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**ABSTRACT**

This document reports some of the findings of a national assessment of seventeen-year-olds on consumer knowledge, skills, and attitudes. An introduction describes the development of the survey, the probability sample, the administration of the assessment, and the format for reporting the results. Chapter 1 of five chapters summarizes the responses on the topic of "the informed citizen." (This topic involved questions about the national economic system, various protective and regulatory organizations and agencies, and the energy problem.) Chapter 2 summarizes the responses on the topic of "the consumer as earner and investor." (This topic involved questions about credit, banking, budgeting, insurance, investments, and taxes.) Chapter 3 summarizes the responses on the topic of "the consumer as purchaser." (This topic involved questions about advertising, decision making, shopping, contracts, and purchasing services and goods.) The data in chapters 1-3 are estimates of the percentages of individuals in the total sample group who could answer specific exercises correctly. Chapter 4 presents performance results for selected groups of students. These selected groups are defined by age, region of country, sex, race, size of community, level of parental education, grade level in school, modal grade by region, and modal grade by sex.) Finally, chapter 5 contains a summary of the views of six experts about the implications of the results of the consumer skills assessment. Some remarks by these individuals are dispersed throughout the report as they pertain to particular exercises. (BM)

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ED174801

**TEENAGE CONSUMERS:  
A PROFILE**

**Results of the 1978 National Assessment of  
Consumer Skills and Attitudes**

**Report No. 09-CN-01**

by the  
**National Assessment of Educational Progress**  
Education Commission of the States  
Suite 700, 1860 Lincoln Street  
Denver, Colorado 80295

**June 1979**

**U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION**

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*The cost figure cited above represents the total amount of money expended since late 1973 on assessments in art, career and occupational development, reading, writing, social studies/citizenship, science, basic life skills, mathematics and consumerism, resulting, to date, in numerous reports, papers, articles, presentations and assessment materials, many of which are used in state and local assessment programs. A complete list of all such materials is available upon request.*

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## FOREWORD

When the U.S. Office of Education was chartered in 1867, one charge to its commissioners was to determine the nation's progress in education. The National Assessment of Educational Progress (NAEP) was initiated a century later to address, in a systematic way, that charge.

Each year since 1969, National Assessment has gathered information about levels of education achievement across the country and reported its findings to the nation. NAEP surveys the education attainments of 9-year-olds, 13-year-olds, 17-year-olds and young adults, ages 26-35, in 10 learning areas: art, career and occupational development, citizenship, literature, mathematics, music, reading, science, social studies and writing. Different learning areas are assessed every year, and all areas are periodically reassessed in order to measure possible changes in education achievement. National Assessment has interviewed and tested more than 810,000 young Americans since 1969.

Learning-area assessments evolve from a consensus process. Each assessment is the product of several years of work by a great many educators, scholars and lay persons from all over the nation. Initially, these people design objectives for each subject area, proposing general goals they feel Americans should be achieving in the course of their education. After careful reviews, these objectives are given to exercise (item) writers, whose task it is to create measurement tools appropriate to the objectives.

When the exercises have passed extensive reviews by subject-matter specialists, measurement experts and lay persons, they are administered to probability samples. The people who compose these samples are chosen in such a way that the results of their assessment can be generalized to an entire national population. That is, on the basis of the performance of about 4,300 17-year-olds, we can make generalizations about the probable performance of all 17-year-olds in the nation.

## ACKNOWLEDGMENTS

Many organizations and individuals have made substantial contributions to this report. Not the least of those to be gratefully acknowledged are the administrators, teachers and students who cooperated so generously during the collection of the data.

Special acknowledgment must go to Richard Hulsart and Rick Knight of the National Assessment staff for coordination of the development efforts. The administration of the consumer skills assessment was conducted by the Research Triangle Institute, Raleigh, North Carolina, and the Measurement Research Center, Iowa City, Iowa.

John Clow, Mareatha Counts, Bill Fasse, Linda Riekes, David Schoenfeld and Sandra Willett made helpful editorial suggestions based on an earlier draft of this report and contributed their time and knowledge to the

development of implications of the data. Their efforts have significantly improved the final report.

The actual preparation of the report was a collaborative effort of the National Assessment staff. Special thanks must go to the following people: Ingrid Van Royen for data processing support; Betty Homler for secretarial support; Valerie Daniels, Marci Reser, Paula Pitchford and Eileen Wollam for production; and Rexford Brown for editing. Statistical analyses for this report were supervised by Charles Gadway. The report was written by Barbara Holmes.



Roy H. Forbes  
Director

## INTRODUCTION

### Developmental History

In keeping with National Assessment's goal to provide the public with information about education concerns relevant to contemporary social issues, some probes, or limited assessments, are conducted in areas other than those routinely surveyed. The assessment of consumer knowledge, skills and attitudes is one such probe.

The assessment of consumer knowledge, skills and attitudes emerged from the basic life skills (BLS) assessment (*Basic Life Skills Kit*, 1978; *Basic Life Skills Results Manual*, 1978) conducted in 1977 with 17-year-olds. Consultants, working with NAEP staff on the development of that assessment, identified consumerism as a major aspect of the basic life skills area. A small pool of exercises (50), focusing primarily on personal finance and consumer protection, were developed for inclusion in the BLS assessment. In response to interest created by the basic life skills exercises and public concern generated by an earlier report on consumer mathematics ability (*Consumer Math*, 1975), the feasibility of conducting an expanded survey of consumer skills was explored by National Assessment.

During 1976, many consumer specialists and lay persons worked with the National Assessment staff to identify some of the major topics central to the consumer area.<sup>1</sup> The consensus of the group was that a comprehensive assessment of consumer skills should include consumer behavior, economics and energy in addition to personal finance and consumer protection.

<sup>1</sup> See Appendix A for a list of the consultants who participated in various developmental phases of the consumer skills assessment.

After the exercises were developed, they were reviewed and examined by members of some of the country's larger school districts during a series of regional conferences conducted by National Assessment. Many of these educators expressed some concerns about an assessment of consumer skills. One of their concerns was that while the concepts included in the exercises were important for 17-year-olds to understand, students might not do well because they had not been exposed to these concepts in school.

National Assessment does not wish to imply that teaching these skills is the sole responsibility of the schools or that consumer skills should be added to the schools' curricula. The assessment conducted by NAEP was intended to provide information about young people's consumer skills that can be useful in evaluating future education needs.

### The Consumer Skills Exercises

The consumer skills exercises are classified into eight major topics, each of which is divided into subtopics. Several exercises did not fit into topics and thus are classified as miscellaneous; background questions constitute a 10th topic. The exercises in each topic or subtopic are not intended to be comprehensive or complete measures of that topic, nor are they intended to define limits on what could be included in a particular topic. Rather, the topics and subtopics represent a way of structuring the exercises. Exhibit 1 lists the topics, subtopics and the number of exercises in each.

### The Sample

National Assessment drew a national prob-

**EXHIBIT 1. List of Topics and Subtopics Included in Consumer Assessment**

Topic	Subtopic	Number of Exercises	Topic	Subtopic	Number of Exercises		
Behavior	Advertising	6	Mathematics		15		
	Decision making	10					
	Shopping	6					
Contracts	Credit cards	4		Protection		Consumer actions	5
	Installments	10				Legal actions	10
	Rental	5				Organizations	4
	Warranties	2				Product safety	5
	Wills	1				Purchases	10
	Economics	Business		1		Purchases	Appliances
Employment		1		Auto			4
Fluctuations		3		Burial			1
Government policy		4		Clothing			1
Marketing		1		Education			1
Money and income		4		Food			11
Prices		3		Housing			3
Supply and demand		4	Information	1			
Taxes		4	Health care	3			
Energy		Attitudes	4	Miscellaneous	Nutrition		2
	Conservation	4	Community resources		1		
	Consumption	7	Job information		2		
	Control	2	Background questions	Consumer courses	1		
	Sources	3		Behavior	1		
Finances	Banking	5		Economics	1		
	Budgeting	2		Credit	1		
	Cost calculation	1		Protection	3		
	Credit	3	Purchasing	1			
	Insurance	7	Records	1			
	Investing	2	Savings and investing	1			
	Taxes	3					

AIX

ability sample of 17-year-olds born between October 1, 1960, and September 30, 1961. The 17-year-olds in this sample were in school, but were selected without regard to their grade levels. The sample was stratified by region and size of community. Approximately 868 students responded to each exercise in the consumer skills assessment. Concurrent with the administration of the consumer skills assessment, the mathematics assessment (which contained 15 consumer math exercises) was being administered to 17-year-olds. In that assessment, approximately 2,500 students answered each exercise. The reader will recall that the basic life skills assessment (1977) contained a group of consumer skills exercises. Each of the consumer exercises in the BLS assessment was administered to approximately 1,250 students. Some of the consumer math and the BLS consumer skills exercises will be presented in this report although the major focus will be on the exercises developed specifically for the consumer skills assessment.

### Administration

The consumer skills assessment was conducted during March and April of 1978, when students would have completed the major part of their schooling for the year. The assessment was administered by trained interviewers. Each student was given one test booklet to complete, although the total number of exercises was distributed across five test booklets. Therefore, no one student responded to every exercise even though each exercise was responded to by approximately 868 students. Students recorded most of their responses on a separate answer sheet; some exercises were open-ended and responses could be recorded directly in the test booklet. The estimated completion time for a test booklet was 50 to 55 minutes. Introductory instructions were recorded on tape and played back to the respondents; the time remaining was announced every eight minutes so that students were aware of how much time they had left. Each test booklet included a background questionnaire to determine the major

sources of students' knowledge about consumer issues.

### Reporting the Results

The emphasis throughout this report is on national results for 75 exercises, many of which have multiple parts. Although all of the exercises could not be included, all of the major topics, with examples of representative exercises from the subtopics, are included. Appendix B contains an index of the exercises displayed in this report. Readers interested in results on the total collection of exercises may want to consult the *Consumer Skills Kit* (1978).

Chapters 1 through 3 of this report are organized around the topical areas reflected by the exercises. The data in Chapters 1 through 3 are estimates of the percentages of individuals in a given group who could answer specific exercises correctly. For example, when we say that "85% of the 17-year-olds gave a correct response," we mean that 85% is an estimate of the proportion of all 17-year-olds in the country who would have answered correctly, based upon weighted performance of our sample group. (All the percentages in the text of this report have been rounded up or down to the nearest percent, e.g., 84.2% is shown as 84%, 84.7% as 85%. Percentages in the tables will not total 100% because the rate of nonresponse for the exercises has not been included. The rate of nonresponse averaged



Early American illustrations courtesy of the *Handbook of Early Advertising Art*. New York: Dover Publications, Inc., 1956.



from 1.5% to 2% with one exception, shown in Table 30. This table has been footnoted to show that the average rate of nonresponse was 9% on this particular exercise.)

Chapter 4 presents performance results for selected groups of students. National Assessment, unlike most testing programs, does not report scores for individuals. Rather, NAEP reports how defined *groups* of people responded to the exercises. Differences between group and national results are discussed only when the results appear to be significantly higher or lower than the national percentages of correct responses; that is, only those differences that are statistically significant at the .05 level are discussed. This means, statistically, that we are 95% confident that these differences are real and not a chance artifact of the survey design or the sample. Group differences are discussed in terms of mean, or average, percentages of performance on groups of exercises representing a particular topic. Definitions of the groups included in this report are presented in the next section.

National Assessment does not make interpretive comments about the data it collects, relying instead upon the comments of outside experts in the field. Chapter 5 of this report contains a summary of the views of six experts about the implications of the results of the consumer skills assessment. Some remarks by these individuals are also dispersed throughout the report as they pertain to particular exercises.

### Reporting Groups Defined

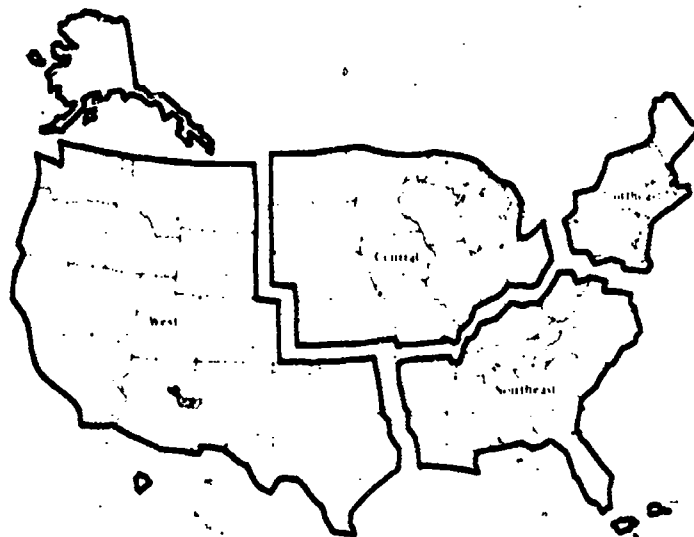
#### Age

Only 17-year-olds attending public or private schools during March and April 1978 and born between October 1, 1960, and September 30, 1961, were assessed.

#### Region

The country has been divided into four

regions -- Northeast, Southeast, Central and West. States included in each region are shown on the following map.



#### Sex

Results are presented for males and females.

#### Race

Respondents were classified as white, black or other on the basis of visual observation by the interviewer. Results are given separately for whites and blacks. The number of respondents classified as "other" was too small to produce reliable results.

#### Size of Community

*Big city.* Students in this group attend schools within the city limits of cities having a population over 200,000.

*Fringes around big cities.* Students in this group attend schools in metropolitan areas served by cities having a population greater than 200,000 but outside the city limits.

*Medium city.* Students in this group attend schools in cities having a population between 25,000 and 200,000 not classified in the

fringes-around-big-cities category.

*Smaller places.* Students in this group attend schools in communities having a population less than 25,000 not classified in the fringes-around-big-cities category.

#### Level of Parental Education

Students were asked to indicate the highest education level attained by either of their parents. Responses were classified into three groups. For purposes of definition, *high school* refers to grades 9 through 12.

#### NGHS

Have not graduated from high school.

#### GHS

Have graduated from high school, but have had no formal education beyond high school.

#### PHS

Have had some formal education beyond high school that may have included business, professional or trade

school training as well as college or university training.

#### Grade Level in School

Results are presented for those 17-year-olds who are below the 10th grade, and those in the 10th, 11th or 12th grade. Most American 17-year-olds in school are in grade 11; therefore, grade 11 is defined as the "modal" grade for 17-year-olds.

#### Modal Grade by Region

Results are presented for those 17-year-olds who are in the 11th grade and live in the Northeastern, Southeastern, Western or Central region of the country.

#### Modal Grade by Sex

Results are presented for male and female 17-year-olds who are in the 11th grade.

## CHAPTER 1

### THE INFORMED CITIZEN

The word "consumerism" describes one of the most compelling and powerful movements of the 1970s. Americans have become increasingly aware of their roles as consumers in various marketplaces within the society. Consumers can be described as playing four roles: (1) the informed citizen, (2) a purchaser or spender, (3) an earner and (4) an investor. Each of these roles demands that the consumer gather the best possible information (usually from several sources), engage in some comparative analysis, synthesize the results of information gathering and analysis, and ultimately, make a judgment about a vast array of available commodities and services. The consumer, in each of these roles, has a tremendous impact on the condition of the economy.

#### Highlights of the Results

- Although 74% of the 17-year-olds realized that the government does not *guarantee* a profit for private businesses, a substantial number (25%) of students did not realize this fact.
- A majority (82%) of the 17-year-olds knew that the correct definition of inflation is "an economic condition in which it takes more dollars now than in the past to buy the same amount of goods."
- Only 14% of the 17-year-olds realized that the person likely to benefit financially during a period of inflation is a homeowner with a long-term mortgage. More than one-fourth (28%) of the students believed that the person most likely to benefit is one who has loaned

\$10,000 at today's loan rates.

- Over half (55%) of the 17-year-olds realized, however, that persons on fixed incomes are most likely to be hurt financially during a period of inflation.
- When asked about the possibility of making a complaint, 45% of the 17-year-olds indicated they "probably would not complain" if blue jeans they saw advertised on sale were not available at the store, and only 12% indicated they "definitely would complain."
- Seventy percent of the students realized that power companies that generate electricity make a profit. But one-fifth (20%) of the youngsters replied "I don't know" to this exercise.

In the general role of citizen, the consumer must be prepared to make informed decisions that will eventually influence the direction of the economy of the country. Therefore, the assessment of consumer skills included a number of exercises designed to probe the knowledge and attitudes of 17-year-olds about issues of relevance to all citizens. Among the topical areas of general concern to the citizenry are economics, protection and energy. Within the broad topic of economics, exercises represented such areas as business, economic fluctuations, employment, governmental policy, money and income, prices, supply and demand, and taxes. Included in the topic of protection were exercises about consumer actions, legal actions, organizations, product safety and purchases. The energy topic contained exercises about energy sources and control, conservation and consumption. What do 17-year-olds know about them?



## Economics

Table 1 shows how students replied when queried about private American businesses.

The majority of 17-year-olds responded correctly to each part of this exercise, and 64% responded correctly to at least four of the statements. The panel of reactors to this report were surprised and concerned over the lack of general understanding exhibited in the percentages of "I don't know" and incorrect responses to this exercise.

When asked to identify the correct definition of inflation, 82% selected (from the choices given) "an economic condition in which it now takes more dollars than in the past to buy the same amount of goods." Clearly, the majority of 17-year-olds knew that inflation is not "a condition in which the value of the dollar increases," or one in which "salaries go up and each dollar buys more," or one in which "salaries go down and each dollar buys more."

Still another exercise about economic fluc-

**TABLE 1. Responses to Statements About Private American Businesses**

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. Private businesses are established to produce goods and/or services for which people are willing to pay.	77.0†	14.5	7.9
B. Private businesses can continue to exist indefinitely without making profits.	15.7	75.9†	7.6
C. Private businesses expect to earn profits in return for risking their money capital.	75.4†	13.4	10.3
D. Private businesses are guaranteed a profit by the government.	11.3	73.7†	13.8
E. Competition generally makes businesses more efficient.	73.9†	18.5	6.8

†Correct response.

tuations asked who would be most likely to benefit financially during a period of rapidly rising prices. Following are the responses to this exercise:

	Percent Responding
A person on a fixed yearly salary	11.1
A homeowner with a long-term mortgage	13.9†
An individual on a fixed retirement income	7.1
A person who has loaned \$10,000 at today's loan rates	28.1
A person owning a paid-up life insurance policy	17.2
I don't know.	22.2

†Correct response.

Results on this exercise indicate that 17-year-olds did not thoroughly understand the implications of an economic fluctuation like inflation although they do know what inflation is. Note that 28% of these students incorrectly selected the fourth statement, and 22% responded that they did not know. However, when asked which group of people would be most hurt financially by inflation, here is how students responded:

	Percent Responding
Government workers	2.6
Persons on fixed incomes	55.6†
Persons who borrow money	15.4
Young married couples	18.2
I don't know.	7.6

†Correct response.

Over half (56%) of the respondents knew that persons on fixed incomes would be most hurt financially by inflation. This result appears fairly consistent with the responses to the previous exercise where only 18% of the 17-year-olds believed that persons on fixed retirement incomes or a fixed yearly salary would benefit from inflation.



A series of statements probed 17-year-olds' knowledge of federal benefits. Table 2 displays the pattern of responses.

Responses to these statements indicate that students have rather limited knowledge about federal benefits, although the majority of students knew that the federal government does not guarantee a job to everyone who wants to work (part E) and that the federal government does not guarantee a college education for everyone with sufficient ability (part F). Only 39% of the 17-year-olds correctly responded to at least five of the seven statements presented in the exhibit.

Money and income were covered under the topic economics. Results on these exercises were mixed. For instance, when asked which pairs of budget items account for the largest expenditure for most American families, 60% of the students correctly responded "food and housing," while 5% selected "recreation and food," 6% selected "housing and clothing," 16% selected "housing and transportation," 6% selected "transportation and taxes" and 6% responded "I don't know."

Students were asked to select the best description of the value of the U.S. dollar: 49% correctly selected "the amount of goods and services the dollar will purchase." Interestingly, 24% of the 17-year-olds selected "the amount of gold supporting the dollar"; however, 5% selected "the level of prices on

**TABLE 2. Responses to Statements About Federal Benefits**

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. Social Security can provide benefits to persons under age 35.	43.0†	47.4	9.5
B. Food stamps are provided free of cost to all persons who qualify for such stamps.	44.3	46.8†	8.7
C. All families who receive welfare benefits are provided with sufficient income to bring them above the official poverty level.	36.2	47.7†	15.7
D. The federal government guarantees an income for all orphans.	28.4	36.6†	34.8
E. The federal government guarantees a job to everyone who wants to work.	14.2	80.1†	5.4
F. The federal government guarantees a college education for everyone with sufficient ability.	26.1	66.7†	6.9
G. The federal government provides health care for men and women over age 65.	79.0†	12.3	8.5

†Correct response.

the stock market," 13% selected "the amount of currency and coins in circulation" and 10% responded "I don't know."

Table 3 displays the pattern of responses to

a series of statements concerning reasons people with low incomes usually have special problems as consumers. Note that only 41% of the students realized that people with low incomes often have to spend a large percent-

age of their income on transportation (part A) and that 37% realized that these people often pay higher prices for lower quality goods and services (part E). Only 35% of the 17-year-olds correctly responded to at least four of the five statements in Table 3, which suggests a general lack of knowledge about the special consumer problems of those with low incomes.

Some National Assessment exercises in the economics topic concerned prices. For instance, students were asked the meaning of the consumer price index if reported as 140. More than half (54%) responded "I don't know," while only 13% correctly responded

"an assortment of goods and services that cost consumers \$100 when the index was 100 now costs \$140." Also, students were asked what usually happens when the general level of prices increases. Table 4 presents their responses.

Students were generally aware that the purchasing power of the dollar will decline and that some people's wages will go up because their contracts call for cost-of-living increases. Moreover, 85% of the 17-year-olds correctly responded to at least two of the four statements in this exercise.

The two exercises following illustrate some

**TABLE 3. Responses to Statements About Special Consumer Problems Confronting Persons With Low Incomes**

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. They often have to spend a large percentage of their income on transportation.	40.6†	48.6	10.6
B. They often have little money saved for use in emergencies.	82.9†	12.6	4.4
C. They often have less choice among stores where it is convenient for them to shop than higher income people.	68.4†	25.9	5.5
D. They often have great difficulty borrowing money at low interest rates.	79.4†	13.0	7.4
E. They often pay higher prices for lower quality goods and services.	37.0†	50.6	11.9

†Correct response.

**TABLE 4. What Happens When Prices Increase?**

	Percent Responding Will Usually Happen	Percent Responding Will Usually Not Happen	I Don't Know
A. Federal income tax revenues will increase at a faster rate than prices.	37.8†	28.5	32.9
B. The purchasing power of the dollar will decline.	79.7†	13.2	6.2
C. Most people will stop buying on credit.	17.9	68.2†	13.0
D. Some people's wages will go up because their contracts call for cost-of-living increases.	80.1†	11.6	7.8

†Correct response.

principles of supply and demand. Generally, 17-year-olds appeared to be aware of some of the implications of the imbalance between available supplies of goods and demands for those goods.

*As gasoline becomes scarce, bicycles become more popular. As a result, there is a sudden increase in the number of bicycles being bought without the same increase in production of bicycles. What would you expect to happen to the price of bicycles?*

	Percent Responding
1. The price would go down because so many more bicycles were being sold.	6.2
2. The price would stay constant because the manufacturers' costs were constant.	4.2
3. The price would stay constant because production eventually would keep up with the increased demand.	6.2

	Percent Responding
4. The price would go up because demand increased and supply did not.	67.6†
5. The price would go up because the manufacturers had increased hourly costs.	12.4
6. I don't know.	3.2

†Correct response.

*American farmers produce millions of bushels of wheat each year. Most of it is used by American consumers. Suppose the government decided to buy most of the wheat produced in a year and sell it to foreign countries. What do you think would probably happen to the price of bread in the United States?*

	Percent Responding
1. Bread prices would go up.	83.0†

†Correct response.

	Percent Responding
2. Bread prices would remain about the same.	6.2
3. Bread prices would go down.	7.3
4. I don't know.	3.0

Young people's knowledge of the tax base was not as high as their knowledge in some other areas. The next two exercises concern the revenues collected by the government directly from the individual citizen. Here is how students responded to these related exercises:

*Of the taxes the federal government collects, which tax provides the most revenue?*

	Percent Responding
1. Personal income tax	34.7†
2. Corporation income tax	9.3
3. Property tax	11.0
4. Fuel or gasoline tax	2.8
5. Sales tax	13.5
6. I don't know.	27.9

*†Correct response.*

*Which one of the following is the largest single deduction taken from the average pay check?*

	Percent Responding
1. Federal tax	48.4†
2. State tax	15.8
3. Social Security (FICA)	27.5
4. Sales tax	1.3
5. I don't know.	6.3

*†Correct response.*

Most students did not know the correct response to either of these two questions. The general lack of a thorough knowledge about

basic tax issues was demonstrated in an exercise that asked, "Which of the following are mainly supported by taxes and which are not?" (See Table 5 for results.)

There are some misconceptions about revenues received by the American Red Cross and the Better Business Bureaus inasmuch as substantial numbers of students believed they receive tax support. The panel of consultants who reviewed these results concurred that the misconceptions about these organizations are perhaps due to effects of widespread advertisements and 17-year-olds' lack of direct, personal experience with either of these organizations.

### Protection

The public and private sectors of our society are responding to the needs of citizens by creating various protective and regulatory organizations and agencies. As citizens, consumers should be aware of the processes associated with the various forms of protection available to them. Protection may be available in several forms: through consumer organizations that inform one of his or her rights and the proper steps in seeking recourse, and/or through legal action. Protection may concern product safety and various other aspects of purchasing rights due the consumer.

The exercise displayed in Table 6 probes students' knowledge about general consumer protection, while the exercise displayed in Table 7 probes students' attitudes about consumer actions.

Although the majority of students knew that statements A and B are correct, fewer than half realized that statement C is also correct (Table 6). Nevertheless, 74% of the 17-year-olds correctly responded to at least two of the statements.

The responses shown in Table 7 suggest that students probably would not complain in two areas that often require some consumer



**TABLE 5. Which Are Mainly Supported by Taxes?**

		Percent Responding		
		Mainly Supported by Taxes	Not Mainly Supported by Taxes	I Don't Know
A.	National parks	86.5†	9.6	3.8
B.	Grocery stores	11.5	84.4†	3.9
C.	City libraries	85.1†	10.8	3.9
D.	Public schools	94.0†	4.2	1.4
E.	Movie theaters	7.0	89.3†	3.5
F.	Major league baseball teams	7.4	84.5†	7.8
G.	Highways	95.2†	2.7	1.9
H.	American Red Cross	47.0	42.2†	10.1
I.	State universities	64.1†	29.0	6.2
J.	Police departments	83.8†	10.5	5.4
K.	Better Business Bureaus	52.5	29.2†	17.7

**TABLE 6. Responses to General Statements About Consumers and Protection**

		Percent Responding		
		Correct	Incorrect	I Don't Know
A.	Product complexity and variety make it difficult for consumers to evaluate quality.	68.6†	21.4	9.9
B.	While there are an increasing number of laws to protect consumer interests, consumers are largely unaware of their rights.	79.3†	16.6	4.0
C.	Government agencies established to protect consumer rights are often influenced by business interests.	48.8†	28.7	22.5

†Correct response.

**TABLE 7. Responses to Statements About Possible Consumer Actions**

	Percent Responding			
	Definitely Would Complain	Probably Would Complain	Probably Would Not Complain	Definitely Would Not Complain
A. Your auto repair bill was \$100 over the original estimate.	76.1	20.0	3.5	0.0
B. Your new dental filling fell out.	67.3	22.6	8.3	1.7
C. Cottage cheese you bought was spoiled.	42.9	31.1	22.6	2.9
D. Blue jeans you saw advertised on sale were not available at the store.	12.3	26.5	45.4	15.4
E. A \$50 friendship ring you bought for your friend turned his or her finger green.	47.9	24.6	19.5	7.1
F. A salesperson refused to sell you a stereo that the store advertised at a very low price. He claimed it was a demonstration model and instead tried to sell you a more expensive stereo.	61.9	27.9	7.0	2.3
G. Your doctor made you wait 1½ hours past your appointment time.	27.3	30.7	32.5	8.8

action: services associated with health care and the nonavailability of advertised merchandise. Perhaps this tendency is prevalent among the adult population as well. Sandra Willett remarked, "Studies show that with some problems, people internalize the issue, blame themselves and do not complain. They think that complaints will do no good, or that they do not have the right to complain. Doctors are such authority figures and health

is so seemingly mysterious that students don't feel justified in speaking up."

The statements in Table 8 were used to explore students' knowledge of legal rights in connection with health care professionals. The results indicate that 17-year-olds were quite aware of their legal rights in connection with health care professionals prior to an examination or treatment. Moreover, 75% of



**TABLE 8: Responses to Citizen's Legal Rights Prior to Examination or Treatment by Physician or Dentist**

	Percent Responding		
	Your Right To Know	Not Your Right To Know	I Don't Know
A. Fee for office visit.	93.4†	3.3	3.2
B. Where and when the doctor got his medical training.	63.4†	30.2	6.2
C. The doctor's age.	4.1	93.4†	2.2
D. The doctor's medical specialty.	85.0†	11.4	3.4
E. Fees for laboratory tests.	89.6†	7.2	3.0
F. Reasons for all tests and procedures.	93.3†	5.0	1.6
G. Number of X-rays planned and reasons for the X-rays.	89.9†	6.9	2.9
H. Name and reason for any medication prescribed.	94.9†	3.8	1.1
I. Number of patients the doctor has in his or her practice.	2.3	94.2†	3.2

† Correct response.

the young people correctly responded to at least eight of the nine statements. So, although the 17-year-olds, at this point in their lives, would likely not complain about a prolonged wait in the office of a physician or

dentist, they were aware of certain other basic legal rights.

It should be noted that developers of this and other exercises that explore knowledge of "legal" rights and actions intend a general, rather than a specific, usage of the term, since legal rights vary from state to state.

Certain practices are permissible or legal by certain state and federal laws. The statements in Table 9 explore students' knowledge of the legality of some of these practices.

It is notable that 43% of the 17-year-olds mistakenly believed that it is legal to advertise



**TABLE 9. Which Actions Are Legal and Which Are Not Legal?**

	Percent Responding		
	Legal	Not Legal	I Don't Know
A. To charge less than a manufacturer's suggested retail price.	75.1†	18.2	6.4
B. To advertise an item for \$4.99 when the final cost is \$5.05 including tax.	79.8†	16.9	3.1
C. To advertise a \$4,000 car at \$90 per month without including credit terms.	43.0	41.1†	15.4
D. To advertise an item for a low price, then charge more for it.	8.2	90.0†	1.6
E. To keep without obligation un-ordered merchandise that you received in the mail.	39.3†	49.5	10.8
F. For a mail order company to cash your check, then delay sending your purchase for three months without telling you.	16.0	75.1†	8.6
G. For the same chain store to charge different prices on identical items in different neighborhoods.	61.7†	30.0	8.1
H. For supermarkets to raise prices on the days when welfare checks are issued.	31.5†	57.3	11.0
I. For a merchant to refuse to refund cash for an item you return, but insist that you exchange the item or take credit.	67.8†	25.1	6.9

†Correct response.

the price of an automobile and the monthly installment without including the credit terms; 50% believed that it is not legal to keep unordered merchandise received in the mail;

and 57% believed that it is not legal for supermarkets to raise prices on days when welfare checks are issued. These are perhaps common misconceptions held by the adult

population as well as by 17-year-olds. Consultants observed, "Passing a law does not guarantee that people know of it."

Another series of statements, displayed in Table 10, concern a business-oriented organization, the Better Business Bureau. The statements examine the knowledge of 17-year-olds about the role, funding source and purpose of the Better Business Bureau.

Note that the majority of students believed that the Better Business Bureaus are agencies of the federal government, and only 42% realized that the purpose of Better Business Bureaus is to help businesses. Also, only 17% of the students realized that Better Business

Bureaus do not enforce consumer laws, and only 27% realized that Better Business Bureaus are supported primarily by contributions from business firms. As a consequence of these misconceptions, only 11% of the students selected the correct response to at least four of the six statements in Table 10. Mareatha Counts commented, "The visibility and concerns of the Better Business Bureau lead many adults to assume it is a government protection agency. While the BBB may be able to assist in resolution of a consumer complaint, this results in many referrals of consumer complaints to an organization that cannot pursue any legal remedies or engage in enforcement action."

TABLE 10. Responses to Statements About the Better Business Bureau

	Percent Responding		
	Correct	Incorrect	I Don't Know
A. Better Business Bureaus are agencies of the federal government.	76.6	11.0†	12.2
B. The primary purpose of Better Business Bureaus is to help businesses.	42.3†	54.1	3.3
C. Better Business Bureaus enforce consumer laws.	71.4	16.7†	11.7
D. Better Business Bureaus have been primarily supported by contributions from business firms.	26.9†	42.3	30.6
E. Better Business Bureaus have the legal power to resolve consumer complaints.	67.4	18.7†	13.5
F. Better Business Bureaus can help prevent consumers from making unwise purchase decisions.	80.5†	12.5	6.8

†Correct response.

**TABLE 11. Responses to Statements About Labeling of Clothing and Fabrics**

	Percent Responding		
	True	False	I Don't Know
A. A permanent care label is required by law on both clothing and fabrics.	47.5†	30.0	22.4
B. Clothes labeled as nonflammable are permanently nonflammable.	35.8	50.4†	13.5
C. Sleepwear for men and women must be labeled regarding flammability.	43.5	40.5†	15.7
D. Textile fibers must be identified by their generic or chemical name.	53.3†	22.7	23.9

†Correct response.

The exercise in Table 11, and several others, explored students' knowledge about product safety as ensured by labeling practices. An average of 48% of the 17-year-olds correctly responded to the four statements.

Another aspect of protection for the consumer concerns the feasibility of certain actions under certain circumstances. For instance, two areas in which consumers often do not exercise all available options are the purchase of car and appliance repair. The two exercises shown in Tables 12 and 13 explore students' knowledge of these options.

While the majority of students correctly responded to the first four statements about car repair, only 49% correctly responded to the statement that "estimates are always free" (Table 12). However, more than half (59%) of the students correctly responded to at least four of the five statements. Generally, students' knowledge about options associated with car repair is rather high. The panel of consultants felt that these results reflect

students' experiences with automobile repair and media coverage of automobile purchase and repair.

From the information in Table 13, we can see that results indicate students are also well-informed and aware of certain options available to the consumer in connection with appliance repair. This is further demonstrated



**TABLE 12. Responses to Statements About Car Repair**

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. A repair shop should not make a service charge for a very simple repair on a car.	21.1	74.3†	4.3
B. It is important to get written estimates from 2 or 3 different repair shops before making a major repair.	92.0†	6.2	1.7
C. All estimates and bills for repair should list parts and labor separately.	86.4†	6.8	6.4
D. A local technical school may be a good source for inexpensive repair work.	64.5†	20.5	14.3
E. Estimates are always free.	41.4	49.2†	9.1

†Correct response.

by the finding that 71% of the 17-year-olds correctly responded to at least four out of the five statements in that table.

### The Energy Problem

One of the most compelling issues facing the nation at the current time is energy. The problem of depleted energy reserves, the need to develop new sources of energy and energy costs have immediate implications for the contemporary citizen. The national assessment of consumer skills included a group of exercises designed to explore the knowledge and attitudes of 17-year-olds about this vital topic. The energy exercises included such areas as energy control and sources and energy consumption and energy conservation. Here are some of the results:

- Almost half (46%) of the 17-year-olds

knew that *coal*, rather than natural gas, crude oil or tar sand, is the largest fossil fuel reserve in the United States.

- Only 33% of the students knew that *crude oil*, rather than coal, natural gas, water (hydroelectric) power or nuclear energy, provides the largest percentage of energy used in the United States.
- Only 27% of the 17-year-olds knew that *coal*, rather than falling water, nuclear energy, oil or natural gas, is the primary source of the largest portion of the nation's electrical energy.
- Seventy percent of the students realized that power companies that generate electricity make a profit. But one-fifth of the youngsters replied "I don't know" to this exercise.
- When asked to select from a series of

possible conservation measures likely to save the most energy in the country, 35% of the youngsters correctly chose doubling the average gas mileage of cars and 35% chose reducing lighting by one-half in residential and commercial buildings. Only 5% chose the elimination of all air conditioning, and 12% chose converting all electric home heating systems to natural gas. Fourteen percent replied "I don't know."

- Only 33% of the 17-year-olds realized that *electric clothes dryers* consume more energy in 15 minutes of continuous operation than color television sets, vacuum cleaners, dishwashers or washing machines.
- Nearly one-third (32%) of the students

realized that *industry*, rather than transportation, homes or commercial buildings (offices, stores, schools, etc.) now uses the largest share of the U.S. energy supply.

- Seventeen percent of the students correctly indicated that only about one-fifth of all energy consumed each year in the United States is consumed in the home (for heating, cooling, lighting, appliances, etc.); other choices were: 1%, 5%, 55% and 90%. Just as many students (17%) responded "I don't know" to this exercise.
- The majority (80%) of the 17-year-olds realized that *driving a car* is more expensive as a means of transportation than riding a bus, riding a bicycle or

TABLE 13. Responses to Statements About Appliance Repair

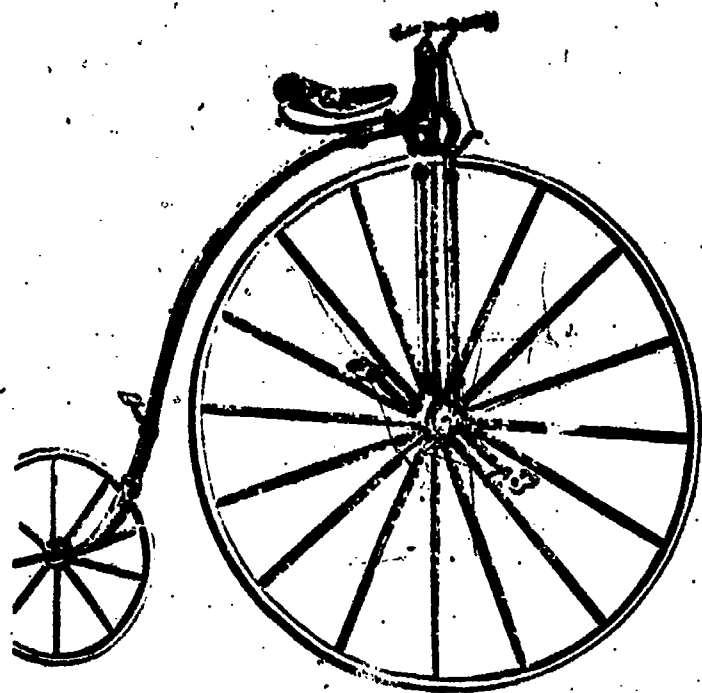
	Percent Responding		
	Correct	Incorrect	I Don't Know
A. A person should always check to see if an appliance is properly plugged into the electrical system before calling a repair service.	91.7†	7.4	0.4
B. A person can usually save money by taking a broken appliance to a repair shop rather than having the repairman call at home.	87.4†	10.7	1.6
C. A warranty may cover the cost of all parts and labor needed to repair an appliance.	79.8†	16.8	2.9
D. Most repair personnel know how to repair any type of appliance.	30.0	65.9†	3.4
E. A factory authorized serviceman will probably guarantee any new parts installed.	69.0†	22.1	8.6

†Correct response.



**TABLE 14. Responses to Statements About Possible Causes of Energy Problem**

	Percent Responding			
	Large Part of Problem	Some Part of Problem	Little Part of Problem	No Part of Problem
A. Present physical shortages of energy resources.	45.4	38.9	10.5	4.7
B. Predicted future shortages of energy resources.	37.2	37.3	16.6	8.2
C. Energy producers' desires for large profits.	46.1	29.9	16.5	6.8
D. Agreements among energy producers about amounts to produce and prices to charge.	28.4	36.0	26.6	8.7
E. Restraints on energy producers and transporters for environmental reasons.	17.4	36.0	32.3	13.5
F. Government regulation of energy producers.	19.1	37.1	29.3	13.7
G. Wasteful energy use by industry.	64.5	25.1	7.6	2.2
H. Wasteful energy use by consumers.	70.1	22.7	4.9	1.6
I. The higher and higher costs to energy producers to find new energy reserves.	38.2	39.0	17.4	5.1



riding in a car pool.

- However, almost half (49%) of the 17-year-olds responded that they *drive or ride in a car* when traveling one-half mile or less. Nearly one-third (31%) responded that they walk; 15% responded that they ride a bike; and only 2% responded that they ride in a bus.

The statements displayed in Table 14 probe students' attitudes about possible causes of the energy problem. Notice that 17-year-olds believed that wasteful energy use by industry *and* by consumers represents a large part of the problem. Moreover, they also believed that the desire for large profits among energy producers is a large part of the problem.



## CHAPTER 2

### THE CONSUMER AS EARNER AND INVESTOR

#### Highlights of the Results

- Only 25% of the 17-year-olds knew that personal finance companies charge higher rates of interest than insurance companies (17% chose this response), local banks (18%), credit unions (8%) or savings and loan associations (14%). Eighteen percent of the students replied "I do 't know" to this exercise.
- Half of the 17-year-olds realized that if one makes a purchase on credit terms, fixed expenses will increase; 65% of the 17-year-olds realized that one may lose the opportunity to buy other items on credit if already making many credit payments each month; 79% of the students realized that better warranties are not available simply because an item is purchased on credit terms.
- The majority (86%) of the youngsters knew that overdrawing a checking account can cost a person money; 66% knew that cancelled checks can be used as receipts for bills paid; 68% knew that a charge may be deducted from a checking account by the bank to pay for service.
- Most (92%) of the students knew that for full protection a health insurance policy should contain a provision for major medical coverage, but only 49% knew that health insurance policies are not always automatically renewable from year to year. A bit more than half (53%) knew that many health insurance policies require a waiting period before benefits are paid.

Just as consumers make a significant impact on the economy through their spending practices, so do they make an impact through their earning and investing practices. From the selection of a career to the investment of earnings, each consumer contributes in some way to the economy. The National Assessment consumer skills exercises included the broad topic *finance* in order to probe students' knowledge of and attitudes toward their potential roles as earners and investors. Areas such as credit, banking, budgeting, insurance, investments and taxes were represented in the finance topic.

#### Finance

One exercise about credit asked which lending institution usually charges the highest rate of interest on a loan, and only 25% of the 17-year-olds correctly responded "personal finance company." Other responses were: insurance company, 17%; local bank, 18%; credit union, 8%; savings and loan association, 14%; and I don't know, 18%. Generally, youngsters did not appear aware that higher interest rates are usually associated with personal finance companies. Consultants felt this is perhaps also true of the adult population.

Another exercise about credit concerned a situation in which an individual wants to buy a color television set. The statements in Table 15 pertain to the individual's decision to buy the set on credit.

Some exercises in the finance topic dealt with banking — checking and savings accounts. For instance, when asked which plan

**TABLE 15. Responses to Statements About Buying on Credit**

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. TV can be had sooner if bought on credit.	58.9†	37.9	2.5
B. Better warranty available if TV purchased on credit.	8.8	78.9†	11.6
C. Spendable income will be affected if credit used.	68.3†	21.5	9.4
D. Fixed expenses will increase.	49.6†	36.0	13.4
E. May lose the opportunity to buy other items on credit if already making many credit payments each month.	65.0†	30.7	4.0

†Correct response.

would probably earn the greatest return on savings, over half (64%) of the students correctly selected "a savings plan where all money deposited earns interest from the day of deposit to the day of withdrawal."

From the pattern of responses to the statements displayed in Table 16, it appears that young people are fairly well acquainted with some aspects of checking accounts and with the advantages of checking accounts.

Some of the finance exercises concerned insurance — health, car and life. When asked to select the correct definition of deductible clauses as they relate to insurance coverage, only 27% of the students knew that this refers to the part of covered expenses that the insured person must pay up to some limit, beyond which the insurance company pays. More students (32%) chose the "I don't

know" response to this exercise than chose any of the other options.

The exercise displayed in Table 17 concerns health insurance, still another necessity as people assume the role of earner in the society. Notice that 37% of the students mistakenly believed that a person is adequately protected if he or she has an insurance policy that pays for 50% of the total cost of any illness or accident requiring medical treatment (part B); 18% of the students responded "I don't know" to this statement. In addition, 27% of the students mistakenly believed that health insurance policies are always automatically renewable from year to year, and 23% responded "I don't know" to this statement (part D). Nevertheless, 63% of the 17-year-olds correctly responded to at least three of the five statements in Table 17.

Here is how students responded to a question about automobile collision insurance:

**Automobile Collision Insurance Pays for Damage to Which One of the Following?**

	Percent Responding		Percent Responding
1. Damage to only the insured's car in the event of an accident	22.1†	2. Damage to the insured's car and that of the other person involved in an accident	40.1
		3. Damage to only the car belonging to the other person involved in the accident	10.5
		4. Damage to the other person's car and any medical expenses of the other person involved in the accident	22.8
		5. I don't know.	4.4

†Correct response.

**TABLE 16. Responses to Statements About Checking Accounts**

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. A checking account provides a convenient, safe way of paying bills.	85.6†	12.4	1.8
B. A charge may be deducted by the bank from a checking account to pay for service.	68.0†	20.2	11.2
C. Cancelled checks can be used as receipts for bills paid.	66.2†	26.3	6.9
D. Overdrawing a checking account can cost a person money.	85.9†	8.7	5.1
E. It is important to write "For Deposit Only" above the signature on the back of a check sent by mail to a bank.	65.0†	17.0	17.4
F. When an account is opened with an out-of-town check, you can usually make immediate withdrawals from that account.	13.6	64.4†	21.6

†Correct response.

**TABLE 17. Responses to Statements About Health Insurance**

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. For full protection, a health insurance policy should contain a provision for major medical coverage.	91.7†	1.9	6.2
B. A person is adequately protected if he or she has a policy which pays for 50% of the total cost of any illness or accident requiring medical treatment.	36.8	45.6†	17.5
C. Many health insurance policies require a waiting period before benefits are paid.	53.5†	20.8	25.3
D. Health insurance policies are always automatically renewable from year to year.	27.4	48.9†	23.4
E. Group health insurance plans are usually more expensive than individual health insurance plans.	27.8	53.0†	18.7

†Correct response.

Notice that a substantial number of students (40%) believed that automobile collision insurance pays for both the insured's car and the car of the other person as well.

The consumer skills assessment of 17-year-olds also probed young people's knowledge of no-fault insurance. The pattern of responses to a series of statements about this recently established type of insurance coverage is displayed in Table 18.

The following hypothetical situation presented to 17-year-olds is an example of several exercises related to budgeting earnings.

*Mike lives with his aunt and uncle on their farm. He works on Saturdays at a bakery in a nearby town. He earns \$25 take home pay each week. Mike needs to save \$300 within the next six months (26 weeks). He also considers it very important to help his aunt and uncle with their food expenses. Look at the following four weekly budgets and answer the question: Which*

**TABLE 18. Responses to Statements About No-Fault Insurance**

	Percent-Responding		
	Correct	Incorrect	I Don't Know
A. No-fault insurance means that there is no way of fixing the blame of an accident.	32.2	54.1†	13.5
B. No-fault insurance means that the insured gets paid by the insurance company regardless of who was at fault.	70.5†	20.4	8.8
C. No-fault insurance means that the injured has to pay his/her own legal and medical expenses.	23.0	60.0†	16.4
D. No-fault means that you cannot sue if the claim is very large.	26.4	44.0†	29.3

†Correct response.

*budget would be best for helping Mike save enough money to buy a car and also help his aunt and uncle*

*as much as possible with their food expenses?*

**WEEKLY BUDGET A**

Ride to work	\$ 1.50
School (paper, pens, etc.)	2.00
Entertainment	3.00
To aunt and uncle for food	15.00
Savings	<u>3.50</u>
	\$25.00

**WEEKLY BUDGET B**

Ride to work	\$ 1.50
School (paper, pens, etc.)	1.00
Entertainment	7.50
To aunt and uncle for food	5.00
Savings	<u>10.00</u>
	\$25.00

**WEEKLY BUDGET C**

Ride to work	\$ 1.50
School (paper, pens, etc.)	.75
Entertainment	4.00
To aunt and uncle for food	7.00
Savings	<u>11.75</u>
	\$25.00

**WEEKLY BUDGET D**

Ride to work	\$ 1.50
School (paper, pens, etc.)	.75
Entertainment	5.00
To aunt and uncle for food	2.00
Savings	<u>15.75</u>
	\$25.00

Nearly three-fourths (71%) of the students correctly selected "Weekly Budget C" as the best budget for achieving Mike's purpose.

Another hypothetical situation involving a slightly different aspect of budgeting follows.

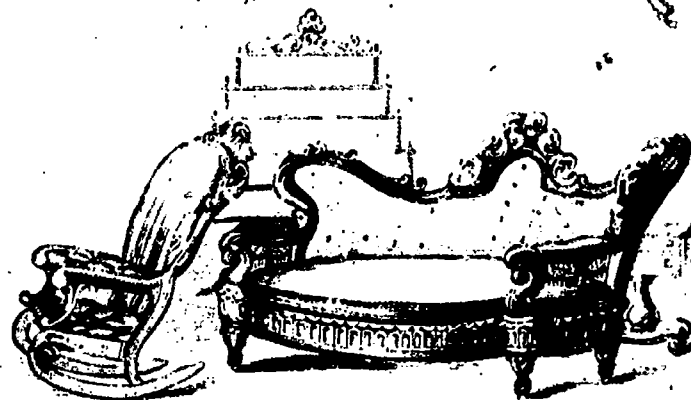
*Lilly and her sister want to redecorate their room. They decided it has the following problems: the room seems cold because it has gray walls and no carpeting; their bedspreads are faded; the curtains are torn; the lamp in the room sputters and blinks. The girls found the following costs of items they could use to redecorate their room.*

Wall-to-wall carpeting	\$39.99
Small throw rug	8.95
Set of matching curtains and bedspreads	27.10
Bamboo shades to replace curtains	7.98
Dye to change color of bedspreads	1.09
Paint to cover walls	14.98
New lamp for room	15.00
Repair of old lamp	7.00

*Lilly and her sister can only spend \$40 on their room, but they want to take care of as many problems as they can. Which of the items listed should they buy to take care of as many problems as they can for \$40.00?*

	Percent Responding		
	Yes	No	I Don't Know
Wall-to-wall carpeting	5.6	92.2†	1.7
Small throw rug	86.7†	10.6	1.4
Set of matching curtains and bedspreads	15.7	80.4†	2.4
Bamboo shades	76.0†	21.1	1.8
Dye	79.1†	18.0	1.6
Paint	84.4†	12.2	2.0
New lamp	12.3	84.0†	1.7
Repair lamp	84.6†	11.9	2.2

*†Correct response.*



These results indicate that most young people knew how to select the most economical items when a limited amount of funds is available. In addition, 7 out of 10 selected the correct response to at least seven out of the eight items.

When students were asked if certain sources are good for seeking help in completing federal income tax forms correctly, private income tax experts were thought to be a good source by 92%, and an internal revenue service office, 65%; the federal income tax instruction booklet was thought to be a good source by 93%, and 60% realized that a Social Security office is not a good source for help in preparing federal income tax forms.

Students were given two related exercises about investing in common stock. The majority (78%) of students knew that if a person decides to take money out of a savings account and buy common stock, that person is accepting the risks involved in the hope of greater profits. However, a smaller percentage (56%) of students knew that if one invests \$1,000 in the purchase of common stock this year, there is no way of telling how much the stock is likely to be worth in five years. Consultants felt that these results reflect the difference between general knowledge about something and the specific knowledge resulting from direct experience with it.



## CHAPTER 3

### THE CONSUMER AS PURCHASER

#### Highlights of the Results

- The majority (90%) of the 17-year-olds knew that advertising information is sometimes misleading; 85% knew that advertising often tries to imply large differences where there are only small differences; 82% knew that advertising is sometimes used to increase loyalty to a brand of product; and 85% knew that advertising can give people useful information.
- More than three-fourths (80%) of the students knew that warranties can exist on labels; 56% knew that a warranty does not necessarily assure that one has a quality product; 32% knew that warranties in advertisements are as binding as warranties in contracts; and 73% knew that warranties must be labeled "full" or "limited."
- In a case of cancelling a contract, 78% of the 17-year-olds thought that telephoning the salesperson to call off the sale is a wise action, and only 18% realized that it is not. However, 89% of the 17-year-olds realized that waiting a few days before deciding what to do is not a wise action. Eighty-two percent realized that a wise action would be to send, within three days of signing the contract, a registered letter to the company calling off the sale.
- More than half (54%) of the students knew that during the first several years of mortgage payments on a home, each payment goes mostly to repay interest on the loan. However, 23% of the

students thought this untrue and 22% responded "I don't know."

- Only 30% of the 17-year-olds knew that unit pricing means that in addition to the price for the package of goods, the price per ounce, pint or pound (or other appropriate unit) is also given.
- Eighty-three percent of the students knew that "store brands" are generally cheaper than national brands; 79% knew that store brands are generally advertised less often than national brands; and 61% knew that store brands are sometimes made by national manufacturers under the store's private label.

The purchasing role of the consumer is probably more apparent than the earner, investor or citizen roles played by the consumer. As consumers play the role of purchaser, their behavior is influenced by advertising, which in turn may influence the decision-making process prior to actual shopping and selection of commodities or goods. As a purchaser, the consumer has to be aware of the implications of certain types of contracts such as those associated with rentals, the implications of warranties and marketing practices, the use of credit cards and installment buying. This chapter presents some of the exercises used by National Assessment to examine 17-year-olds' knowledge about various aspects of the purchasing role.

#### Advertising, Decision Making and Shopping

Table 19 displays the reactions of 17-year-

**TABLE 19: Responses to Statements About Advertising**

	Percent Responding		
	Correct	Incorrect	Don't Know
A. Advertising may help increase sales and lower prices for a new product.	74.6†	22.5	2.9
B. Consumers have to pay for advertising in product prices.	71.6†	17.2	11.0
C. Only high quality products are advertised.	9.3	87.7†	2.4
D. Companies that advertise more always produce better products.	19.4	75.8†	4.6
E. Advertising information is sometimes misleading.	90.3†	6.9	2.6
F. Advertising often tries to imply large differences where there are only small differences.	84.8†	9.0	5.6
G. Advertising is sometimes used to increase loyalty to a brand of product.	82.1†	10.0	7.3
H. It is difficult for a new business to compete in an industry where large amounts of money are spent on advertising.	69.4†	20.2	10.1
I. Advertising can give people useful information.	85.1†	11.5	3.0
J. For some products, production costs are less than advertising costs.	64.4†	17.7	17.6

†Correct response.

olds to a series of statements about the effects of advertising on prices and some of the more general aspects of advertising. Overall, students were quite astute in identifying which

of the statements were correct or incorrect. Moreover, 80% of the students selected the correct response to at least three of the five statements about the effects of advertising on



prices (parts A, B, D, H and J), and 89% selected the correct response to at least four of the six statements about some of the general aspects of advertising (parts C through G and Part I). Linda Riekes observed, "Because our society is so oriented to advertising, it would seem natural that students would know about advertising, but what is surprising is the amount of incorrect and 'I don't know' answers. It is quite amazing that in an advertising oriented society, over 25% would not know, or be incorrect, on parts A and B. This indicates that we haven't gone as far in teaching students to critically view advertising as we should."



The hypothetical situation following was presented to students to see if they were aware of some influences on consumer behavior. Over half (53%) of the students were aware that the opinion of a peer is often the strongest influence on a consumer's behavior, while more than one-fourth (27%) indicated that the consumer should clear up any confusion about a product by consulting a consumer report magazine (probably the best

means of seeking consumer information).

*Jack is 17 years old. He is interested in buying a portable radio for himself. He has read a magazine ad that said that Brand C has great sound and many other desirable features. His friend, Marty, just bought that brand of radio and says that it's too heavy to carry around and the sound quality is poor. Which one of the following actions will most 17 year olds like Jack probably take?*

	Percent Responding
Clear up his confusion about Brand C by reading consumer report magazines about Brand C radios	27.4
Ask his parents which brand of radio he should buy	9.9
Accept Marty's opinion instead of believing the advertisement	52.8†
Accept the advertisement's claims instead of Marty's opinion	5.1
I don't know.	4.7

*†Correct response.*

Another exercise concerned how decisions are made within the family. Table 20 displays the pattern of responses to several general statements about household decision making.

Notice that nearly two-thirds (63%) of the students believed the statement "husbands have considerable influence on what foods to buy" to be incorrect, while only one-third were aware that this statement is actually correct. Sixty percent of the 17-year-olds selected the correct response to at least three of the four statements about household decision making.

Another exercise (Table 21) concerned students' attitudes toward saving money. The attitudes implied by the statements reflect some of the reasons why people make a decision to save money. According to 17-year-olds' responses, family expectations (part F) is not an important reason to save. Generally, these results suggest that young

**TABLE 20. Responses to Statements About Household Decision Making**

	Percent Responding		
	Correct	Incorrect	I Don't Know
A. The husband is usually the final authority on all purchase decisions regardless of the product.	22.9	74.5†	2.0
B. In most families, the wife's influence and the husband's influence on purchase decisions varies, depending on the type of item to be purchased.	88.2†	7.5	3.7
C. Husbands have considerable influence on what foods to buy.	32.7†	63.3	3.3
D. Children seldom have an effect on what foods to buy.	28.7	68.0†	2.0

†Correct response.

people are capable of discerning really important reasons for saving money.

Seventeen-year-old students were queried about some protective actions consumers can take in connection with shopping. In recognition of the fact that young people often have not yet encountered certain situations, students were asked to indicate if they had had no experience with a particular action. As might be expected from this age group, a substantial number of students had not had any experience with complaining directly to the owner or manager of a store when dissatisfied with a purchase (22%), writing to company officials when receiving unsatisfactory service from a company that operates regionally or nationally (39%) or sending details of a complaint to the state attorney

general and/or a consumer protection agency when a business disregards the complaint (57%). On the other hand, a substantial number of students indicated that they keep copies of sales slips (65%) and warranties (77%) (see Table 22).

### Contracts

Consumers, as purchasers, can enter into various contractual agreements: rental, credit card, installment payment and warranty. Since 17-year-olds are about to assume consumer roles in society, they need to be aware of some of the privileges and restrictions inherent in contractual agreements. National Assessment's survey of consumer skills included many exercises concerned with this

**TABLE 21. How Important Are These Reasons To Save Money?**

		Percent Responding			
		Very Important	Moderately Important	Not Very Important	Not Important A+ All
A.	To buy something you can't afford now.	31.6	38.3	22.0	7.7
B.	To take care of emergencies.	75.1	19.5	4.3	0.6
C.	To pay for an education.	62.6	25.3	8.5	2.9
D.	To get married.	15.8	39.1	27.6	17.0
E.	Just to have money in the bank.	28.4	45.8	18.1	7.1
F.	Because your family expects you to save money.	8.0	31.5	34.5	25.1
G.	To earn interest on the money.	23.7	45.0	25.6	4.7
H.	To avoid using credit to buy something.	36.5	36.5	17.6	8.7



area. For instance, the statements displayed in Table 23 concern some rights implied in rental agreements.

Generally, these results suggest that students are fairly knowledgeable about rights of the renter and rights of the lessor. However, it is notable that students have some misconceptions about deducting money spent on rent from their federal income tax obligations and about whether or not the renter needs personal insurance against theft or fire even though the building is insured by the owner. These two statements elicited higher percentages of "I don't know" responses and

fewer correct responses than any of the other statements in the exercise. When the results are taken collectively, only 34% of the students correctly responded to at least five of the six statements about rental agreements.

Another National Assessment exercise ex-

plored students' knowledge about warranties since they, also, have implications for the protection of the purchaser's and the seller's rights. Table 24 displays the pattern of responses to these statements.

The results in the table suggest that knowl-

**TABLE 22. Responses to Actions That Consumers Can Take To Protect Themselves**

	Percent Responding			
	Most of the Time	Some-times	Never	No Experience With Action
A. Keep copies of sales slips after making purchase of product or service.	64.9	29.5	3.1	2.2
B. Keep copies of warranties when purchasing product or service that involves warranty.	77.3	16.0	1.5	4.8
C. Complain directly to the owner or manager of store when dissatisfied with purchased product or service.	23.4	38.2	15.6	21.8
D. Write to the officials of a company when receiving unsatisfactory service from a company that operates regionally or nationally.	13.2	25.8	20.9	39.4
E. Send the details of your consumer complaint to the state attorney general and/or a consumer protection agency when a business refuses to pay any attention to your complaint.	10.0	9.6	22.7	57.3

**TABLE 23. Responses to Statements About Renting**

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. A renter is usually required to give the owner an initial payment in addition to the rent to cover any possible damage to the rental property.	72.8†	18.7	8.5
B. In most places, a renter may be evicted from (required to leave) a rented property without any prior notice by the owner.	17.9	77.0†	4.7
C. An owner can legally place restrictions on a renter's use of the rented property.	77.7†	14.0	7.8
D. The owner of a rental property usually pays the taxes on the property.	68.1†	19.4	12.0
E. A renter can deduct the amount spent on rent from his/her federal income tax.	33.6	36.1†	29.7
F. A renter does not need insurance against theft or fire when the building is insured by the owner.	30.3	54.7†	14.5

†Correct response.

edge of warranties as a type of contractual agreement is somewhat limited. For instance, nearly one-fourth (24%) of the 17-year-olds replied "I don't know" to the statement that warranties in advertisements are as binding as warranties in contracts, and only 32% knew that the statement is accurate. In addition, 38% of the students did not know that if you buy a product without a warranty, there is

some recourse available to the consumer should the product be faulty. That knowledge of warranties is limited is further evidenced by the finding that only 48% of the students selected the correct response to at least four of the six statements and only 22% selected the correct response to at least five of the six statements.

The statements shown in Table 25 concern steps that should be taken by the consumer prior to signing a contract to pay for a commodity through installments. Generally, students appear to be very familiar with some of these steps.

Moreover, 88% of the students correctly responded to at least five of the six statements. Mareatha Counts commented, "Students' ability to discern correct answers is very high. I doubt if asked to list important features students would score as well. In addition, there is no question reflecting the most common adult mistake — failure to get

all verbal promises they believe to be part of the agreement written into the contract."

Another aspect of installment contracts concerns the steps a consumer should take to extricate himself or herself from a binding contractual agreement. The hypothetical situation below was presented, along with the questions found in Table 26, to students to explore their knowledge of this important aspect of contracts.

*Jack and Amy were relaxing at home on Thursday night when a young salesperson came to the door with pots and pans to sell. Their daughter was going*

TABLE 24. Responses to Statements About Warranties

	Percent Responding		
	Accurate	Inaccurate	I Don't Know
A. Warranties in advertisements are as binding as warranties in contracts.	32.2†	43.1	24.4
B. Warranties can exist on labels.	79.8†	11.5	8.5
C. A warranty assures that you have a quality product.	38.9	55.7†	4.9
D. If you buy a product without a warranty, there is nothing you can do if the product is faulty.	56.4	37.6†	5.9
E. All warranties cover the cost of repair or replacement of a product.	34.9	57.6†	6.8
F. Warranties must be labeled "full" or "limited."	72.6†	11.7	15.4

†Correct response.



**TABLE 25. Responses to Things To Do Before Signing an Installment Contract**

	Percent Responding		
	Yes	No	I Don't Know
A. Fill in or cross out all blank spaces in the contract.	62.0†	18.4	18.5
B. Check to see if the contract outlines the schedule of payments.	94.1†	2.1	2.3
C. Ignore the fine print in the contract, because all installment contracts are the same.	3.4	93.8†	1.3
D. Check to see if the contract states the Annual Percentage Rate and the finance charges.	90.8†	2.9	4.4
E. Insist on obtaining an exact copy of the contract.	90.3†	4.5	3.6
F. Make sure you understand all of the provisions of the contract before signing it.	96.7†	0.8	1.1

†Correct response.



to be married soon, so this looked like a good opportunity to get her the cooking utensils she needed. They signed a contract which resulted in a bill of nearly \$400. The next day Amy saw similar utensils at a department store at less than half that

price. They wanted to cancel the contract. Which of the following actions would be wise for Jack and Amy to take in order to cancel the contract and which would not be wise?

TABLE 26. Responses to Statements About Cancelling Contracts

	Percent Responding		
	Wise Action	Not a Wise Action	I Don't Know
A. Just ignore the contract.	3.0	95.1†	1.7
B. Within 3 days of signing the contract, send a registered letter to the company calling off the sale.	82.5†	11.3	5.9
C. Hire a lawyer to cancel the contract.	52.8	34.9†	11.9
D. Wait a few days before deciding what to do.	8.7	89.0†	1.7
E. Telephone the salesperson and call off the sale.	77.7	17.9†	4.0

†Correct response.

Generally, students were able to discern wise actions from those that are not wise. Notice, however, that more than half (53%) the students thought that hiring a lawyer to cancel the contract would be a wise action when, actually, this is not the case because it incurs additional expense while other forms of recourse are available to the consumer. Only 18% realized that simply telephoning the salesperson to call off the sale is not a wise action under the circumstances. Nevertheless, 79% of the students selected the correct responses to at least three of four parts: A, B, D and E. Sandra Willett commented, however, "Except for sensing the worst possible action, students apparently do not know enough about contracts. This topic, along with per-

sonal finance, is one of the major components in consumer education courses. The moderate scores are disturbing. I would have been interested in a question on how many students have actually taken the options presented."

The two exercises displayed in Tables 27 and 28 are examples of those used to explore 17-year-olds' knowledge of credit cards.

It should be noted that when a credit card is lost (part D), usually the owner of the card is responsible for only \$50 of the charges made by someone else.

While the majority of students were aware

**TABLE 27. Responses to Statements About Credit Cards**

	Percent Responding		
	True	False	I Don't Know
A. The use of a credit card may involve interest charges.	67.9†	15.9	16.0
B. The use of a credit card lessens the necessity of carrying a lot of cash when shopping or traveling.	96.2†	3.2	0.5
C. Once you have signed your credit card, no one else can use it.	26.8	69.2†	3.6
D. If your credit card is lost, you can be held responsible for any charges made on the credit card by someone else.	61.6†	27.7	10.6
E. A credit card allows you to buy things when you are short of cash.	87.1†	11.4	1.4

†Correct response.

that use of a credit card lessens the necessity of carrying a lot of cash and that credit cards allow one to buy things when short of cash, far fewer students were aware that use of a credit card may involve interest charges, or that merely signing the credit card does not prevent someone else from using it, or that if the credit card is lost, one still may be held responsible for purchases made by another party (Table 27). Nevertheless, when these results are taken as a whole, 65% of the students selected the correct response to at least four of the five statements.

The statements in Table 28 concern two widely known, general purpose credit cards. The pattern of responses to the first statement indicates that most students did not know the retailer pays a charge to the bank on each sale in which a credit card is used.

Many retailers (especially small concerns) do not honor Visa and Master Charge cards for this reason. On the other hand, students clearly knew that everyone cannot get one of these credit cards. Fewer than half of the students knew that at some stores a lower price may be had if cash, rather than a credit card, is used.

#### Purchasing Services and Goods

Consumers, as purchasers, are engaged in the process of making choices — explicit or implicit. Most consumers are probably aware of the explicit choice-making process when seeking goods or commodities. These are tangible and consequently result in some immediate gratification of a need or desire.

**TABLE 28. Responses to Statements About Visa and Master Charge Cards**

	Percent Responding		
	Correct	Incorrect	I Don't Know
A. The retailer pays a charge to the bank on each sale in which a credit card is used.	36.9†	31.5	31.5
B. Anyone can get one of these credit cards.	11.6	84.2†	4.1
C. At some stores, the consumer may be able to pay a lower price for an item by paying cash instead of using his or her credit card.	45.7†	42.2	11.8

†Correct response.

However, perhaps most consumers are not as aware of the implicit choice-making associated with the purchase of services such as education and health care. These are slightly less tangible and do not necessarily result in immediate gratification of a need or desire.

The assessment of consumer skills included a number of exercises that reflect the explicit and implicit choice-making processes associated with the purchase of education, health care, housing, automobiles, appliances and food. For instance, students were presented a hypothetical situation about selecting vocational training. (See Table 29 for results.)

The results of this exercise indicate that the majority of young people are aware of appropriate actions to be taken in selecting a vocational training school. Five out of 10 students successfully answered at least six of the seven parts of this exercise.

Purchasing medication is still another area requiring close attention by the consumer. During the past decade, consumers have be-

come increasingly aware of their rights in this area and are more knowledgeable about the various choices available to them. The following exercise shows one example of this; Table 30 illustrates some of the choices currently available to the consumer.

Although the availability of medication in its generic form has been widely discussed, students performed less well on the statement about generic or chemical names of medication than they did on any other statement in this exercise. However, 78% of the 17-year-olds selected the correct response to at least two of the four statements in Table 30.

Some exercises in the assessment of consumer skills concerned the purchase or rental of housing. Accessibility to housing is probably a major concern of young people about to enter society as independent individuals. Over the past decade, it has become increasingly difficult to purchase housing because of rising costs and rates of interest. Table 31 displays the pattern of responses to a group of statements about buying a home.

Tim's boss told him he could get a better job if he had some vocational training. Tim is looking at all the vocational schools in his area. Which of the following

actions should Tim take to choose a vocational school and which actions should Tim not take?

**TABLE 29. Responses to Statements About Choosing a Vocational School**

	Percent Responding		
	Should Take the Action	Should Not Take the Action	I Don't Know
A. Contact major companies in the vocation of interest to find out if they hire graduates from the school.	82.4†	10.3	6.9
B. Select a school because it makes the most promises about employment afterward.	40.8	52.3†	6.5
C. Enroll at the school that says it is best, regardless of costs.	10.3	83.1†	6.1
D. Select the school that offers immediate admission without discussing your interests or abilities.	16.0	79.2†	4.6
E. Check on the qualifications of the teachers in the school.	75.4†	19.3	4.9
F. Find out how many of the students enrolled in the school actually complete their training.	72.3†	24.1	3.3
G. Select a school because it is endorsed by someone famous.	3.9	91.4†	4.3

†Correct response.

Notice the high percentages of "I don't know" responses to each of the statements in Table 31 and the fact that one-fifth or more of the 17-year-olds gave incorrect responses to

each statement. Viewing the results collectively, however, 54% of the young people successfully answered at least two out of the three statements.

Betty has been sick for a week. Her doctor has prescribed a brand name medicine that costs \$8 for a bottle of 20 tablets. If Betty wants to get the

medicine at a lower price per tablet, which of the following actions would be appropriate for her to take and which would be inappropriate?

**TABLE 30. Responses to Statements About Buying Medicine\*\***

		Percent Responding		
		Appropriate Action	Inappropriate Action	I Don't Know
A.	Ask the druggist for a larger bottle of tablets.	28.8	56.3†	6.1
B.	Ask her doctor to prescribe the medicine by its generic or chemical name.	35.1†	41.8	14.1
C.	Ask the druggist for a non-prescription medicine that is cheaper in price.	21.3	64.9†	4.4
D.	Ask her doctor to prescribe an equally effective medicine that has a lower price per tablet.	78.1†	9.3	3.2

\*\*The rate of nonresponse averaged 9% on this exercise.

**TABLE 31. Responses to Statements About Buying a Home**

		Percent Responding		
		Correct	Incorrect	I Don't Know
A.	During the first several years of mortgage payments on a home, each payment goes mostly to repay interest on the loan.	54.2†	23.2	22.4
B.	The longer the maturity of a mortgage loan, the lower the total dollar amount paid in interest.	21.4	57.2†	21.1
C.	Interest rates on mortgage money for home loans depend upon the supply and demand for mortgage money.	48.7†	27.3	24.0

†Correct response.



**TABLE 32. Responses to Statements About Financing an Automobile**

	Percent Responding		
	Correct	Incorrect	I Don't Know
A. The lending institution can repossess your car and sell it to another buyer if you fail to keep up your payments.	85.7†	9.5	4.8
B. If a repossessed car is sold for less than you owe the lender, you are personally liable for the difference.	32.2†	42.3	25.1
C. If you are in a situation where you can't make your car payment, it is wise to turn the car over to the lender.	46.8	34.7†	18.2
D. If the dealer is lending you the money, you must buy credit life insurance.	15.5	48.0†	36.1
E. If you intend to have car insurance, you must use the insurance company suggested by the lender.	9.2	82.4†	7.9
F. The dealer usually provides finance arrangements; therefore, it is not necessary to investigate other possible sources for a loan.	18.0	70.3†	11.2
G. By signing a contract which includes a "confession of judgment" you are liable for all court costs if you default.	51.8†	11.7	36.1

†Correct response.

Another area of purchasing often of great interest to young people concerns owning one's private automobile. The exercises displayed in Tables 32 and 33 concern some of the practices associated with financing a car and purchasing a used car, respectively.

In the exercise in Table 32, parts A through D and part G concern the borrower's liabilities: only 21% of the students selected the correct responses to at least four of the five statements. In addition, only 15% of the students selected the correct responses to at

least six of the seven statements.

The following hypothetical situation concerns buying a used car. Table 33 displays the responses.

Mary is interested in purchasing an eight year old car that she saw on a used car lot. The used car dealer has told her that the car was owned by only one owner and was used primarily for pleasure driving. Would the following conditions indicate that there might be something seriously wrong with the car?

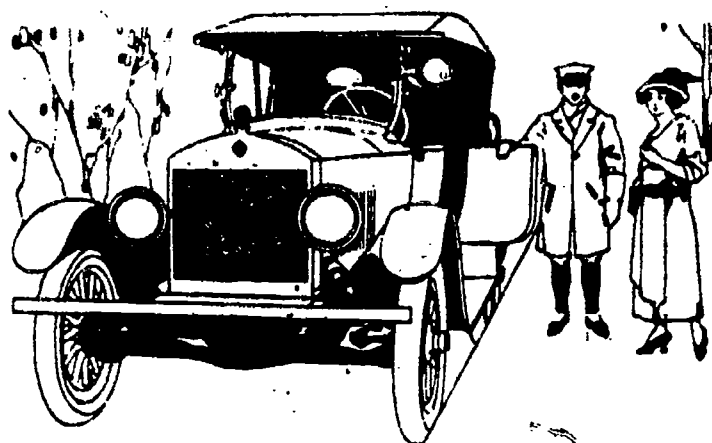


TABLE 33. Responses to Indication of a Possibly Serious Problem

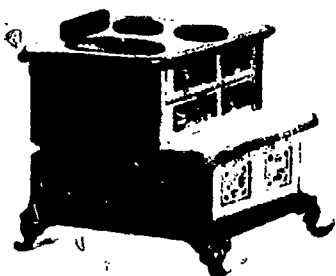
	Percent Responding		
	Yes	No	I Don't Know
A. The odometer reads 10,000 miles.	28.4†	63.4	7.6
B. The dealer says he cannot provide the name of the previous owner.	67.8†	28.4	3.3
C. There is a white powdery substance around the battery terminals.	51.7	37.2†	10.7
D. The paint on the hood and front fenders is different from the paint on the rest of the body.	60.9†	36.1	2.5
E. The rear left fender is slightly dented.	28.2	69.0†	2.3
F. There are no safety belts in the car.	46.8	49.4†	3.1
G. There is no serial number on the engine.	73.5†	18.3	7.7
H. There is a pool of oil under the car.	90.4†	6.7	2.3
I. The exhaust smoke is black.	80.7†	14.3	4.4
J. There is no radio in the car.	8.3	89.3†	1.8
K. The dealer will not allow you to have your mechanic inspect the car.	91.4†	5.6	2.4

†Correct response.

**TABLE 34. Responses to Statements About Purchasing Major Appliances**

	Percent Responding		
	Correct	Incorrect	I Don't Know
A. The price tag on a major appliance must indicate cost of delivery and installation.	17.8	74.7†	7.3
B. All major home electrical appliances can be installed without changes in the wiring system of a home.	36.0	58.1†	5.6
C. A customer should always ask the dealer to demonstrate the operation of an appliance before making a purchase.	93.5†	4.8	1.4
D. It is important to compare prices and credit terms in several stores before purchasing an appliance.	95.1†	3.3	1.5
E. A service contract is always a good investment when purchased for the life of an appliance.	79.4	10.5†	10.0
F. A service contract guarantees that you will get immediate service on broken appliances.	56.0	34.6†	9.2
G. A service contract is a good substitute for a warranty.	47.4	39.0†	13.2
H. A service contract should be purchased during the same time a warranty is in force.	59.6	19.4†	20.7

†Correct response.



Generally, young people appear to be aware of those conditions that could indicate a serious problem when considering the purchase of a used automobile. Only 26% of the 17-year-olds correctly responded to at least 9 of the 11 statements. Mareatha Counts observed, "Only 28% of the students indicated that a low odometer reading would be an indication of a serious problem. Considering

the prevalence of this deceptive practice and laws prohibiting its use, consumer recognition of this warning signal is vital."

The purchase of major appliances, such as washing machines or refrigerators, is another area requiring the alertness of the consumer. The statements in Table 34 concern some of the principles of shopping to be kept in mind when purchasing appliances.

The results indicate that while students were generally aware of many of the do's and don't's of appliance purchasing (82% selected the correct responses to at least three of the first four statements), they were not aware of some of the advantages of purchasing a service contract on major appliances. Parts E through H concerned this protective measure, and only 7% of the 17-year-olds selected the correct responses to at least three of these four statements.

Because a great portion of the consumers' earnings are spent on food, several National Assessment exercises probed aspects of students' knowledge of this area. For instance, over the past five years large supermarket chains have initiated the concept of "unit

pricing," enabling the consumer to make better judgments in selecting food items that are packaged by several manufacturers. Here is how 17-year-olds responded when asked, "Which one of the following is the correct description of the term 'unit pricing?'"

	Percent Responding
Each manager in a chain of stores sets the prices of products independently of other managers.	6.8
In addition to the price for the package of some goods, the price per ounce, pint, or pound (or other appropriate unit) is also given.	29.6†
Prices are set for each new unit of shipment received in a store; for example, prices are set for each new crate of lettuce or case of peanut butter.	21.8
Prices are set for some fixed unit of time, generally a month, and are changed only at the end of that unit of time.	13.4
I don't know.	28.1

†Correct response.

TABLE 35. Responses to Statements About Store Brands

	Percent Responding		
	Correct	Incorrect	I Don't Know
A. Are generally cheaper than national brands.	82.6†	12.8	3.9
B. Are generally poorer quality than national brands.	31.4	59.8†	8.3
C. Are generally advertised less often than national brands.	78.6†	15.1	4.7
D. Are sometimes made by national manufacturers under the store's private label.	61.3†	19.0	18.5

†Correct response.

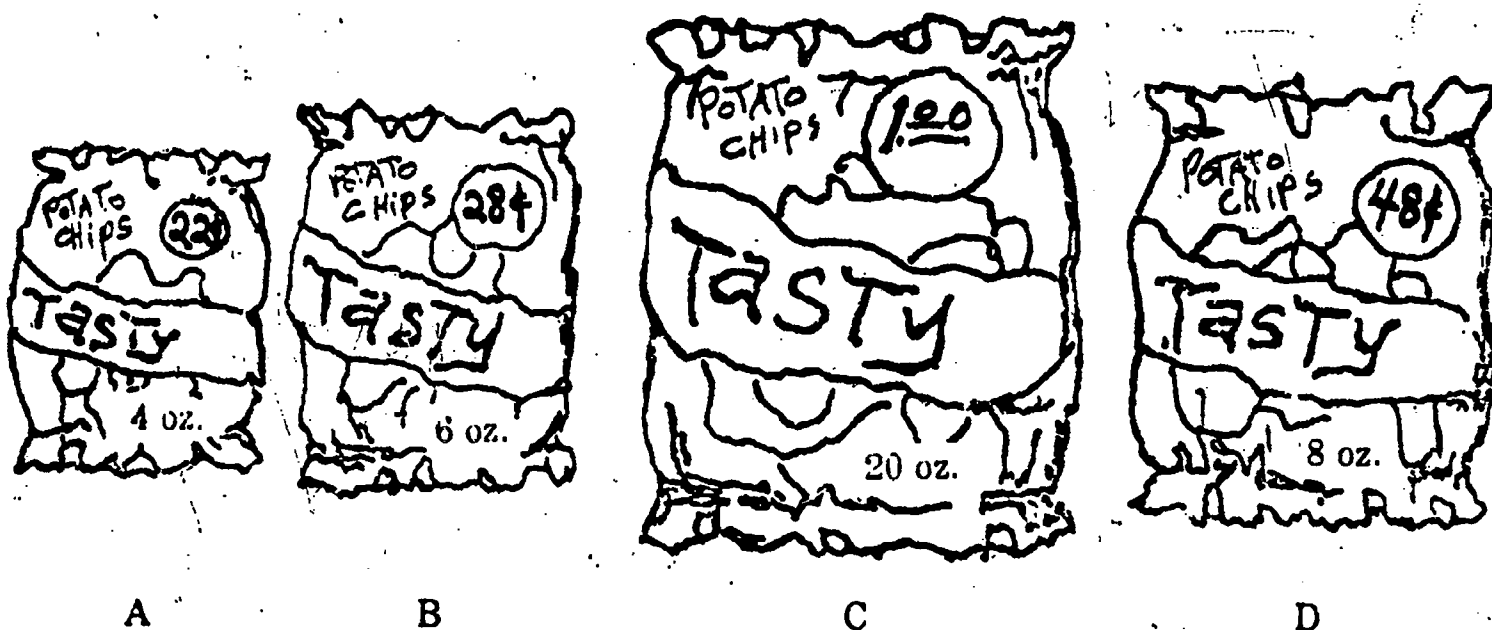
Only 30% of the students selected the correct definition of unit pricing, and nearly as many (28%) responded "I don't know." However, as 17-year-olds assume their full consumer roles in society, it is probably safe to assume that they will become increasingly aware of the significance of unit pricing and other aids to comparative shopping.

One exercise concerned another aid to comparative shopping available to the consumer — store brand groceries. Most large supermarket chains stock the same food items under the name of the store brand, packaged by national manufacturers of food items. Table 35 shows 17-year-olds' responses to a group of statements describing some of the characteristics of store brand groceries.

The results suggest that students are familiar with some characteristics of store brand groceries, although there appears to be some misconceptions about the quality of store brands versus national brands and about the fact that store brands are often produced by national manufacturers. However, 65% of the 17-year-olds selected the correct response to at least three of the four statements.

The following exercise concerns the consumer's ability to make the best selection without the aid of unit pricing and a choice of brands. In the following instance, the consumer must calculate the cost per unit in order to determine which bag of potato chips is the best buy. Here is how students performed on the exercise:

*The following are 4 bags of the same kind of potato chips. Which is a better buy?*



	Percent Responding
A.	4.2
B.	39.4†
C.	41.4
D.	12.7
i don't know.	2.3
†Correct response	

These results suggest that students either assumed Bag C is the best buy because of its size or they simply made faulty calculations.

As illustrated in the exercise, there are numerous occasions when the consumer must quickly calculate costs, the amount of goods needed, convert measurements, adjust amounts in order to achieve the correct

proportions and so on. Therefore, the consumer, ideally, should have some mathematical skills. The consumer skills assessment included a group of mathematical exercises to probe the ability of 17-year-olds to make simple calculations. Some of the results are:

- When asked to combine 2-1/4 cups and 1-1/2 cups of sugar (as in making a cake and frosting), 80% of the students selected the correct response, 3-3/4 cups of sugar.



- When asked to calculate the cost per kilowatt hour for electricity if the amount consumed is 606 kw/hr and the bill is \$9.09, only 5% of the students responded 1.5 or 1-1/2 cents.
- When asked to compute the number of cubic feet of cement needed to pave an area 30 feet long and 20 feet wide with a layer four inches thick, only 9% of the students responded 200 cubic feet.
- When asked to determine how much more one square foot of floor space costs in a house that has 2,000 square feet and sells for \$25,000 than in a house that has 2,200 square feet and sells for \$22,000, only 18% of the students responded \$2.50.
- When asked to calculate each payment when the purchase price of a car is \$900,

\$200 is paid down, finance charge is 10%, and finance charge and loan are paid back in 10 equal installments, nearly one-third of the students correctly responded \$77.

- When asked to determine the number of pounds of ground beef in a six-pound meatloaf mixture that costs \$5.10 and contains ground beef selling for 80 cents per pound and ground pork selling for 95 cents per pound, only 20% of the students correctly responded four pounds.
- When asked to compute the percent of discount on a vacuum cleaner if the regular price is \$48.00 and the sale price is \$36.00, 36% of the students selected the correct response, 25%.
- When asked to calculate the cost of each bottle of cola if six bottles cost \$1.20 including a five-cent deposit on each bottle, 45% of the students correctly responded 15 cents.

Consultants had mixed reactions to performance on the mathematics exercises. For instance, John Clow remarked, "[low math performance] shows a general lack of math competency, which is not just germane to consumer education practices. Also, for many of the questions in which there was a low number of correct responses, the problems were ones with which they could not readily identify."

Conversely, Sandra Willett observed, "These applied, or action-oriented, questions are some of the most important in the assessment. The low results are shocking." And, Mareatha Counts commented, "While students hopefully possess the basic knowledge to perform most of the required calculations, they, like many adult counterparts, may be unwilling to devote the effort and prefer guessing."



## CHAPTER 4

### GROUP RESULTS

National Assessment examines the performance of selected groups of students relative to the national level of performance. Group performance may be considered across all of the topical areas (a total of 201 exercises) as well as in terms of level of performance in each of eight topical areas: behavior, contracts, economics, energy, finances, mathematics, protection and purchases.

Table 36 displays the national level of performance (average percentage of correct responses) on the total number of exercises and the level of performance on each of the topics. The numbers shown for each group are the differences between the group's level of performance and the national level of performance. For example, the national level of performance on the total 201 exercises is 57.0%. The level of performance of students in the Northeastern region was 0.6% above the national level of performance, or 57.6%. The level of performance of students in the Southeastern region was 2.4% below the national level, or 54.6%. Note that the number -2.4 has an asterisk beside it; this denotes that the difference is statistically significant, whereas the 0.6% for the Northeastern region is not. In other words, the difference between the percentage of correct responses for the Southeastern region and national performance is greater than two standard errors.

A review of the table indicates that some groups, rather consistently, performed *above* the national level; some groups, rather consistently, performed *below* the national level; and still others performed very near the national level. Figure 1 illustrates this pattern by displaying each group's performance rela-

tive to the national level of performance on 201 exercises. Following is a brief summary of variations in performance among selected groups:

- Students in the Northeastern region of the country performed significantly above the national level in the area of mathematics and did not vary significantly from the national level in the other topics.
- Students in the Southeastern region of the country performed significantly below the national level in the areas of finances, mathematics, protection and purchases, but did not vary significantly in performance in the areas of behavior, contracts, economics or energy.
- Students in the Central region of the country performed significantly above the national level in all topics except contracts.
- Students in the Western region of the country performed below the national level in behavior, economics and energy, but their performance did not vary significantly from the national level in contracts, finances, mathematics, protection or purchases.
- The performance of male students fluctuated with topics. For instance, males performed above the national level on contracts, economics, energy, finances and mathematics, but they performed below the national level on behavior and did not vary significantly in performance on protection or purchases. The pattern

**TABLE 36. Average Percentages of Correct Responses for 17-Year-Olds  
and Differences Between National and Group  
Average Percentages**

	Total Exercise Parts†† (201)	Behavior (15)	Contracts (19)	Economics (35)
National	67.0	67.7	53.3	59.8
Region				
Northeast	0.6	0.0	0.0	0.6
Southeast	-2.4*	-1.4	-1.3	-1.1
Central	2.2*	3.2*	0.8	2.0*
West	-1.5*	-2.8*	0.0	-2.0*
Sex				
Males	1.0*	-1.2*	1.1*	1.0*
Females	-1.0*	1.1*	-1.1*	-0.9*
Race				
Whites	2.5*	3.2*	1.9*	2.1*
Blacks	-12.9*	-13.7*	-10.5*	-9.8*
Parental education				
Not graduated high school	-7.6*	-10.6*	-5.1*	-7.6*
Graduated high school	-1.4*	-0.9	-0.6	-1.4*
Post high school	4.5*	5.1*	3.0*	4.1*
Size of community				
Big cities	-2.5*	-1.4	-1.4	-1.3
Fringes around big cities	2.6*	1.4	1.4	2.1*
Medium cities	0.4	2.6*	0.7	-1.3
Smaller places	-0.4	-0.5	-0.5	-0.4
Grade				
Less than 10th grade	-21.3*	-26.6*	-17.4*	-17.0*
10th grade	-10.4*	-11.2*	-7.7*	-11.0*
11th grade	1.5*	1.4*	1.2*	1.2*
12th grade	5.3*	7.8*	3.6*	6.7*
Modal grade by region				
11 X SE	-0.6	-0.2	0.5	0.0
11 X W	0.2	-0.9	1.1	-1.1
11 X C	3.4*	4.5*	1.9*	3.4*
11 X NE	2.0*	0.8	0.8	1.6
Modal grade by sex				
11 X M	3.2*	1.0	2.5*	2.3*
11 X F	-0.1	2.3*	-0.2	-0.3

\*Indicates significant variations.

†The table excludes two topics: Miscellaneous and Background Questions.

††A total of 193 complete exercises, many with multiple parts, were administered to 17-year-olds. The average percentages of correct response shown on this table were computed using 201 selected exercise parts.

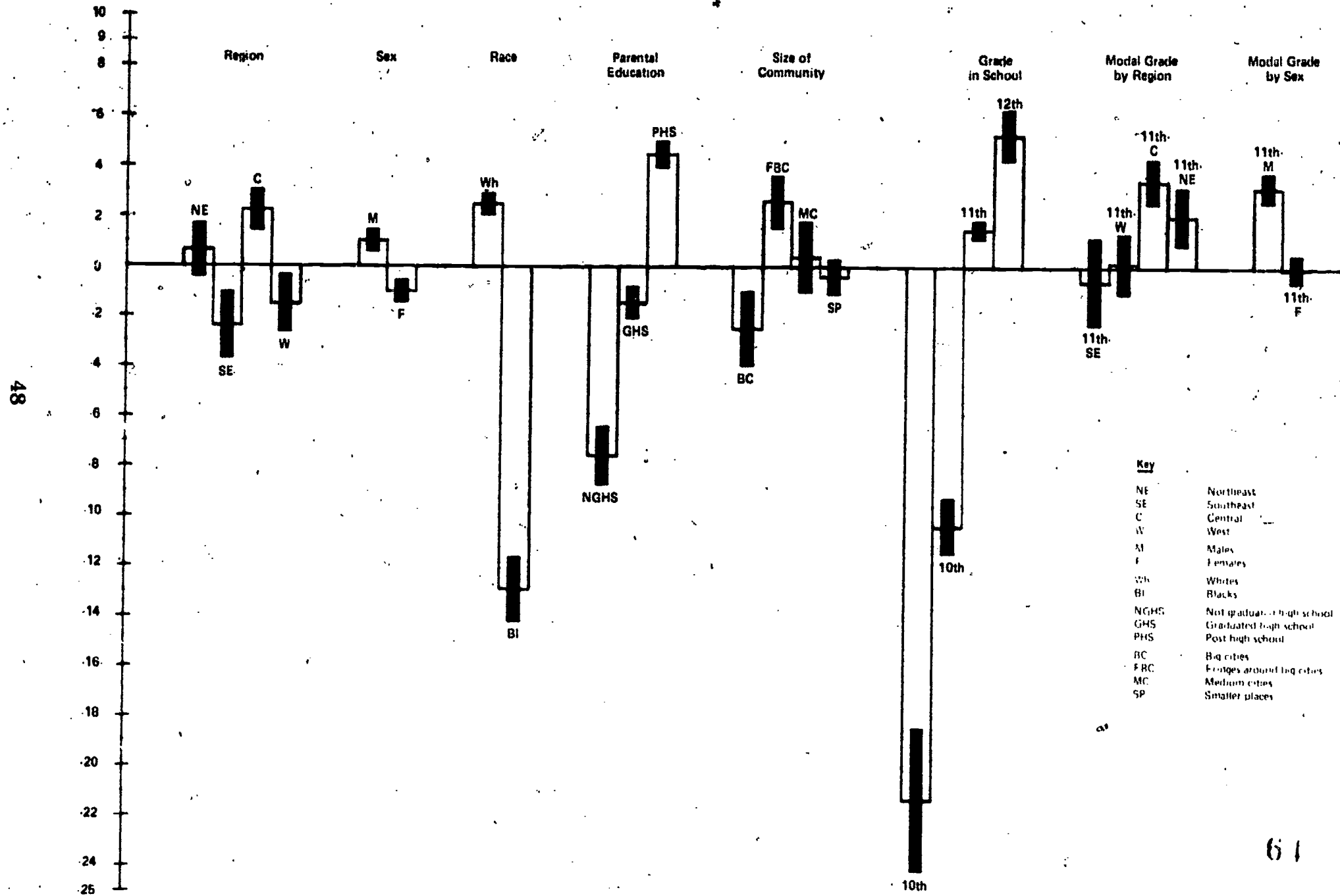
**TABLE 36 (Continued). Average Percentages of Correct Responses for 17-Year-Olds and Differences Between National and Group Average Percentages.**

	Energy (18)	Finances (25)	Mathematics (23)	Protection (33)	Purchases (29)
National	40.8	56.0	56.9	56.5	60.4
Region					
Northeast	0.9	0.3	1.8*	1.4	-0.2
Southeast	-0.8	-3.3*	-4.0*	-3.5*	-2.7*
Central	3.5*	2.8*	2.2*	2.1*	1.9*
West	-4.4*	-1.2	-1.7	-1.2	-0.0
Sex					
Males	5.3*	1.5*	2.3*	-0.1	0.2
Females	-5.2*	-1.4*	-2.2*	0.2	-0.2
Race					
Whites	1.8*	2.6*	2.8*	2.9*	2.8*
Blacks	-9.5*	-13.1*	-15.0*	-14.6*	-15.2*
Parental education					
Not graduated high school	-5.6*	-7.5*	-8.3*	-7.9*	-8.2*
Graduated high school	1.7*	-1.4*	-2.3*	-1.5*	-1.6*
Post high school	3.6*	5.1*	4.9*	4.9*	5.0*
Size of community					
Big cities	-2.1	-3.7*	-2.3*	-3.6*	-3.1*
Fringes around big cities	1.4	3.0*	3.3*	3.6*	3.3*
Medium cities	-0.6	-1.2	3.2*	2.0	-0.8
Smaller places	0.4	0.4	-1.3*	-1.0	-0.1
Grade					
Less than 10th grade	-9.4*	-24.5*	-19.1*	-24.6*	-27.7*
10th grade	-5.8*	-10.4*	-10.9*	-10.6*	-12.5*
11th grade	1.0*	1.8*	1.6*	1.7*	1.9*
12th grade	0.6	5.4*	5.6*	6.3*	4.8*
Modal grade by region					
11 X SE	-0.8	-0.5	1.7*	-1.4	-0.2
11 X W	-3.3*	0.2	0.7	1.2	2.2*
11 X C	4.5*	4.1*	3.4*	2.9*	3.2*
11 X NE	2.5	2.2*	3.0*	3.2*	1.1
Modal grade by sex					
11 X M	7.0*	4.5*	4.7*	2.1*	2.0*
11 X F	-4.6*	-0.6	-1.1*	1.3*	1.0

\*Indicates significant variations.

†The table excludes two topics: Miscellaneous and Background Questions.

Figure 1. Comparison Between Group and National Performance  
on 201 Exercise Parts, Age 17



of performance by females across the several topics reversed that of male students.

- Students who are white performed above the national level on all topics, were more successful in the areas of behavior, protection, purchases and mathematics than in other topics.
- Students who are black performed below the national level on all topics, but were more successful in the areas of energy and economics than in other topics.
- Students whose parents had not graduated from high school performed below the national level on all topics, but were more successful in the areas of contracts and energy than on other topics.
- Students whose parents had graduated from high school performed below the national level in the areas of economics, energy, finances, mathematics, protection and purchases, but did not vary significantly in performance in the areas of behavior and contracts.
- Students whose parents had post-high-school education performed above the national level in all of the topical areas.
- Students attending schools in big cities did not vary significantly in performance in the areas of behavior, contracts, economics or energy, but performed significantly below the national level in the areas of finances, mathematics, protection and purchases.
- Students attending schools located in the fringes or suburban areas around big cities did not vary significantly in performance in the areas of behavior and contracts, but did perform above the national level in the areas of economics, energy, finances, mathematics, protection and purchases.
- Students attending schools in medium-

sized cities performed above the national level in behavior and mathematics, but did not vary significantly from the national level in other topics.

- Students attending schools in smaller towns performed below the national level in only one area, mathematics, but did not vary significantly in their performance in all of the other topics.
- Students in grades lower than grade 10 and in grade 10 performed significantly below the national level in all of the topics, while students in the 11th grade and in the 12th grade performed above the national level in all topics except energy. Eleventh and 12th graders did not vary significantly in performance on the energy topic.
- Eleventh graders who live in the Southeastern region performed below the national level in only one topic, mathematics. In all other topics, these students did not vary significantly from the national level of performance.
- Eleventh graders who live in the Western region performed below the national level in only one topic, energy, and above the national level in purchases. In all other topics, these students did not vary significantly from the national level.
- Eleventh graders who live in the Central region of the country performed above the national level in all topics, while those who live in the Northeastern region of the country performed above the national level in three topics: finances, mathematics and protection.
- Male 11th graders performed above the national level in all topics except behavior, while female 11th graders performed below the national level in energy and mathematics, but above the national level in behavior, protection and purchases.



## CHAPTER 5

### WHAT DO THE RESULTS MEAN? A PERSPECTIVE

In order to offer a context for results of the consumer skills assessment, National Assessment asked six people, knowledgeable in various aspects of the consumer field, to participate in an interpretive conference. Participating were: John Clow, project director, Joint Council on Economic Education; Mareatha Counts, consumer specialist, State Attorney General's Office, Seattle, Washington; Bill Fasse, assistant professor, School of Home Economics, University of Arizona; Linda Riekes, director, Law and Education Project, St. Louis (Missouri) Public Schools; David Schoenfeld, consumer advocate, J.C. Penney Co., Inc.; and Sandra Willett, executive vice president, National Consumers League. These persons joined National Assessment staff members in discussion of the assessment results. The panel thoroughly reviewed the exercises and results described in this report as well as those not included because of space limitations. It should be noted that the comments of this panel are their observations as individuals and do not represent the positions of any organization with which they are affiliated.

Generally, the panel's comments can be presented under three categories: general observations and implications, limitations of the present study and directions for future surveys in the consumer field.

#### General Observations and Implications

While students' performance was mixed — high in some areas and low in others — the panel felt that the range of topics covered in the National Assessment survey represented areas of concern in the consumer field. As a

whole, the exercises and the topics they reflect were based on a valid premise — that is, individuals need to know how to operate and think in the marketplace. Effectiveness in the marketplace, in turn, requires broad knowledge about the economy and inflation, types of available protection, personal financial management, and so on. In other words, the consumer aspect of daily living requires more than merely the act of purchasing. The NAEP study embodied this premise.

Several members of the panel felt that the results of this consumer skills assessment indicate a higher level of awareness of some major consumer areas and greater consumer skills than would be reflected in the contemporary adult population. Nevertheless, the results in areas such as economics and protection suggest that 17-year-olds remain inadequately prepared for their roles as consumers in light of demands soon to be made on them.

Generally, the panel felt that 17-year-olds might have fared better on certain exercises had they been able to identify more closely with the situations used to illustrate various concepts in the exercises — for instance, had they been asked about purchasing stereos instead of refrigerators. The basic principles of wise purchasing are the same, however. Moreover, there is a need to acquaint 17-year-olds with situations beyond their present level of experience if they are to acquire necessary skills as consumers. Every exercise cannot be couched in terms of familiar objects and situations. Areas such as economics, federal benefits and services, taxation, avenues of protection, and redress and contractual agreements are very real aspects of



consumer activities the 17-year-old will soon confront.

The panel felt that the performance results of selected groups (Chapter 4) duplicated the patterns evident in national assessments of other subject areas. However, the panel urged caution in the teaching of consumer education courses so that males and females, for instance, are not restricted to certain types of curricula, and they also recommended that precautions be taken against a culturally biased curriculum.

A major implication derived from the present study is that consumer education needs to provide students with a broad outlook on their roles as consumers. It should create a sense of responsibility and a knowledge of various courses of action, coupled with awareness of some concrete areas where their knowledge of responsibilities and rights are required for most effective operation in the marketplace. Although National Assessment results indicate that students are perhaps becoming more sophisticated in terms of knowing they should ask questions, they still appear not to have a substantial or sufficient level of knowledge to transact effectively.

### Limitations of the NAEP Study

Although the panel commended National Assessment for conducting this survey, the consensus among panel members was that its modest scope should be stressed. It tells us important things about the needs and present knowledge of 17-year-olds, but there are other things it does not address.

For example, the NAEP assessment tended to focus on knowledge of consumer techniques and skills, but not much on the attitudes of 17-year-olds. The panel strongly recommended that future assessments address attitudes more directly, since a primary goal of consumer education is to affect approaches to and attitudes toward intelligent consumer activity.

In addition, in some exercises (those dealing with legal actions, for example) the answers seemed particularly obvious. As a consequence, these exercises provide little substantial evidence about what the 17-year-old will actually do (or has done) when confronted with certain specific situations. Since there is often a significant gap between what people know and what they do, more attention should be given to "application" exercises — for example, "How many times have you sent a complaint?" "What would you do if a vocational school representative called at your home?" and so on. The results on several exercises suggest that students may have responded on the basis of what they believed they were supposed to respond, rather than what they really believed.

Another criticism of the present study was that 17-year-olds did not participate in the development of the exercises. Participation by members of this age population could have improved the chances of including exercises embodying situations with which they are more familiar.

Therefore, readers must make their own judgments about the meaning and usefulness of the results described in this report. Because of the consensus process employed by National Assessment in the development of each assessment, exercises naturally reflect the major concerns of educators and lay persons participating in the process at one point in time. As times change, so do points of view.

### Directions for Future Assessments

The panel agreed unanimously that a full-scale assessment of consumer skills, knowledge and attitudes should be undertaken. Ideally, such an assessment should include out-of-school as well as in-school 17-year-olds. The results of a larger survey (in terms of sample size and scope of the exercises) could be used to identify various special needs of certain segments of the population, such as the handicapped or persons with low and/or

fixed incomes, as well as females and ethnic groups in the country. An additional survey could focus on some of the following concerns, for instance:

- Attitudes of consumers
  - Attitudes toward sales personnel (are they viewed as authority figures?)
  - Attitudes toward systems of legal redress (are they adequate, easy to have access to, easy to use?)
  - Attitudes toward business/management (are they accessible, nonaccessible; efficient; trustworthy; and so on?)
- Knowledge of governmental services and benefits
  - Are students aware that they are consumers of governmental services and benefits?
- Knowledge of protection services
  - Which to use under specific circumstances and how to use them
- Knowledge of variations in state and/or federal laws
- Consumer behaviors and experiences
- Perceptions of self as consumers
  - Do they feel competent, effective?
  - Do they feel victimized?
  - Do they feel a responsibility to seek out information before they buy, to take action, to seek appropriate channels for redress, etc.?
- The effect of home environment on consumer behaviors
  - Develop a series of questions that could better probe the influence of home environment and home practices on behavior

Additional formats for exercises should be included in another assessment. For example, one format that might be incorporated is the step-wise exercise that probes the actual processes or procedures a consumer might

take under specific circumstances. Examples are: extrication from a contractual agreement, seeking redress on the basis of a warranty agreement, complaining about a faulty product, and so on. Also, more multiple-choice exercises might be included using choices with narrower distinctions between them. In this way, more information could be attained about the *level* of knowledge students have in consumer activities.

### Conclusion

In concluding this conference, individual members of the panel shared their points of view about the goals and objectives of consumer education and about the responsibilities of consumers themselves. Mareatha Counts remarked:

*It is essential that students receive adequate training in important consumer skills areas. It would seem that school systems have dealt with sensitive areas before, i.e., sex education, when there was a perceived need in the community.*

Taking this point a step further, David Schoenfeld offered this observation:

*... in my view, the objectives of consumer education should be to develop hesitancy on the part of the individual before he or she takes any action or makes any decision. This would be followed by a thought process wherein the options and the consequences of those options are considered before determining a course of action.*

John Clow cautioned:

*The total results [of the NAEP assessment], in my opinion, could well give an indication of the attitude and knowledge deficiencies of the general public, since many consumer learnings are internalized from one's environment both inside and outside the school settings.*

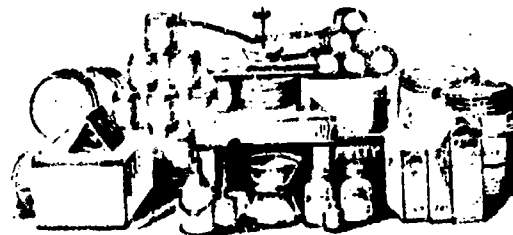
Linda Riekes stressed the need to create a sense of responsibility among consumers:

*Consumers, for instance, have a responsibility to let the appropriate agencies, bureaus, and so on, know when they have encountered a problem. However, this sort of responsibility can be instilled only when the consumer knows the appropriate actions to take and procedures to follow.*

Mareatha Counts concurred and added that once general responsibility is created, then the specifics of circumstances and situations can be acquired.

Bill Fasse indicated that "consumer education (whether acquired formally or informally) should translate into a good, practicable knowledge of how to think and operate in the marketplace."

Sandra Willett suggested still another ave-



nue of consumer responsibility:

*... the active consumer [has] rights and responsibilities not to buy, as well as to buy, to participate in government decision making, to think of the impact of individual decisions on society, and to act collectively to counter the trend toward increased corporate concentration.*

Panel members concurred that the perspective of the present report underscores the many-faceted role of consumers and their potential for impact on the economy, and thus, the necessity for forceful, comprehensive consumer education.

## APPENDIX A

### DEVELOPERS AND REVIEWERS INVOLVED IN THE 1978 CONSUMER SKILLS ASSESSMENT

Special thanks are due the following people  
for contributing their time and expertise in

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Boards of Education  
Washington, D.C.

Sally Allen, Researcher  
Council for Real Education  
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Jennifer Cross, Education Director  
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## APPENDIX B

### INDEX OF CONSUMER EXERCISES FOUND IN THE REPORT

The list below provides a complete index of the exercises discussed in this report. They are given in sequential order, by topic, beginning with Chapter 1. Each listing contains a short

description of the content of the exercises, the NAEP item number and the year administered.

Description of the Exercises	NAEP Number	Year Administered
<b>Economics</b>		
Private American businesses	C120402	1978
Definition of inflation	C120202	1978
Likely to benefit financially during period of rapid price increase	C120203	1978
Likely to be hurt by inflation	C120205	1978
Statements about federal benefits	C120901	1978
Budget items accounting for largest expenditure	C120001	1978
Describe value of U.S. dollar	C120102	1978
Consumer problems of those with low income	C140301	1978
Meaning of consumer price index (CPI)	C120201	1978
What happens when prices increase?	C120204	1978
The price of bicycles	C120302	1978
The price of bread	C120801	1978
Largest source of tax revenue	C120904	1978
Largest single deduction from average paycheck	100002	1977
Institutions/organizations receiving tax support	100903	1978
<b>Protection</b>		
Statements about consumer protection	C140101	1978
Statements about consumer action	C140403	1978
Legal rights in relation to physician/dentist	C130507	1978
General legal actions	C140501	1978
Statements about Better Business Bureaus	C140402	1978
Labeling of clothing and fabrics	102016	1977
Statements about car repair	C130502	1978
Statements about appliance repair	C130501	1978



**Description of the Exercises****NAEP Number****Year Administered****Energy**

Largest fossil fuel reserve in U.S.	A12C03-B	1978
Source of largest percentage of energy	A12C03-A	1978
Primary source of electrical energy	A12C04	1978
Power companies make a profit	C150023	1978
Conservation measure likely to save most energy	C150003	1978
Appliance consuming most energy in 15 minutes	A31C03-A	1978
Sector using largest share of U.S. energy	A22C01	1978
Percentage of U.S. energy consumed in the home each year	A31C01	1978
Most expensive means of transportation	101002	1977
How do you travel one-half mile or less?	A46A02	1978
Attitudinal statements about causes of energy problem	C150005	1978

**Finance**

Which charges highest rate of interest?	C130305	1978
Buying TV on credit	C130702	1978
Which savings plan earns the greatest return?	103011	1977
Statements about checking accounts	C130101	1978
Meaning of deductible clauses in insurance	C130605	1978
Statements about health insurance	C130601	1978
Automobile collision insurance	C130603	1978
No-fault insurance	C130604	1978
Mike's weekly budget	101003	1977
Lilly and sister redecorate room	102001	1977
Sources of help in completing federal income tax	100001	1977
Buying common stock	C130805	1978
Return on \$1,000 in common stock in five years	C130801	1978

**Behavior (Advertising, Decision Making and Shopping)**

Statements about advertising	C120601	1978
Jack buys a radio	C110103	1978
Household decision making	C110501	1978
Reasons to save money	C130701	1978
Protective steps when shopping	C140405	1978

**Contracts**

Statements about renting	C130503	1978
Statements about warranties	C130504	1978
Statements about installments	103013	1977
Extrication from contractual agreement	C140404	1978
Statements about credit cards	103009	1977
Statements about bank credit cards	C130308	1978

**Description of the Exercises****NAEP Number****Year  
Administered****Purchasing**

Selecting vocational training	C130506	1978
Purchasing medication	102015	1977
Purchasing a house	C130303	1978
Financing an automobile	C130302	1978
Serious problems when buying used automobile	102018	1977
Purchasing service contract for appliances	C130401	1978
Unit pricing of grocery items	C130202	1978
Store brand groceries	C130207	1978
Potato chips, comparative shopping	C130211	1978

**Mathematics**

Combining measures when making a cake	A31341	1978
Cost per kilowatt hour of electricity	A94644	1978
Cubic feet of concrete	D93643	1978
Cost per square foot of floor space	A80844	1978
Equal installment payments	A92944	1978
Number of pounds of ground beef	B2 242	1978
Percent of discount	A47244	1978
Cost per bottle of cola	AC0942	1978

## APPENDIX C

### SELECTED CHARACTERISTICS OF THE 17-YEAR-OLDS' SAMPLE

**TABLE C-1. Percentages of National 17-Year-Olds' Sample for Sources of Knowledge About Consumer Education**

Have you ever taken a course in high school that *dealt specifically* with consumer education?

Yes	28.9%
No	70.2†

Have you ever taken a course or courses in high school that did not deal specifically with consumer education, but did help you learn considerable information?

Yes	42.5
No	56.4†

†Columns do not total 100% because of rounding and/or nonresponse.

**TABLE C-2. Percentages of National 17-Year-Olds' Sample Receiving Information From Various Sources About How Physical and Psychological Conditions Influence Consumers on What To Buy**

	Yes	No	I Don't Know
School	69.8%	24.2%	3.7%†
Family	83.9	11.1	2.4†
Friends	59.1	34.3	3.9†
TV, radio, newspapers, magazines	73.8	20.0	3.4†
A community program	15.9	74.5	6.7†

†Rows do not total 100% because of rounding and/or nonresponse.

**TABLE C-3. Percentages of National 17-Year-Olds' Sample Receiving Information From Various Sources About How Economic Conditions and Consumer Decisions in This Country Affect Each Other**

	Yes	No	I Don't Know
School	74.2%	19.2%	4.6%†
Family	66.6	26.7	4.7†
Friends	34.1	58.2	5.5†
TV, radio, newspapers, magazines	71.6	21.3	5.0†
A community program	15.7	74.4	7.7†

†Rows do not total 100% because of rounding and/or nonresponse.

**TABLE C-4. Percentages of National 17-Year-Olds' Sample Receiving Information From Various Sources About How To Establish and Use Credit**

	Yes	No	I Don't Know
School	52.1%	43.7%	2.1%†
Family	78.1	17.8	1.8†
Friends	31.3	63.0	3.5†
TV, radio, newspapers, magazines	41.0	52.8	3.9†
A community program	9.7	82.6	5.2†

†Rows do not total 100% because of rounding and/or nonresponse.

**TABLE C-5. Percentages of National 17-Year-Olds' Sample Receiving Information From Various Sources About How To Compare the Quality and Prices of Goods and Services**

	Yes	No	I Don't Know
School	67.1%	29.1%	1.5%†
Family	89.1	7.9	1.0†
Friends	53.4	42.1	2.0†
TV, radio, newspapers, magazines	65.4	29.6	2.4†
A community program	13.6	79.2	4.6†

† Rows do not total 100% because of rounding and/or nonresponse.

**TABLE C-6. Percentages of National 17-Year-Olds' Sample Receiving Information From Various Sources About How To Save and Invest Their Money**

	Yes	No	I Don't Know
School	55.6%	39.9%	1.9%†
Family	91.2	5.3	1.0†
Friends	46.3	49.1	1.9†
TV, radio, newspapers, magazines	43.1	51.6	2.5†
A community program	11.9	81.7	3.6†

† Rows do not total 100% because of rounding and/or nonresponse.

**TABLE C-7. Percentages of National 17-Year-Olds' Sample Receiving Information From Various Sources About How To Avoid Being Misled or Cheated When They Purchase Goods and Services**

	Yes	No	I Don't Know
School	62.2%	33.1%	1.8%†
Family	88.9	7.0	1.2†
Friends	64.2	30.8	2.0†

Yes No I Don't Know

TV, radio, newspapers, magazines	55.5	38.7	2.7†
A community program	13.9	78.5	4.5†

† Rows do not total 100% because of rounding and/or nonresponse.

**TABLE C-8. Percentages of National 17-Year-Olds' Sample Receiving Information From Various Sources About How To Protect Themselves When They Receive Goods or Services That Are Not Satisfactory**

	Yes	No	I Don't Know
School	52.2%	42.0%	2.6%†
Family	86.3	9.0	1.7†
Friends	51.7	42.4	2.8†
TV, radio, newspapers, magazines	51.7	42.0	3.1†
A community program	13.1	78.8	4.6†

† Rows do not total 100% because of rounding and/or nonresponse.

**TABLE C-9. Percentages of National 17-Year-Olds' Sample Keeping a Written Record of Their Expenses**

Yes	No
19.3%	77.7%†

† Row does not total 100% because of rounding and/or nonresponse.

**TABLE C-10. Percentages of National 17-Year-Olds' Sample Responding That Self or Family Used the Services of a Consumer Protection Agency To Help Them Solve Consumer Problems**

Yes	No	I Don't Know
7.3%	63.3%	25.8%†

† Row does not total 100% because of rounding and/or nonresponse.

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