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MARKETING TECHNIQUES APPLIED TO ENERGY CONSERVATION

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MARKETING TECHNIQUES APPLIED

TO ENERGY CONSERVATION

by

William L. Christensen

A Dissertation Submitted to
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APPROVAL PAGE

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CHRISTENSEN, WILLIAM L. Marketing Techniques Applied to Energy Conservation. (1980)
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The purpose of this study is to review the nature of the controversy on the scope of marketing; to determine whether marketing techniques and tools can be applied to a social problem in a nonbusiness enterprise--in this case, education; and to analyze the results of an experiment to determine the effectiveness of these techniques.

The study attempts to answer in a specific instance the question of the effectiveness of marketing techniques seeking to solve a social problem. The nonbusiness area selected was education and the social cause decided on was energy conservation by the homeowner. This problem was selected because of its unique importance, its timeliness, and the fact that an effort to change the consumer's lifestyle in the area of energy conservation has been relatively unexplored by the different agencies involved (government, education, business, utility companies, etc.).

The hypothesis stated that certain marketing techniques applied to a nonbusiness enterprise at a selected community college will more effectively bring about the desired social change by the consumer in the area of home energy conservation than in a community college not employing these techniques. Change is evaluated on (1) initial attendance, (2) the positive action taken by the class participants, and (3) the intended future action by the participants.

The "product" that was used in this study is a homeowner energy conservation course developed by the state and federal governments entitled Project Conserve.

Project Conserve is one of several energy conservation programs sponsored by the Federal Energy Administration. The aim of Project Conserve is to encourage the residents (owners) of single-family dwellings to save home heating and cooling energy by one or more of the following methods: increasing attic and/or floor insulation; adding storm windows; adding caulking and weather-stripping; adding storm doors; and reducing or increasing thermostat setting.

The course may be broken down into four distinct stages:

1. Reinforce in the participating consumers' minds the need for energy conservation and the fact that a course to help them conserve is available.

2. Motivate the participants to attend the first orientation meeting (three hours) at no charge.

3. After the first meeting, motivate the participants to pay the tuition and enroll for the following seven segments.

4. Develop the course instructions so that not only will the participants attend all sessions, but that they will take positive action to save energy.

The findings are divided into three main categories:

1. Those activities that were undertaken prior to the first meeting, i.e., press conference, publicity, promotion, and selling support.

2. Results of the questionnaire from those who attended the first session but did not choose to continue the course.

3. Results obtained from the evaluations turned in by those who finished the course.

Although the writer encountered problems in time and resources, it is believed that certain worthwhile conclusions may be derived from the exploratory study:

1. That media involvement is essential to the promotion of a program, such as this study, and can be obtained;

2. That in the case of energy conservation, the cooperation of key firms in the business community can be obtained if it can be shown how they can benefit;

3. That, given the right program, consumers will take positive action through education to conserve energy.

Although not conclusive, this exploratory study did show that there is a possibility that marketing principles can be used by a nonprofit organization to accomplish a societal need. More research is needed in this area.

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CHAPTER I

INTRODUCTION

In recent years two opposing schools of thought have dominated all others in marketing literature. The traditional school as represented by Dr. David Luck theorizes that marketing applies primarily to the distribution of economic goods and services and that any attempt to broaden the concept to include more than the business domain would divert marketing from its true value and dilute its content.[1]

More recently, a more encompassing scope of marketing has been proposed. First publicized in an article by Drs. Philip Kotler and Sidney Levy, entitled, "Broadening the Concept of Marketing," this points out that "marketing is a relevant discipline insofar as all organizations can be said to have customers and products." They expand the marketing function or techniques to both economic and social, to both business and nonbusiness processes.[2]

The purpose of this study is as follows:

1. Review the nature of this controversy on the scope of marketing.

2. Determine if marketing techniques and tools can be applied to a social problem in a nonbusiness enterprise, i.e., education, through an experimental study.

3. Analyze the results to determine the effectiveness of these

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[1]David Luck, "Broadening the Concept of Marketing," Journal of Marketing, July 1969, pp. 53-73.

[2]Philip Kotler and Sidney Levy, "Broadening the Concept of Marketing," Journal of Marketing, January 1969, pp. 10-15.

techniques.

Before proceeding, it is necessary to review the nature of marketing and the evolution of its scope.

The Nature of Marketing

What is the proper domain of the construct labeled marketing?

Dr. Luck agrees with the American Marketing Association (AMA) which traditionally defines marketing as "the performance of business activities that direct the flow of goods and services from producer to consumer or user."[3] This position has come under attack from various quarters as being too restrictive and has prompted one textbook on marketing to note: "Marketing is not easy to define. No one has yet been able to formulate a clear, concise definition that finds universal acceptance."[4]

Although vigorous debate concerning the basic nature of marketing has alternately waxed and waned since the early 1900's, the most recent controversy probably traces back to a position paper by the marketing staff of the Ohio State University in 1965. They suggested that marketing be considered,

> . . . the process in a society by which the demand structure for economic goods and services is anticipated or enlarged and satisfied through the conception, promotion, exchange, and physical distribution of goods and services.[5]

The conspicuous absence of the notion that marketing consists of a set of business activities (as in the AMA definition) is notable. On the

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[3]Ibid., p. 3.

[4]Steward Rewoldt, James Scott, and Martin Warshaw, Introduction to Marketing Management (Homestead, IL: Richard D. Irwin, 1973), p. 3.

[5]Shelby Hunt, "The Nature and Scope of Marketing," Journal of Marketing, July 1976, pp. 56-62.

contrary, marketing is considered in a somewhat broader context.

This broader view was supported by Drs. Kotler and Levy. Although they did not specifically propose a new definition of marketing, Kotler and Levy in 1969 suggested that the concept of marketing be broadened to include nonbusiness organizations. They observed that churches, police departments, and public schools have products, services, and customers, and that they use the normal tools of the marketing mix. Therefore, Kotler and Levy concluded that these organizations perform marketing or, at least, marketing-like activities. Thus, "the choice facing those who manage nonbusiness organizations is not whether to market or not market, for no organization can avoid marketing. The choice is whether to do it well or poorly," and on this necessity the case for organizational marketing is basically founded.[6]

At the same time, Dr. Lazer supported this concept by saying that what is required is a broader perception and definition of marketing than has hitherto been the case--one that recognizes marketing's societal dimensions and perceives of marketing as more than just a technology of the firm.[7]

Thus, Kotler and Levy desired to broaden the notion of marketing by including not-for-profit organizations, and Lazer called for a definition of marketing that recognized the discipline's expanding societal dimensions.

Luck took sharp issue with Kotler and Levy by insisting that marketing be limited to those business processes and activities that ultimately

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[6]Kotler and Levy, "Broadening the Concept of Marketing," p. 15.

[7]Robert Lavidge and Robert Holloway, <u>Marketing and Society: The Challenge</u> (Homestead, IL: Richard D. Irwin, 1969), p. 7.

result in a market transaction. Luck noted that even thus bounded marketing would still be a field of enormous scope and that marketing specialists could still render their services to nonmarketing causes.[8] Kotler and Levy then accused Luck of a new form of myopia and suggested that "the crux of marketing lies in a general idea of exchange rather than the narrower thesis of market transactions." They further contended that defining marketing "too narrowly" would inhibit students of marketing from applying their expertise to the most rapidly growing sectors of the society.[9]

Other marketing commentators began to espouse the dual theses that (1) marketing be broadened to include nonbusiness organizations, and (2) marketing's societal dimensions deserved scrutiny. Thus, Ferber prophesied that marketing would diversify into the social and public policy fields.[10] Additionally, Lavidge sounded a similar call to arms by admonishing marketers to cease evaluating new products solely on the basis of whether they could be sold. Rather, he suggested, they should evaluate new products from a societal perspective; that is, should the product be sold?[11]

The areas in which marketing people can, and must, be of service to society have broadened. In addition, marketing's functions have been

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[8] Theodore Levitt, "Marketing Myopia," Harvard Business Review, July-August 1960, pp. 45-56.

[9] Philip Kotler and Sidney Levy, "A New Form of Marketing Myopia: Rejoinder to Professor Luck," Journal of Marketing, July 1969, pp. 55-57.

[10] Robert Ferber, "The Expanding Role of Marketing in the 1970's," Journal of Marketing, January 1970, pp. 29-30.

[11] Robert Lavidge, "The Growing Responsibilities of Marketing," Journal of Marketing, January 1970, pp. 25-28.

broadened. Marketing no longer can be defined adequately in terms of the activities involved in buying, selling, and transporting goods and services.

In "Conceptual Conflicts in Marketing," William G. Nickels reported that of seventy-four marketing professors surveyed, 95% felt that the scope of marketing should be broadened to include nonbusiness organizations, and 93% believed that marketing is not concerned solely with economic goods and services.[12] These responses imply that marketing is something in addition to the official definition given by the American Marketing Association, something in addition to what is currently presented in most marketing studies.

While normative criteria may be lacking as to how marketing should be defined, some value may be found in the reasons this broad viewpoint came about. Its implications are relative to marketing study, education, and practice.

For purposes of clarity, this general review of marketing will be divided into three parts: (1) The history of the marketing concept, (2) the evolution of the definition of marketing, and (3) the summary of the stages of the scope of marketing.

The History of the Marketing Concept

From the time the first settlers began their struggle to survive in America until after the Civil War, the general philosophy of business was, "Produce as much as you can because there is a limitless market." Given the limited production capability and the vast demand for products in

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[12]William G. Nickels, "Conceptual Conflicts in Marketing," Journal of Economics and Business, Winter 1974, pp. 140-143.

those days, such a philosophy was both logical and profitable. Business people were mostly farmers, carpenters, and trade workers who were catering to the public's basic needs for housing, food, and clothing. There was a need for greater and greater productivity capacity, and businesses naturally had a production orientation. Consequently, little attention was given to marketing. This philosophy was satisfactory at that time because most goods were bought as soon as they became available.

After the Civil War, businesses in the United States began to grow much larger. By 1890 some had become so large and complex that a law called the Sherman Antitrust Act was passed to forbid such things as contracts, combinations, or conspiracies in restraint of trade. In part, this act, which had little immediate effect, was passed to prevent larger corporations from driving smaller firms out of business.

During the period from 1890 to 1920, businesses turned to mass production; automobile assembly lines are a prime example of this development. This was also a time when large corporations had control over much of the sugar industry, the oil industry (this was before cars were widely available), and other major industries. Production capacity often exceeded the immediate market demand, and the marketing philosophy turned from a production orientation to a sales orientation. Businesses turned their attention to promoting their products and mobilized much of the firms' resources into the sales effort.

In the 1920's books on selling were written by psychologists and other trained professionals. They usually emphasized techniques for "getting your foot in the door," "overcoming objections," and "winning the order"; they generally tried to show how psychological concepts could be used to persuade others to buy. The customer was usually viewed as a pawn to be moved and manipulated in the quest for increased profits.

World War II moved the United States away from depression and unemployment to mobilization for war. Mass production techniques were employed to produce military products rather than consumer products. Because of the war effort, few consumer goods were available, and many were rationed. It was not a time for salespeople to be pushing consumer goods.

After the war there was a tremendous demand for goods and services among the returning soldiers who were starting a new life with new families. It was during these postwar years that the "baby boom" (the sudden large increase in the birthrate after the war) started, and a "boom" in consumer spending was also launched.

The United States entered a period of relative prosperity after the war (1945 to 1950), and businesses began to recognize the need to work with their customers rather than continue the philosophy of selling to customers. A major factor in this era was the rapid development and expansion of consumer credit. The sales orientation that had dominated businesses for so many years (from about 1870 until the early 1950's) was being slowly replaced by what is now known as the "marketing concept."

The traditional marketing concept was interpreted differently by various authors, but it basically called for three managerial strategies: (1) a consumer orientation, (2) the coordination and integration of corporate efforts, and (3) a profit orientation.[13]

The Evolution of the Definition of Marketing

Marketing was first taught as a business subject in 1902. At that

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[13]William G. Nickels, Marketing Principles (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1978), p. 51.

time the courses had names like "The Distribution of Products," and marketing was thought of as a distribution process.[14] In fact, the American Marketing Association still officially defines marketing as "the performance of business activities that direct the flow of goods and services from producer to consumer or user."[15]

One popular definition in the 1950's viewed marketing as "the delivery of a standard of living to society."[16] Throughout the period from 1900 to 1960, marketing was generally thought of as a business activity. The emphasis in texts was on the description of marketing functions and institutions. During this period there were many different concepts about the meaning of marketing:

> It has been described by one person as a business activity; as a group of related business activities; as a trade phenomenon; as a frame of mind; as a coordinative, integrative function in policy making; as a sense of business purpose; as an economic process; as a structure of institutions; as the process of exchanging or transferring ownership of products; as a process of concentration, equalization, and dispersion; as the creation of time, place, and possession utilities; as a process of demand and supply adjustment; and as many other things.[17]

During the 1960's the emphasis in marketing (and in marketing texts) shifted to marketing management. The definitions thus emphasized management of the flow of goods and services from producer to consumer.

But the 1970's saw the emergence of a new direction in marketing

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[14] Robert Bartels, The Development of Marketing Thought (Homestead, IL: Richrad D. Irwin, 1962), p. 3.

[15] "Report of Definitions Committee," Journal of Marketing, October 1948, pp. 202-217.

[16] Paul Mazur, The Standards We Raise (New York: Harper and Row, 1935), pp. 18-28.

[17] Bureau of Business Research, Statement of the Philosophy of Marketing by the Marketing Faculty (Columbus: Ohio State University, 1964).

thought. Marketing concepts were broadened to include the activities of nonprofit organizations, and the definitions changed as well.[18]

The newer, more progressive texts recognize marketing as an exchange activity applicable in all exchange situations. Thus, marketing is now referred to as "those activities performed by individuals or organizations, either profit or nonprofit, that enable, facilitate, and encourage exchange to the satisfaction of both parties,"[19] or as "human activity directed at satisfying wants and needs through exchange processes,"[20] or as "exchange activities conducted by individuals and organizations for the purpose of satisfying human wants."[21]

Evolution of the Scope of Marketing

Since its inception in the early twentieth century, the concept of marketing has undergone many changes. While its stages may be variously identified, these general categories seem to be apparent.

Marketing, concerned with the distribution of products. Originally, the economic process was conceived as divided between production and distribution, the marketing portion of the process beginning upon completion of production. Marketing was viewed as an exchange process, dealing with physical distribution and the economic and legal aspects of transaction.

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[18]Kotler and Levy, "Broadening the Concept of Marketing," p. 10.

[19]Marcus Burton and others, Modern Marketing (New York: Random House, Inc., 1975), p. 4.

[20]Philip Kotler, Marketing Management: Analysis, Planning and Control (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1972), p. 5.

[21]Ben M. Enis, Marketing Principles: The Management Process, (Santa Monica, CA: Goodyear Publications, Inc., 1977), p. 17.

Marketing, as the economics of distributive enterprise. Beginning in the early 1920's, enterprise aspects of marketing became increasingly emphasized. Functions and problems of institutional operation, but not yet the processes of management decision making, were the principal subjects of concern.

Marketing, as management of the distributive process. An evaluation of marketing management occurred during the 1950's when variables other than the simple mathematics of making ends meet gained attention. Management of the "4 P's" of marketing--product, price, promotion, and place--represented a concept of marketing moved one step more from the macro to the micro and from the general to the specific, yet from the routinely operational to the coordinatively managerial.

Marketing, as distributive managerial decision making. With the introduction of new managerial concepts into marketing management, emphasis shifted a degree further from macro considerations toward a broadened interdisciplinary concept of management itself. Educational literature and courses reflected this in their incorporation of models, quantitative analysis, electronic data processing, and various methods and techniques of decision making.

Marketing, as a behavioral process. In the late 1950's increasing interest in behavioral disciplines imbued marketers with greater appreciation of the humanistic aspects of marketing. This constituted a new element in contrast to the economics of distribution, the mathematics of merchandising, and the processes of decision making. Roles of marketing participants definable in other than their economic context were identified, and the patterns of their interactions and perceptions of responsibility explored.

<u>Marketing, as a societal process</u>. During the 1960's marketing became increasingly regarded not merely as a process involving economic participants, but as a societal process in which the functions and responsibilities of the marketing segment were viewed as interrelated with all other segments of the social structure. In its relationships with the legal, political, educational, religious, and general community environments marketing was both a dependent and an independent variable. Marketing behavior was seen to be influenced by the nonbusiness values of its participants, and nonbusiness institutions were seen to be influenced by business and the activities of businessmen.

<u>Marketing, as a generic function applicable to both business and nonbusiness institutions</u>. Beyond its relationship to society in general in the distribution of economic goods, marketing in the late 1960's became viewed as a generic process, one applicable to the fulfillment of the needs and goals of all types of institutions. Kotler and Levy said in 1969, "When we come to the marketing function, it is also clear that every organization performs marketing activities whether or not they are recognized as such."[22] They identified the marketing functions as product development, pricing, distribution, and communication. Thus, in preparing and presenting their ideas and programs, government departments, political campaigners, military recruiters, educators, and activists are said to be engaging in "marketing"; therefore, it is the province of professional marketers to provide expertise on their behalf. It was recommended also that:

> Marketing is that function of the organization that can keep in constant touch with the organization's consumers, read their

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[22]Kotler and Levy, "Broadening the Concept of Marketing," p. 15.

> needs, develop "products" that meet these needs, and build a program of communications to express the organization's purpose.[23]

It is thus that the scope of marketing has broadened to the dimensions preferred by the large percentage of marketing professors surveyed by Nickels.

As emphasis in marketing has broadened to include both economic and social behavior, insight has been gained into the interaction of those who participate in marketing, and techniques for guiding interaction patterns have been developed. These have come from studies in consumer behavior, personnel management, channel organization, communication, cross-cultural relationships, quantitative analysis, and social responsibility. Marketers skilled in these techniques have found application for their expertise outside the marketing field, for people in different roles may act similarly and respond alike to stimuli. Thus, as the scope of marketing practice has broadened, so has the concept of marketing, with the term social marketing designating the application of marketing techniques to nonmarketing fields.

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[23] Robert Bartels, "The Identity Crisis in Marketing," Journal of Marketing, October 1974, pp. 73-76.

CHAPTER II

RELATED RESEARCH

In 1970 two professors at Northwestern University, Philip Kotler and Sidney Levy, won an award for writing the best article of the previous year in the Journal of Marketing. It called for broadening the concept of marketing, and it was to cause quite a stir among marketing scholars. Here are some of the things the authors said in that article:

> Political contests remind us that candidates are marketed as well as soap; student recruitment reminds us that higher education is marketed; and fund raising reminds us that "causes" are marketed. Yet these areas of marketing are typically ignored by the student of marketing . . . .
>
> . . . the authors see a great opportunity for marketing people to expand their thinking and to apply their skills to an increasingly interesting range of social activity . . . .
>
> . . . Many . . . organizations . . . require the same rarefied management skills as traditional business organizations. Managing the United Auto Workers, Defense Department, Ford Foundation, World Bank, Catholic Church, and University of California has become every bit as challenging as managing Proctor and Gamble, General Motors, and General Electric . . . .
>
> . . . All organizations must develop appropriate products to serve their sundry consuming publics. The business heritage of marketing provides a useful set of concepts for guiding all organizations.[1]

The favorable reaction to the article by Kotler and Levy was not unanimous, however. David Luck felt that they had broadened the concept of marketing too far. As Luck put it: "A manageable, intelligible, and logical definition of marketing can be fashioned when its scope is

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[1]Philip Kotler and Sidney Levy, "Broadening the Concept of Marketing," Journal of Marketing, January 1969, pp. 10-15.

bounded within those processes or activities whose ultimate result is a market transaction."[2]

Kotler and Levy answered Luck with their point that the crux of marketing lies in a general idea of exchange rather than the narrower idea of market transactions. Exchange involves two or more parties who voluntarily agree to enter into a trading agreement.[3]

In reality, there does not seem to be any right or wrong in this debate. Marketing is concerned with market transactions, but it is also concerned with nonmarket exchanges. The problem should more appropriately be centered on the question of whether marketing concepts, principles, and strategies can be effectively applied to nonprofit organizations.

In conducting a review of related research in the general area of social marketing and, more specifically, in the field of education, one of the handicaps encountered was the lack of primary research data. However, a few pertinent articles could be summarized.

Mindak and Bybee applied marketing concepts to a local fund-raising campaign for national charity and discussed the process and results in "Marketing's Application to Fund Raising."[4] They found that the benefits achieved from the application of marketing tools outweighed the additional costs to the campaign, and the fund drive experienced its first

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[2]David Luck, "Broadening the Concepts of Marketing," Journal of Marketing, July 1969, pp. 53-63.

[3]Philip Kotler and Sidney Levy, "A New Form of Marketing Myopia: Rejoinder to Professor Luck," Journal of Marketing, July 1969, pp. 55-57.

[4]William Mindak and Malcolm Bybee, "Marketing's Application to Fund Raising," Journal of Marketing, July 1971, pp. 13-18.

revenue increase in several years. This is an illustration that marketing technology, properly applied, can achieve the results discussed in the preceding article.

This particular case concerned a March of Dimes fund-raising drive held in Travis County, Texas, in January, 1970. Despite limited funds and facilities, or perhaps because of these limits, the authors had an opportunity to experiment with marketing concepts in a area not traditionally considered a business enterprise.

The first handicap the authors encountered in conducting the marketing analysis was the lack of primary research data about the "heavy giver," his demographic characteristics, the location and size of this particular market, and his basic motivations for giving or not giving. In view of the fact that since its inception in 1934 through 1960 the National Foundation had raised $618.5 million, and that in 1967 it was the fourth largest public health agency in terms of contributions (some $22 million), one would expect a wealth of primary marketing data. However, the policy of the National Foundation of the March of Dimes has been to spend money on medical research rather than on consumer or marketing research. A review of past chapter records, in addition to exploratory investigations in the local community, did indicate the following problems:

1. An apathetic and uninformed public which still considered the major aim of the organization to be the prevention of polio.

With the advent of the Salk (1955) and later the Sabin (1962) vaccines, an effective prevention for polio was achieved. Although the National Foundation had announced interests in other related diseases, particularly birth defects, as early as 1958, relatively few people had changed their image of the March of Dimes.

A preliminary telephone survey conducted in Travis County indicated that only 17.5% of the respondents related birth defects with the March of Dimes on the unaided recall basis. When aided, only another 13.4% made the association. Thus, 30.9% of those surveyed realized that the March of Dimes was becoming concerned with birth defects. Therefore, although the product had been redefined, the Travis County public was not aware of this redefinition.

2. Decreasing interest in the organization and a subsequent decline in involvement by volunteers. This was attributed to a general de-emphasis in the importance of birth and child-rearing by women, with subsequent lessened interest in the birth process, and increasing competition from other causes needing volunteers.

3. Declining returns from each campaign in Travis County.

4. Lack of primary marketing research data on the composition of donors and the location of prime market segments for the current year or for the previous year.

5. Evidence that nationally prepared campaign materials did not apply to the local situation.

There was a feeling that the national campaign was too organization-centered and not sufficiently benefit-centered. The use of such themes as "250,000 babies are born each year with birth defects" was not personally involving, and the shock effect of a single poster child with missing and disfigured limbs seemed too negative and too removed to be effective.

In addition to these problems, a market analysis indicated several potential opportunities:

1. A long public association of the March of Dimes Organization with the area of public health. A nation-wide opinion survey conducted by the American Institute of Public Opinion found that 83% of the population in the United States could identify the March of Dimes.

2. Recent breakthroughs in the area of birth defect prevention and detection coupled with a high number of people exposed to the problem.

3. The organization and structure of the March of Dimes, with a nucleus of dedicated individuals.

4. Receptivity at the local level to experiment with new marketing and communication techniques.

Once a marketing plan had been instituted and the problems and opportunities analyzed, various marketing techniques were applied with these conclusions.

As Mindak and Bybee conclude, the results of the Travis County test market clearly suggest that marketing techniques and philosophy can be applied to ideas and social causes. It also seems clear that they could have national application for a foundation such as the March of Dimes.

Associations and their causes, like products, experience a life cycle. Patton suggests that a product will go through graduated intervals of development, beginning with an introduction stage which is followed by stages of growth, maturity, and decline:

> As volume rises and the market becomes increasingly saturated marketing steps to the center of the stage. Generally speaking at this point all competitive products are reliable and there is less and less to choose between them. Improvements in the product tend to be small with selling features or style changes dominant.[5]

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[5]Arch Patton, "Top Management's Stake in the Product Life Cycle,"

The question is how long can basic market research be viewed as an unnecessary, unwanted expense by an organization such as the March of Dimes.

Research information could be translated into selective promotion, in to contrast to the "mass" techniques used in the past. Computer data from the Internal Revenue Service are already available containing information on incomes, number of dependents, and taxes paid for each of the 35,000 postal Zip Code areas. These data, plus a regression and correlation analysis of March of Dimes data from individual chapter records, could identify the names to efficiently reach the "heavy giver."

The need to apply other marketing management concepts is equally obvious. These concepts include redefining the "product" in a meaningful way, developing new marketing tools for the volunteer, and arranging national test markets to test different types and levels of promotional appeals.[6]

Zaltman and Vertinsky consider a different aspect of environmental marketing in "Health Services Marketing: A Suggested Model."[7] They take marketing out of its traditional realm of business orientation and present a model of the social and psychological considerations and their interactions affecting the success of marketing health programs. However, the contribution of this article transcends the model and its

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Marketing Management and Administrative Action, eds. Stuart H. Britt and Harper W. Boyd, Jr. (New York: McGraw-Hill Book Company, 1968), p. 324.

[6]Mindak and Bybee, p. 18.

[7]Gerald Zaltman and Ilan Vertinsky, "Health Service Marketing: A Suggested Model," Journal of Marketing, July 1971, pp. 19-27.

applications. It provides an illustration of the manner in which concepts from the behavioral and social sciences can be combined with the competent application of marketing concepts to achieve socially desirable results outside of the business area.

The authors contend that it is in the commercial interest of most profit-oriented firms in health-related industries to promote proper health practices. In doing so, firms engage in "social marketing." Social marketing has been defined by Kotler and Zaltman as the

> . . . design, implementation, and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research.[8]

It is also argued that nonprofit health agencies at the federal, state, and local levels would be more effective if they utilized marketing concepts more carefully and explicitly. Thus, the social marketing concept extends in two directions: to marketing organizations and to social-problem-oriented agencies.

The health market is rapidly becoming one of the most significant markets in the economies of developed and less developed countries. It is, therefore, increasingly important that attempts be made to gain further insights into human behavior in health situations. This article by Zaltman and Vertinsky discusses social marketing in a health context. It is concerned with developing a psychosocial model of health-related behavior with emphasis on less developed countries.

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[8]Philip Kotler and Gerald Zaltman, "Social Marketing: An Approach to Planned Social Change," Journal of Marketing, July 1971, pp. 3-12; see also Julian L. Simon, "Some 'Marketing Correct' Recommendations for Family Planning Campaigns," Demography 5 (1968); 504-507; see also John Ziegler, "Social Change Through Issue Advertising," Sociological Enquiry, April 1970, pp. 159-165.

Each component of the model is identified and defined, and some of the interactions among its components are noted. While the state of the art suggests that a complete model is almost an impossibility, the authors feel that the model presented forms a modest but important step in integrating existing knowledge. A mosaic of variables and processes is assembled which is particularly relevant to the health care sector of social life. These variables will help to form a basis for the development and analysis of health marketing strategies. Since the authors' experience in the prior years to writing this article had focused on nutrition and the improvement of general health practices in Latin America, the model draws heavily on examples in this area.

The presentation of the model and a treatment of its major components and their interaction is followed by a general discussion which focuses on selected elements of the model and illustrates the actual manifestation of these elements in the marketplace. The article concludes with the model's potential usage by agencies marketing proper health practice and products. In closing, the authors state:

> The health and allied industries are becoming an increasingly large factor in the economies of developed and developing nations. Marketing activities represent an important force for developing and tapping this important market and in making a significant contribution to human health and welfare.[9]

Marketing's changing environmental role is further illustrated in "Marketing and Population Problems."[10] Until recently, the idea of applying marketing technology to help solve the world's population problems would not have been considered by marketing scholars and

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[9]Zaltman and Vertinsky, p. 27.

[10]John Farley and Harold Leavitt, "Marketing and Population Problems," Journal of Marketing, July 1971, pp. 28-33.

practitioners. Farley and Leavitt note the magnitude of the population problem and discuss the failure of massive programs designed to abate the population explosion. The authors believe that part of this failure can be attributed to the technical personnel responsible for administering these programs who neglected such critical issues as distribution channels, promotion, and "consumer" attitudes. It is in these areas that the application of marketing technology can effectively be employed to aid in solving the population problem. The authors state:

> One of the problems inherent in several population programs has been that they maintain a distinct production orientation. Virtually all official programs have been formulated around medical considerations. Distribution has been planned through clinics, and promotion has consisted of fundamental education, generally in the classroom or face-to-face in the clinic. There has been increasing recognition that this approach may not be sufficient, and that a variety of other options--including private sector and particularly marketing involvement--would be useful. The peculiar skills of the entrepreneur, as well as those of the marketer, are being acknowledged as a "reservoir" of talent and energy in that private sector that could in principle contribute to the legitimate extension of the practice.
>
> It is further recognized that the private sector in general has played an important role in the distribution of contraceptives, both in the developed and the developing countries.
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> . . . It would appear that a latent market exists for birth control services and devices, but that the means used to stimulate its development have generally been inadequate. This presents a variety of marketing opportunities.[11]

Adel I. El-Ansary and Oscar Kramer, in their study, "Social Marketing: The Family Planning Experience,"[12] related the application of marketing technology to the field of family planning. They explore the manifestations of social marketing applications in the Louisiana model of a state-wide program for family planning. Their conclusion is

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[11]Ibid., pp. 30-31.

[12]Adel I. El-Ansary and Oscar Kramer, "Social Marketing: The Family Planning Experience," Journal of Marketing, July 1973, pp. 1-7.

that the significance of this experiment lies in the fact that the Louisiana Family Planning Program has proven its value as a national model for the successful delivery of these services. It has even been expanded to include international environments. The success of the program and its continued growth are, in part, the result of:

1. The adoption of consumer-oriented philosophy in service delivery as manifested by (a) defining the services needed by the customer, (b) determining a market target and the use of market segmentation, (c) taking the service to the customer rather than bringing the customer to the service source, and (d) emphasizing the concept of selling family planning rather than giving a free birth-control method.

2. The recognition of marketing as a process with many participants other than the Family Health Foundation and the customer. The sensitivities of these participants (the community, the American Medical Association, and sources funding, among others) were considered in designing the program's marketing strategy.

3. The recognition of marketing as an integrated effort involving the design of a marketing mix which included (a) developing and defining the concept of the product offering as a bundle of benefits or satisfactions; (b) the popularization of the idea that opportunity for the customer is the price paid for the "free" service; (c) the design of service delivery programs, including clinic site selection and physical and information flows, to provide an acceptable service level to the customer; (d) the recognition of promotion as an integrated effort, including mass media advertising, personal selling, and public relations; and (e) the recognition of marketing research as a continuing effort to provide inputs for a marketing information system.

4. The use of analytical marketing tools such as break-even and cost-benefit analysis.

5. The use of a generic "human services" definition rather than a myopic "family planning" definition of the program's services.

6. The extension of the foundation's activities to multinational environments and adaptation of the product offering to the needs of these environments.

El-Ansary and Kramer emphasize that:

> Marketing is a field in transition. In recent years, its spectrum has broadened to involve marketing of social causes. So far, we have been flooded with literature and discussions of the theoretical underpinnings of broadening the concept of marketing. There seems to be a greater need not to examine available evidence of "broadening type" applications, especially in the most controversial area of "social marketing."[13]

"Recycling Solid Wastes: A Channel-of-Distribution Problem" illustrates how marketing can be used to provide profit opportunities to firms and to facilitate the accomplishment of societal goals.[14] Zikmund and Stanton consider the recycling of solid wastes to be a channel-of-distribution problem that can be analyzed through applying traditional marketing techniques. This article depicts an area of marketing opportunity as well as a social concern where marketing technology can be effectively applied.

In the article the authors address the problem by pointing out that in 1970 every American threw away approximately five and one-half pounds of solid waste (industrial construction, commercial and household) each day which amounts to about a ton a year. This daily disposal

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[13] Ibid., p. 1.

[14] William Zikmund and William Stanton, "Recycling Solid Wastes: A Channel-of-Distribution Problem," Journal of Marketing, July 1971, pp. 34-39.

rate is predicted to increase to eight pounds by 1980.[15] The escalation of public concern over environmental issues has, to an increasing extent, led government officials, business leaders, and conservationists to seek a solution to the problem of solid-waste pollution. One ecologically desirable technique for the disposal of trash is recycling. Simply stated, recycling consists of finding new ways of using previously discarded materials.

The recycling of solid wastes is being recognized as a tenable solution to cleaning up the cluttered environment. Scientists view recycling as a substitute for the declining supply of natural resources. Technology has responded to the recent interest in recycling with many new and sophisticated techniques capable of turning solid wastes into basic raw materials.

Although science and technological innovations are necessary aspects of recycling, the task of alleviating solid-waste pollution may be treated as a marketing activity; that is, the marketing of garbage and other waste materials. If it is a marketing function to distribute products and to add time and place utility to products, then, theoretically, it should make no difference whether the product is an empty, used beer can or a full one. More specifically, recycling is primarily a channel-of-distribution problem, because the major cost of recycling waste products is their collection, sorting, and transportation. The American Paper Institute estimates that over 90% of the cost of recycling paper is the cost of distribution.

This article by Zikmund and Stanton discusses the major alternative channels necessary to handle the waste materials created by

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[15]"Cash in Trash? Maybe," Forbes, 15 January 1970, p. 20.

the ultimate consumer, and identifies some of the major marketing problems involved in the recycling of these waste materials.

In referring to alternative channels-of-distribution, the authors put forth the concept of the "Backward Channel":

> If recycling is to be a feasible solution to the trash problem, there must be some means to channel the waste materials to the firm for future reuse. However, marketers have traditionally examined the channel of distribution starting with a producer; that is, a channel of distribution is the vehicle which facilitates the flow of goods from producer to consumer.
>
> Recycling, on the other hand, is unusual from a marketing standpoint, because the ultimate consumer who recycles his waste materials must undergo a role change. The household consumer who returns his old newspapers and used bottles is the de facto producer of the waste materials which eventually will be reused. Thus, in this case the consumer becomes the first link in the channel of distribution rather than the last. The unique circumstances of recycling present an interesting marketing situation.[16]

The authors conclude then that recycling waste materials is essentially a "reverse-distribution" process. Reverse distribution is facilitated by a "backward" channel which returns the reusable packaging and other waste products from the consumer to the producer; it reverses the traditional physical flow of the product.

Conceptually, reverse distribution is identical to the traditional channel of distribution. The consumer has a product to sell and, in essence, he assumes the same position as a manufacturer selling a new product. The consumer's (seller's) role is to distribute his waste materials to the market that demands his product.

There is a practical difference, however, between the traditional channel and the "backward" channel. The consumer does not consider himself a producer of waste materials. Consequently, he is not concerned

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[16] Ibid., pp. 34-35.

with planning a marketing strategy for his product--reusable wastes. The authors state: "Thus, for analytical purposes the recycling of waste materials will be considered as the reverse distribution of the original product, and the flow of the product from the consumer to the producer will be treated as the manufacturer's 'backward' channel."[17]

Predicting the future is difficult, but knowledge of society's needs helps us to know the general direction of the changing environment. One focus of the 1970's seems to center on the reduction of pollution in our environment. The environmentalists who see recycling as the solution to the problem of solid-waste pollution must rely on marketing's help; technology alone is not enough. Lavidge has observed that:

> . . . as it (marketing) matures, as it broadens in function and scope, marketing will become increasingly relevant during the 70's to the fulfillment of man. And as the impact of marketing on society increases, so does the social responsibility of marketing people.[18]

Recycling waste materials is part of marketing's growing responsibility.

Kassarjian provides evidence of the effectiveness of an advertising theme which emphasized societal rather than individual benefits in his article, "Incorporating Ecology into Marketing Strategy: The Case of Air Pollution."[19] He attempted to identify the market segment which would respond to air pollution appeals and found that such a theme appealed to all demographic segments. The summary of this study is as follows:

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[17] Ibid., p. 35.

[18] Robert Lavidge, "The Growing Responsibilities of Marketing," Journal of Marketing, January 1970, pp. 25-28.

[19] Harold Kassarjian, "Incorporating Ecology into Marketing Strategy: The Case of Air Pollution," Journal of Marketing, July 1971, pp. 61-65.

In the early part of 1970 an ideal combination of conditions existed for the introduction of a new product--a pollution-reducing gasoline. A portion of the population was seriously concerned about air pollution and was willing to try to solve the problem; a product was available that purportedly aided in the reduction of air pollution; a massive advertising campaign was undertaken; and governmental officials were prepared to make testimonials. Within six weeks after the introduction of the gasoline, more than half of the population had paid an additional two to twelve cents per gallon to try the new brand. Two-thirds of the people could identify the company marketing the product, and 55% could identify the brand name.

When a product is introduced that appears to promise some alleviation of a critical problem, its acceptance by the population is vitally important. In the case of air pollution, advertising incorporated an appeal which would be effective in reaching those concerned. A significant percentage of members of the high-concern group could identify the name of the company and the name of the additive promising the problem's alleviation.

Consumers, in general, were willing to try the product at premium prices. They claimed to be willing to pay more for it (with circumstantial evidence that this may have been true) and certainly appeared to be interested in the developments surrounding the product. With a good product based on ecological concerns, the potential for a marketer seems to be impressive.

The author concluded by saying:

> In regard to the marketing correlates of air pollution, it is apparent from this study that there is no simple segmentation variable other than the attitude itself. Demographic variables

such as age, sex, socioeconomic status, and political party membership do not seem to be relevant. Other variables, not presented in this article, such as selected sociopsychological ones, also do not discriminate between the two attitudinal groupings. The important variable of concern to the marketer is not related to the usual market segmentation criteria, but rather the level of concern about the issue at hand, whether it be nonreturnable bottles, high-phosphate detergents, aluminum cans, or excessive use of paper bags dispensed at supermarkets. In this particular case the issue was air pollution, and the environment consisted of a large concerned population, good marketing support, and a successful campaign. It is unfortunate that the product allegedly was unable to withstand the test of credibility. One can only wonder what the long-term effect will be on the marketing of the product now that apparently many consumers, as well as the Federal Trade Commission, believe its value and superiority have been discredited.[20]

In the area of marketing and education, even less work has been done.

Dr. Krachenberg, in his article, "Bringing the Concept of Marketing to Higher Education," states:

> A major operational activity that still remains largely unappreciated by higher education, however, is marketing. The term "marketing" to most people connotes an activity peculiar to the business world alone. To many, it is synonymous with selling or advertising. Even to those who accept marketing in its broader context, that of the determination and meeting of customer needs and wants, it is almost always viewed as solely a business activity. To the contrary, it is a pervasive societal activity that every kind of organization is engaged in, and generally must engage in.[21]

Dr. Fram, in his article, "Marketing Higher Education," has this to say:

> Problems faced by higher education in the last several years have led some educators to conclude that a business-minded approach to education has merit. In other words, institutions of higher learning may look toward business for help in finding solutions to some of their problems. Terms such as cost-benefit analysis, management by objectives, and systems analysis are now

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[20]Ibid., p. 1.

[21]A. R. Krachenberg, "Bringing the Concept of Marketing to Higher Education," Journal of Higher Education, May 1972, pp. 369-380.

> included in the language of college and university administrators. It is becoming clear that problems faced by business organizations are not much different from those faced by any human organization, although organizational outputs may be different.
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> Business approaches in use by colleges and universities have largely been drawn from the financial practices of the business community, but another business function--marketing--has recently been identified as an area in which a business approach might benefit higher education. In fact, marketing principles may be of greater value than financial principles in solving educational problems. In the business factor, the job of the marketing function is to help the organization focus on the needs and wants of current and potential customers. If marketing approaches are applied to institutions of higher learning, they can similarly help the college or university focus on its "customers"--students, alumni, donors, and governmental agencies.[22]

This lack of hard data on the concept of social marketing and non-profit organizations, such as educational institutions, points out the need for research if marketing techniques are going to be used effectively. The experiment that follows attempts to supply some of this much needed data.

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[22]Eugene Fram, "Marketing Higher Education," <u>The Future in the Making</u> (San Francisco: Jossey-Bass, 1973), pp. 56-62.

CHAPTER III

AN EXPERIMENTAL STUDY IN MARKETING--AN EDUCATIONAL PROGRAM

In a recent paper, Professors Kotler and Levy maintained that marketing is a societal activity which goes beyond the selling of toothpaste, soap, and steel.[1] They suggested that the basic concepts of product development, distribution pricing, and communication also apply to nonbusiness organizations interested in persons, services, and ideas. Further, they challenged marketing professionals to apply their skills to an increasing range of social activity rather than to a narrowly defined business activity.

This exploratory study is, in part, a response to that challenge. It hopes to answer specifically the question of the effectiveness of marketing techniques applied to a nonbusiness enterprise involved in the attempt to solve a social issue. The nonbusiness area selected for study was "energy conservation by the homeowner." This problem was selected because of its unique importance, its timeliness, and the fact that an effort to change the consumer's life-style in the area of energy conservation has been relatively unexplored by the different agencies involved (government, education, business, utility companies, etc.).

The sample used will be those homeowners in the area served by Guilford Technical Institute consisting mainly of Greensboro, Jamestown,

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[1]Philip Kotler and Gerald Zaltman, "Social Marketing: An Approach to Planned Social Change," Journal of Marketing, July 1971, pp. 3-12.

and High Point, North Carolina. If the promotion is successful, it is estimated that the sample will not exceed 25 students.

Statement of the Problem

The hypothesis simply stated is: that certain marketing techniques applied to a nonbusiness enterprise (a selected community college) will more effectively bring about the desired social change by the consumer in the area of home energy conservation than in a community college not employing these techniques. Change is evaluated on (1) initial attendance, (2) the positive action taken by the class participants, and (3) the intended future action that the students plan to take.

The Experiment

Marketers view the marketing problem as one of developing the right product backed by the right promotion, and put in the right place at the right time and at the right price. These key variables in the marketing mix have been labeled the four P's by McCarthy.[2] These control variables will be examined in terms of this study outlining the background, procedure, methodology and limitation in each category.

Product

Background. In business marketing, sellers study the needs and wants of target buyers and attempt to design products and services that meet their desires. If well-designed and affordable, these products will be purchased. In social marketing, sellers also have to study the target audiences and design appropriate "products."

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[2] Jerome McCarthy, Basic Marketing: A Managerial Approach (Homestead, IL: Richard D. Irwin, 1968), pp. 31-38.

The product that was used in this study is a homeowner's energy conservation course developed by the state and federal governments entitled Project Conserve.

Project Conserve is one of several energy conservation programs sponsored by the Federal Energy Administration. The aim of Project Conserve is to encourage the residents (owners) of single-family dwellings to save home heating and cooling energy by one or more of the following methods: increasing attic and/or floor insulation; adding storm windows; adding caulking and weather-stripping; adding storm doors; and, reducing (increasing) thermostat setting.

Presenting the Educational Program

Saving Energy at Home is a "how-to" course on reducing energy use in private homes. The emphasis of the course is on showing things the homeowner can do that will pay for themselves in energy savings. The suggestions cover a wide range of expense, effort, and effectiveness. Topics covered include environment, energy leaks, windows and doors, insulation, mechanical systems, and home modifications. Background information on related topics, and additional resources are provided which encourage the student to develop an increased awareness of energy and energy savings.

Objectives. The objectives of the course are to give homeowners an understanding of their energy environment and how it relates to the use of energy on a personal level; to provide the skills and knowledge of materials so that steps can be taken immediately and with confidence to improve the energy efficiency of the home; to demonstrate and show effective means of minimizing energy consumption using locally available materials; and to provide a lasting awareness of energy so that homeowners will continue finding ways to conserve energy in their environment.

<u>Course Length</u>. This course was designed for a total of 24 hours divided into eight segments, each three hours long.

<u>Procedure</u>. The course was to be executed as proposed with slight modifications depending on the needs of the students participating. An instructor was designated by the participating community college to provide the necessary lecture/workshop environment. A survey to determine the demographic background and needs of the students was taken at the beginning of the course. An example of the initial questionnaire follows:

QUESTIONNAIRE

1. What type of heating system does your house have? (I.e., natural gas, oil, coal, etc.)

2. How is the heat delivered? (I.e., forced air, warm water, etc.)

3. Does your house have storm windows? _____ Storm doors? _____

4. Does your house have attic insulation? _____ If so, approximately how much?

5. Does your house have wall insulation? _____ If so, how much?

6. What steps have you taken to weatherize your house?

7. What additional steps do you have planned to weatherize your house?

8. How many rooms does your house have?

9. How many people live in your house?

10. Is your home air conditioned? _____

11. Approximately, what was your heating bill for last winter?

12. What is your profession?

13. How did you find out about this course?

    TV _____
    Radio _____
    Newspaper _____
      Greensboro _____
      High Point _____
    Brochure _____
    Other _____

A survey was also taken at the completion of the course which focused on three areas: positive action regarding energy conservation as a result of this course; future actions intended to be taken; and course content--i.e., which segments did the students find to be most or least valuable, and what additional subjects would they have liked to see included which weren't.

Limitations. As in any experiment there are inherently some limitations. By using a curriculum already designed but not tested, the experiment encountered several questions. For example, did the course contain the right product mix? Was the time per segment correct? Did the course fit the need of the students, thereby inducing them to enroll?

Promotion

Background. The second control variable of marketing is promotion. This is the communication-persuasion strategy and tactics that will make the product familiar, acceptable, and even desirable to the audience. The social campaign strategist will tend to think of this as mass media communication, but promotion is actually a much larger idea. To the marketing professional, promotion includes several major activities. The principal one is advertising which is any paid form of nonpersonal presentation and promotion of products, services, or ideas by an identified sponsor. Separate from this is personal selling which can be defined as any paid form of personal presentation and promotion of products, services, or ideas by an identified sponsor.

Publicity is distinguished as any unpaid form of nonpersonal presentation and promotion of products, services, or ideas where the sponsor is unidentified.

Additionally, sales promotion includes miscellaneous paid forms (special programs, incentives, materials, and events) designed to stimulate audience interest and acceptance of a product.

Each of these promotional tools involves complex issues in strategy and tactics. With respect to advertising, the marketer has to determine the size of the total advertising budget, the choice of appeals, the development of attention-getting copy, the selection of effective and efficient media, the scheduling of the advertising inputs, and the measurement of overall and segment-level results. With respect to personal selling, the marketer must determine the size of the total sales force, the development of personal presentation strategies, the degree and type of salesforce motivation and supervision, and the evaluation of salesforce effectiveness. Publicity necessitates arranging for significant news about the product to appear in various media. Sales promotion calls for develping special displays, premiums, programs, and events that might be useful in stimulating interest or action.

Each of these activities is a specialty in which the experts have achieved sophisticated levels of knowledge and techniques. This is especially apparent when one examines social campaigns developed by amateurs where the appeals and copy seem very naive. Even behavioral science consultants for social campaign organizations often fail to make a maximum contribution because of their inability or reluctance to view the issue in broad marketing terms instead of in strictly social or behavioristic terms.

Promotion Used in Study

In the study, three of the aforementioned promotional activities were utilized: publicity, personal selling, and nonpersonal promotion. Because of budget limitations, advertising could not be employed.

In a brief market analysis, it became apparent that selling the cause of energy conservation and, in fact, taking a step beyond and persuading the consumer to take positive action (to spend time and money to save energy) was going to be a very difficult task for many reasons.

Many Americans still believe that there is no real energy shortage, but that the touted shortage is a conspiracy between the big oil companies, the government, and the OPEC nations. Moreover, the luxury of waste has become a national habit.

The American Dream has always been to make enough money so that waste for comfort and convenience could be afforded. Furthermore, the American consumer is an optimist with a strong belief in technology and, as such, assumes that in a short period of time, a new source of energy will be discovered and the current shortage will disappear.

And, lastly, even if the more erudite consumer recognizes the shortage and knows that by taking some positive action now he will not only save energy but also money, the fact that his expenditure in time and money must be immediate leads him to procrastinate.

The problem, therefore, could be broken down into four distinct steps: (1) reinforce in the consumer's mind the need for energy conservation and the fact that a course to help him conserve is available; (2) motivate the consumer to attend the first three-hour orientation meeting at no charge; (3) after the first meeting, motivate him to pay the tuition and enroll for the following seven segments; and (4) develop the course instructions so that not only will he attend all sessions, but that subsequently, he will take positive action to save energy.

Publicity. Publicity was used as the major vehicle to overcome obstacles presented in the first two stages of the program, i.e., reinforcing the need, notification of the course, and motivation to attend the first orientation meeting. Because of perceived consumer resistance to this social cause, it was felt that more than a typical press release was needed.

It was proposed that the institution conduct a full-scale press conference and luncheon for all media editors in the market area at which time they would be presented with the program, the need for conducting the course, and why their support was needed. Executive personnel from the institution would also be present to underline and support the importance of the undertaking.

At the conclusion of the conference, all editors were given a complete press kit which contained all course material, background information, transparencies, brochures, etc., so they could make up their own releases.

Nonpersonal Promotion. To supplement the activities of publicity, a four-page brochure was developed with the same objectives, i.e., reinforcement of the need for energy conservation, announcement of the course, and motivation to attend the first session.

Personal Selling. To help meet the third and fourth objectives, instruction was expanded to include business experts in four key segments of the program: (1) electricity, (2) storm windows, (3) insulation, and (4) mechanical systems. They would not only supply the day-to-day practical expertise that would be needed to maintain interest but also provide the follow-through outside the classroom by calling on the home, at the student's request, analyzing a problem, and proposing a solution. This employs a basic marketing principle in that it makes it easier for the consumer to take positive action.

Methodology

Publicity. At the end of the course an interview was conducted either by phone or in person, and the editors were asked how many announcements were run and what could be done to improve their participation, if anything.

Nonpersonal Promotion. The four-page brochure was distributed to supermarkets, lumber yards, hardware stores, and other retailers for handouts to the consumer. On the initial questionnaire completed during the first session, Question 13 helped to evaluate this vehicle.

Personal Selling. A specific presentation was made to prominent businessmen in the fields to ask their cooperation and involvement in the course instruction and consumer follow-through. Since there would be no remuneration for this involvement, the interview highlighted community service and possible sales orders for their equipment. At the end of their particular segment of instruction, cards were returned by the students (Appendix G) asking a representative from the business enterprise to call. Records were kept on each meeting and on actions taken.

Limitations

Publicity. Publicity has some definite advantages in that there is no cost for time or space and the fact that it generally is more believable than paid advertising.

However, it also has definite disadvantages in contrast to paid advertising, in that neither the content nor exposure can be controlled by the sponsor. As a result, it was not known to what extent the editors would cooperate.

Nonpersonal Promotion. The institution faced a severe budget limitation in the promotion of this program. As a result, only one thousand pieces of the brochure were produced leaving the majority of potential customers unsolicited by this vehicle. In addition, due to the fact there was no postage money available, a hit-or-miss distribution was employed instead of a direct mail approach which could have better pinpointed potential consumers.

Personal Selling. One of the biggest limitations in this activity was to gain full cooperation of the prominent business organizations. Due again to the fact of budget limitation, no money was set aside for instructional salaries other than the principal one. Therefore, it was requested that the businessman use his discretionary time (therefore, money) to support this social cause.

Place

Background. The third element of the marketing approach to social campaigns calls for providing adequate and compatible distribution and response channels. Motivated persons should know where the product can be obtained. The poor results of many social campaigns can be attributed, in part, to their failure to suggest clear action outlets for those motivated to acquire the product. The current national campaigns to interest people in the pollution problem may suffer from this defect. They are succeeding in making everyone not only aware of environmental pollution but also fearful of it. People want to do something about it. But, for the most part, they cannot act because there is not a clear product to "buy" (such as a petition to sign, an election in which to choose an antipollution candidate, or a pending piece of national legislation). In addition, the average person does not have a clear picture of the alternative channels of action for expressing his interest in the issue. There are so many ad hoc organizations working without coordination and at times with cross-purpose that the average person is likely to ignore further messages because of personal frustration. Saturation campaigns unaccompanied by the provision of adequate response channels may result in "interest overkill."

Thus, "place" means arranging for accessible outlets which permit the translation of motivations into actions. Planning in this area entails selecting or developing appropriate outlets, deciding on their number, average size, and locations.

For the purpose of this study, this aspect of planning included the selection of the test area which entailed the selection of experiment and control institutions.

The additional element of representatives from the utility company provided information and assistance to the course. Also, as noted previously, the participation of prominent business organizations where the consumer could get additional help in the use of energy-conserving products provided another place element.

Procedure. When it came to the selection of the test areas and institutions to serve as distribution points for this program, the state of North Carolina specified that it be undertaken by community colleges. As these institutions have like tuitions, philosophy, and enrollment, as well as diversified employment, income and social class, they seemed ideally suited for the role. Indeed, among their main mandates are community service and adult education.

Methodology. Based on the aforementioned, Guilford Technical Institute was selected as the experimental institution and Davidson Community College as the control.

Presentations were made to both colleges and the month of November, 1976, was designated as the program initiation date. Both programs and evaluations would be alike with the exception of the marketing activities, and both would run the program as initially proposed by the North Carolina Energy Conservation Commission.

Limitation. As noted previously, this test was necessarily small so that it could be controlled, with its major purpose to determine how effective selected marketing techniques can be when used by a non-business enterprise to solve a social problem.

Price

Background. The final control vehicle to be planned was price.

Price represents the costs that the buyer must accept in order to obtain the product. Price includes money costs, opportunity costs, energy costs, and psychic costs. Thus, the cost to persons asked to appear for immunization shots includes any possible money charge, any opportunities foregone, the expenditure of energy, and the psychological concerns aroused by innoculation. The cost of giving up smoking is largely psychological, since there is actually a financial saving in breaking the habit. The costs of using seat belts are the charge of buying them, the effort to lock and unlock them, and the psychological cost of not being completely sure one is better off in an accident wearing them or not wearing them.

Procedure. Price in this particular study was difficult to determine in that the following factors came into play: (1) the price of tuition ($5.00) was set by the state for all community colleges but (2) opportunity costs, psychic costs, and energy costs were intangibles and varied by individuals.

Methodology. The main evaluation of price and its different aspects could best be determined by the following points: (1) initial class enrollment versus attendance at orientation meeting, (2) class attendance throughout the course of the program, (3) future intended action by individuals as a result of the program, (4) future intended action to be taken by attending consumers, and (5) course evaluation by students and businessmen.

Limitation. A big drawback from a marketing viewpoint was the ceiling placed on tuition. If, in fact, the institution was supplying a needed service, viewed as such by the consumer, then the tuition should be set accordingly. The money obtained by an increase in tuition could be used to obtain better instructors, increase the promotion of the program, and, in fact, increase attendance which would result in the attainment of the social objective faster and more efficiently.

CHAPTER IV

FINDINGS OF EXPLORATORY STUDY

In order to present the findings so that they relate to the total program in a comprehensive manner, this chapter will be divided into four main categories:

1. Those activities that were undertaken prior to the first meeting, i.e., press conference, publicity, promotion and selling support.

2. Results of the questionnaire from those who attended the first session but did not choose to continue the course.

3. Results obtained from the evaluations turned in by those who finished the course.

4. The information obtained from the college used as a control group.

Activities Undertaken Prior to the First Meeting

Press Conference. A press luncheon was sponsored by Guilford Technical Institute approximately two weeks before the start of the program to gain the support of the media and participating businessmen. Of the twenty-five media, business and utility representatives invited, twenty attended the two-hour session (see Appendix I).

The formal program portion lasted approximately forty-five minutes after the luncheon with the main purpose being two-fold: to convey the fact that the homeowner would have to be convinced to enroll in the program; and to gain support from all segments of the community for the idea that cooperation of business, utilities, and media organizations would be needed.

At the end of the press conference, a press kit was handed to each member, which included a course overview, instructional materials, the Saving Energy at Home program, a description of Project Conserve, and other information.

The positive comments received from those attending were encouraging to the members of the college, who had not hosted a press conference before

Publicity. As a direct result of the press conference, there was a total of eighteen announcements made about the program with a media breakdown as follows: television, 3; newspaper, 5; and radio, 10.

The television exposures were more than the routine spot announcements. On WFMY-TV (Channel 2) CBS, the author was invited to present a seven-minute talk on energy conservation on the 7:00 a.m. news broadcast, which had a potential of reaching 98,500 households in Guilford County alone. On WGHP-TV (Channel 8) ABC, the author was interviewed on the "Mid-day Piedmont" show for fifteen minutes and again for four minutes on the 6:00 p.m. news. The potential again was 98,500 households in Guilford County.

Personal Selling. Also as a direct result of the press conference, representatives of Duke Power Company and Piedmont Gas Company participated in a portion of the orientation meeting. Additionally, representatives from four different business concerns conducted a total of twelve hours of instruction (three hours for each company in its respective area) at no charge to the college. To help gain the participation of business, consumers were given cards to fill out if they wanted representatives to call on them at their homes (see Appendix G).

A total of fourteen such cards were filled out resulting in sales of approximately $750.

Promotion. The promotion of this program was limited due to a severe budget restriction. Only one thousand copies of the four-page brochure (see Appendix B) were produced and distributed in quantities of twenty-five to one hundred to supermarkets, hardware stores, lumber yards, discount houses and paint stores. Approximately twenty stores helped in distributing this brochure.

Summary

At the first orientation meeting, homeowners were asked through which medium they had learned of the course (see Appendix J, Question 13). They showed the following responses: television, 11; radio, 3; newspaper, 13; brochure, 9; and other, 1, for a total of 37.

Thirty-seven people attended the initial orientation meeting of which twenty-four signed up for the course and paid the tuition of $5.00.

Those That Attended the First Session but Failed to Enroll

A follow-up survey (Appendix K) was made of those individuals who attended the first session but failed to enroll in the course. The objective was to determine why they decided not to continue.

Of the nine people responding, the following were some of the comments:

> Was misled. Thought it was going to cover more than it did. Thought it was going to be a mini-course. Learn it and go home and try it.
>
> Information was too political. Faulted Duke Power and Piedmont Natural Gas Companies too often. Spent too much time there.
>
> The class wasn't what I had expected. Did not cover what I had expected.
>
> Job conflicted with the time of the course.

Went to the meeting, big debating system, wrong kind of information. It should be where you could find about different kinds of insulation, rather than different types of fuel.

Job conflicted with course.

Would be interested if the course is offered again.

Came to class and no one was there.

Those Who Enrolled. A course evaluation (Appendix H) and an instructor evaluation (Appendix I) were made at the last session. Eleven out of the twenty-one people who finished the course responded. The major points covered and the responses were as follows:

I. Course Content

A. Please rank the eight (1-8) in order of relevance to you.

	Number of people	Rank
Insulation	10	1
Windows and doors	6	1
Mechanical system	2	2
More information	2	3
Home modifications	5	5
Energy leaks	3	6
Overview	6	7
Environment	4	8
Overview	1	8
Overview	1	5

COMMENTS: Energy leaks could have been a good segment in its own right. Discussion of opportunities in wind power.

Overview got out of hand with atomic power debate versus using other energy sources.

Did not get to environment, but feel the printed material shows there is less one can do about an existing home.

Have the schedule better planned. If you use outside contractors for instructors, be sure everyone knows their schedule.

Mechanical systems was a lost cause.

B. If you were taking this course again, on which topics would you like more time spent; less time spent; deleted (check one for each).

Eight out of eleven people would like more time spent on Energy leaks.

Six out of eleven people would like less time spent on Environment and more time spent on Insulation.

C. Would you like any segment of energy conservation added to the curriculum?

One out of eleven said NO.

Four people said YES.

COMMENTS: Solar heating of space--not just water heat pumps.

Solar energy.

More specifics on equipment using natural gas.

Home maintenance work sheet/annual preventive maintenance plan.

D. Was the total course time (eight weeks at three hours per week) adequate?

Three said YES.

Eight out of eleven said NO.

Expanded time: Only if other resource people are located.

10 weeks.

10 sessions.

3 to 4 weeks.

Four people thought the course should be shortened.

E. Did you find the participation of business and/or utility firm personnel useful?

Participation of:	Businesses	Utilities
	100%	100%

F. In addition to those firms represented, would you like to see any other organization(s) participate? (Please specify.)

OTHER Organizations: Learn carpentry, etc., caulk windows (thermo-pane), etc. Insulate around doors, etc.

If not for participation of these type of people, would have generally been a flop.

Local building, heating, etc., inspectors.

Architects.

Consumer Advocates? Better Business Bureau.

II. Positive Action Taken as Result of Course

For each of the course segments listed, please answer the questions indicated.

Action taken to improve energy conservation (eight responded):

Installed storm windows and doors.

Put up weatherstripping.

Reworked sealing strips in windows.

Cork.

Put plastic over the inside.

Storm door put up (spent $60.00) 4 hours.

Storm windows installed ($150.00) 8-10 hours.

Furnace installed and inspected by heating firm.

Checked furnace and humidifier.

Installed "parasite" from furnace flue for heating hot water, $100.

III. Intended Action to be taken

Insulated doors ($12-$15) to be spent.

Install storm windows next spring ($150.00)

Possibly have ducts cleaned.

Insulate hot water heater.

Caulk (within month) $5.00 estimate to spend.

Add more insulation $300-$500 within a year.

Add 3" insulation to ceiling.

Add cellulous (5 hours)

Add heat pump, solar hot water ($3,000) 1979-1980.

Clean furnace, duct work and fireplace.

Insulate basement windows and doors (this month).

Add plastic to cover windows.

Purchase 2 attic fans.

Add electric timer for hot water heater ($50.00).

Form weatherstripping.

Insulate hot water heaters and cut back temperature.

IV. Miscellaneous

A. Would you recommend this or a similar program to your friends?

100% would recommend this course to their friends.

B. Would you pay a higher tuition? (If yes, specify: $10, $15, $20, etc.)

Two said NO, they would not be willing to pay more than $5 for the course.

Five would pay $15.

Four would pay $10.

C. Any other comments:

Good start and should get better.

I enjoyed the course very much.

I think it would be a good idea if families were encouraged to attend some sessions together, i.e., children to learn about importance of conserving, turning out lights, etc. Wives so they will cooperate on housekeeping techniques that conserve energy.

All I'm really saying is there is a big need and this course did little to fill it from a practical point of view. Could have almost said call these five to six businesses and let them do their thing on your house. Could have been much better. Could have been much simpler.

The course without the businessmen who participated would be deadly--they are the guts of an effective program. Time for more demonstrations.

In my opinion, the largest waste in this course was the tremendous amount of time spent telling us about the energy crisis and the need for conservation. After all, if we weren't aware would not have attended.

Request electrical contractor/Electrolock to visit residence. Representative did visit 1/21/78.

Class involvement and questions proved the value of the class. Accumulation of knowledge and experience, much of it from class members, was inspiring. Hope it starts a movement.

Most sessions were good. Mechanical session was not of value, it could have been better. This course would be great for someone planning a house. Solar Energy System good.

I learned something from the course. Some people in the class did monopolize the instructor's time.

I found a lot of interest among others (neighbors, work associates in the course), but too late to be helpful.

Needs more practical application so the novice could understand and make good judgments. Think your sending weekly notices is a waste of taxpayer's money. If one wants to come they will.

Excellent course. Good presentation.

Good start and should get better as you repeat.

Great! Do it again! Class participation proved its value. There was a lot of cross-pollination and accumulation of knowledge, much of it from class members.

Please continue this course. This was very innovative course. By allowing experts in various energy related fields to come and talk, various perspectives on energy conservation are altered.

> I enjoyed the course very much and would highly recommend the course to anyone.

Summary of the program would indicate that (1) overall the course was well received, (2) that the addition of Business Representatives was essential to the success of the program, (3) that most students thought the time spent was inadequate but did not dwell on whether it should be expanded or contracted, (4) that "insulation" was the most popular segment with "windows and doors" next; "overview" and "environment" were the least helpful, (5) that eight out of eleven people took some positive action as a result of the course and 100% intended to take action in the future.

Program Findings in Control College

Due to the fact that the college selected as the control group had only six people in the free orientation meeting and no enrollments, there could be no true evaluation.

However, as a benchmark for evaluation, it was noted that other Community Colleges were asked to run similar programs urging the homeowner to conserve energy. They had many of the same tools available to them that were used in the exploratory study at Guilford Technical Institute. When asked to outline their results and mail them to the Department of Community Colleges in Raleigh, forty-five of these colleges responded.

After the letters submitted by the forty-five respondents were reviewed, it became apparent that the activities of each of the colleges were many and varied. However, for purposes of evaluation, the respondents were placed into four categories: (1) those who thought the program was successful, (2) those who were disappointed in its results, (3) those who did not offer the program, and (4) those who had no results.

In all cases, there was no college that offered the full program of eight segments of three hours each as was done in the exploratory study. Most of them only offered the first module, i.e., the overview with just a little more elaboration that last only three hours. In approximately 98% of the cases, no tuition was involved. It was also found from those colleges responding that none of them asked for the involvement and commitment of the business community to help the homeowner make those adjustments necessary to conserve energy. Therefore, in reviewing the following comments of the responding colleges, it must be kept in mind that the exploratory study done at Guilford Technical Institute was the harder program to market due to the following reasons: (1) the course lasted for eight weeks (3 hours each session), (2) the consumer along with giving his time was asked to pay tuition of $5, (3) the business community had to be persuaded to give its time at no charge to aid in the instruction, (4) the media were asked to give their time and expenses in promotion of the program, and (5) all through the course, the consumer was asked to spend time and money in making household improvements to conserve energy.

The following are comments excerpted from letters received by the Department of Community Colleges broken down into two major categories: those who liked the program and those who were disappointed in the results.

Comments From Those Who Liked the Program

> At __________ Community College our 3-hour "Saving Energy at Home" seminar was held Tuesday, November 1, 1977. Twelve individuals participated in the seminar. My instructor is very enthusiastic about the materials and the goals we are attempting to attain. Therefore, tentative plans are presently being made to have another seminar during the month of January.

Following the meeting on November 17, we were encouraged by the Council on Aging and Duke Power Company representatives to hold another session; therefore, the December meetings. We felt that the response was good and would have had difficulties in accommodating larger groups because we erected wall sections and demonstrated certain techniques and methods and had people from the audience participate if they desired.

The course has been offered twice. Once to a community center group of ten persons and once to a group of eighteen persons taking a Home Construction Class. We also had it scheduled during early December for the general public in our institute auditorium. Unfortunately, we were snowed out. We have this section rescheduled for March 14, 1978.

The attendance at the workshops was not what we had anticipated --as we had 11 for the first which was held at Buies Creek and 20 for the second which was held on our main campus.

Our college was pleased to have such a program that could be made available to residents of our service area, and we are especially appreciative of the materials prepared for the seminar and the additional monies that were used for the purchase of materials used in the seminar already held and in the seminar scheduled for this month.

Our program results are:

1. Number of times offered: one three-hour session conducted on November 1, 1977 entitled "Conservation of Energy in the Home."
2. Number of students enrolled - 29.
3. Promotional efforts: Mailed announcements to all newspapers, radio and television stations in the institution's service area.

There have been two important spin-offs of the program. First, the home economists of the county are using the material from the program to conduct programs for the local Home Demonstration Clubs and other interested individuals. The city of Shelby is sponsoring a home insulation inspection and advisement program. They are making use of the surplus folders and the slide-sound program in their counseling.

<u>Comments From Those Who Were Disappointed With the Program</u>

Listed below is the information you requested concerning the Home Retrofit Program that was offered this past November and December.

1. Number of times the course was offered: Three
2. Number of students enrolled in the course: Six
3. Promotion used in our service area:
    - (a) mailed announcements to four area newspapers.
    - (b) mailed announcements to four area radio stations.
    - (c) appeared on two local radio stations concerning the course.

(d) appeared on local TV station concerning the course. We were very disappointed in the response that was received concerning the course. A second effort will possibly be made during February, 1978.

We attempted to conduct the home energy savings course in late October. We advertised the course through local radio and newspaper. We had employed an instructor from Macon County. However, no one showed up for the course.

We tried this program in November with no success. We used newspapers and posters to get the message to the people, but it seems they were not interested. No one showed up for registration.

Even with extensive advertising, very few citizens elected to attend. The one had approximately eight participants, while the program at __________ had about four. Based on those results, we do not anticipate offering this project again this year.

We have sponsored only one short course in Energy Conservation, but hope to sponsor several more before the winter is over. The following steps were taken as advertisement for the course:

1. Announcement in local paper
2. Announcement on local radio stations
3. Telephone calls to local agencies were made in an effort to recruit participants, also.

The course was not successful since only one student participated, but materials and an instructor are now available for additional courses in this area.

The class was offered on December 13, 1977 but participation was very light with only seven persons attending. The Continuing Education Department is planning to offer a similar class but exact dates and time have not been set.

Our response for this course was poor. Only four persons attended.

This is response to your request for information regarding home retrofit programs. We conducted one home retrofit program course, and a grand total of eight students enrolled. The course was held on October 27, 1977.

We ran the course one time with an enrollment of eight people. Needless to say, we were disappointed with the small participation; however, we are prepared to run the course again if there is reason to believe more people will participate.

We attempted to offer this course again on January 9, 1978. This was a twenty-one hour course that was publicized through paid advertisement in the newspapers and radio public service announcements. In addition, 560 class schedules were mailed to the residents on our mailing list. The class did not make in as much as two people showed up.

> We presented this program one time and only five students were present. At present we are not planning on promoting this course again unless more interest is shown.
>
> It grieves me to report that our course "How to Save Energy in the Home" did not materialize. The following ways were used to promote the course:
> 1. newspaper articles
> 2. radio spots
> 3. a five-minute radio program during prime-time
> 4. telephone calls to various organizations
>
> We still have the course materials and plan to offer this course in the near future under a different name and hope that it will be successful. We will let you know the results of this latest effort.

A summary of the forty-five responses from the other community colleges running similar programs showed that fifteen liked the program, twenty-three were disappointed in the results, four did not offer the program, and three gave no results.

In summarizing the exploratory study against the performance of the other five community colleges, it would appear that the Guilford Technical Institute's program was much more comprehensive than any of the others. In spite of the severe limitations of time and budget, Guilford was able to multiply its dollars by getting the media and the business community involved, resulting in an increase of sales effort in the promotion of the program. Through evaluation, valuable information was received from the consumer that could result in better group instruction as far as subject and scheduling are concerned. One of the most important factors in evaluating this program, as was stated earlier, was to judge the positive action taken by the consumer as a result of this course. During the eight-week period, he spent approximately $750 on energy-saving devices and planned to spend much more in the future. Although intent is very hard to measure, the fact that the actual expenditures were that much during the eight-week period would lead one to believe that much more would be spent in the following year.

CHAPTER V

CONCLUSION

A review of the literature presents impressive evidence that marketing techniques are beginning to be used in seeking a solution to social problems. The exploratory study conducted here would seem to support the contention that marketing techniques may be successfully employed to aid in the solution of a problem that is both economic and societal in scope--namely, energy conservation.

Although the writer encountered problems in time and resources, it is believed that certain worthwhile conclusions may be derived from the study:

1. That media involvement is essential to the promotion of a program, such as this study, and can be obtained.

2. That in the case of energy conservation, the cooperation of key firms in the business community can be obtained if it can be shown how they can benefit.

3. That given the right program, consumers will take positive action through education to conserve energy.

To obtain positive response from the media, the business community, and the consumer, a basic principle of marketing strategy was employed --namely, determine the needs of each sector and develop a program to fulfill those needs. A product-orientation approach as opposed to a marketing orientation would have been to develop the program first and then try to find a way to sell it.

Media Involvement

This study found that favorable publicity can be obtained by supplying the news media with information that the editor will accept as news. There is just one basis for that acceptance. News is what the editor thinks will interest his readers, listeners, or viewers today. The key then is interest and timeliness. To get media involvement on any program, the editor must be sold on the fact that the program will be of interest to his audience and that it can be classified as timely news.

Because this is a highly subjective decision, there is a very great difference in the criteria to accept or reject news items. Individual media gave the program either in-depth support or no support. For example, Channel 12 in Winston-Salem did not give the program coverage because the editors thought the program offered by Guilford Technical Institute did not apply to the majority of their audiences who lived too far away to attend. On the other hand, Channel 8 in High Point and Channel 2 in Greensboro gave the program coverage because they thought it was timely as well as practical and would be of interest to their viewers.

Judgement of news value is not the only criterion. The policy of the medium can be a major factor. Media reflect in their news coverage the attitudes of their ownership or management. Consequently, no support was given by the Winston-Salem media due to the fact that the community college running the program was known as a Greensboro and High Point technical institute, whereas Winston-Salem had its own community college.

In essence then, the program presented to the editors at the press luncheon focused on the idea of how the program would benefit them, i.e., that their readers or viewers would be interested and that, in fact, the program was timely.

Cooperation of Business Firms

The program presented to local key business firms in the energy conservation field was developed along the same lines, i.e., how their involvement in the program would benefit them. To induce them to give their time, which to business people is money, it was necessary to show these firms how they would benefit in both sales and publicity. One of the main reasons for the development of the salesman request card (Appendix G) was to point out the fact that after a presentation, if the consumer was interested enough, he would request a salesman from that firm to come into his home. This would heighten chances of a sale being made. It was pointed out that the program had media support and that it was likely that these firms would be mentioned favorably in connection with the new program.

There is little doubt that the business firms contacted would not have cooperated in the program without these two main selling points.

Consumer Action

In regard to the consumer, the program was designed to convince the consumer to take positive action and thereby save money. In the face of sky-rocketing energy bills, the course was timely and assumed to be of great interest. Even with media and promotional support, however, only thirty-seven attended the initial orientation meeting; of these, twenty-four signed up for the course. But if the message had revolved around patriotism, for example, it was felt that their response would have been much less. Those homeowners that did take positive action during the course did so for one reason--to save money. This is clearly beneficial. Any program that would ask people to change their life style must show clearly how they benefit.

This study showed that marketing principles can be used by a non-profit organization to accomplish a societal need. However, it must be pointed out that although a time span of two months was used to develop the program, this period was insufficient to obtain the total potential support. To obtain maximum involvement by the media, business firms, and the consumer, it is estimated that at least six months should have been taken to achieve the best results.

The foregoing study was conducted against the background of a growing volume of research and publication on the use of marketing techniques in the societal realm. A continuing study of published material in the field reveals conclusions of a broader nature than those deriving from this study.

One of the main questions in today's evaluation of the legitimate concern of marketing is what role marketing should assume with respect to society and social values. Some of the questions relevant to this inquiry are: Is marketing more than simply a business function? Should marketing try to change society? More basic perhaps is the question: What exactly is societal marketing?

Social marketing is that branch of marketing concerned with the uses of marketing knowledge, concepts, and techniques to enhance social ends as well as with the social consequences of marketing policies, decisions, and actions. The purview of social marketing is, therefore, broader than that of managerial marketing. It refers to the study of markets and marketing activities within a total social system.

In countries of abundance, social marketing is a necessary complement to managerial marketing. The extended nature of marketing responsibility in a broader sphere of interest highlights the fact that a company interacts with society in many ways other than economic, and that marketing decisions have an impact on factors other than corporate sales and profits. Social marketing gets to the very root of the functions and contributions of marketing in our total system.

The definitive statement on social marketing has yet to be written. Nevertheless, its intent seems clear. It involves sets of social expectations that arise from the interfaces between the marketing activities of businesses and the many publics that surround business. Included in the publics are competitors, governments, consumers, employees, shareholders, business and labor.

Why should the social marketing discipline arise at this time? Is it the result of the natural evolution or the unfolding of marketing as a discipline? Does it stem from a moral and ethical root that is now emerging and taking precedence over some of the economic dimensions of marketing? Is it the result of affluence? No definitive answer can be given to such questions. It is evident, however, that marketing in our era is a major thrust of business. The marketing system does allocate scarce resources in our society. Business has provided a very efficient mechanism for meeting some of the wants and needs of society, particularly the economic ones. But business, and that part of business that is marketing, has not been used as extensively in allocating scarce resources to social ends.

Social marketing now seems to be emerging because of the convolution of several factors and forces. These are affluence, technology, communications media, better informed citizens, increased educational opportunities, and social value changes. The latter is among the most powerful influences. Changes in social values are reflected in new areas of environmental sensitivity--physical and esthetic, national and international. For example, sensitivity to pollution, consumer protection, utilization of resources, the welfare of society, human capital, and ecology has been heightened. These represent frontier areas for the marketing discipline.

Ours is an industrialized society with the accompanying high standard of living, resulting in the rise of service-oriented and knowledge-oriented industries and the relative decline of the importance of manufacturing. Greater communication gaps exist between businesses and consumers. Changes are occurring where education is recognized as a generator of wealth. The dissemination of information becomes increasingly important and the role of technology and productivity assumes a greater status. In a redistribution of power, more power flows to groups representing the public. This ultimately shapes the structures of society's institutions, values, and perceptions. It is shaping and restructuring marketing with one result being the development of social marketing.

In essence, the idea that business has not contributed enough to meeting socially desirable goals has led to a change in the direction of marketing. The responsibilities extend well beyond economic domains, and include more than just the profit goals of marketing management. A sense of awareness of social needs and social problems that can be handled by marketing is emerging as a new social responsibility on the part of business.

Underlying these demands for social responsibility is an assumption that marketing possesses the capability to have an impact. In other words, society is implying that the performance on the part of government and of social work agencies is inadequate. The result is that marketing managers who have the confidence and capability to solve risky problems, to deal with economic uncertainty, and to handle unstructured situations in business are being called on to do these in the social or public domain. As this know-how is applied to the solution of social problems, it is evident that the rules and roles of marketing will change. Social marketing can encompass the design and implementation of such programs of concern to society as family planning, safe driving, and smoking.

As it intertwines with society, marketing depends upon such social resources as air, water, communication facilities and transportation. Marketing management must earn the approval of society for the use of these resources and evaluate the social opportunity costs.

Marketing as a business activity functions by the consent of the public. Its basic purpose is the satisfaction of consumers' wants and needs. Obviously, it is impossible to totally satisfy society with its heterogeneous desires. It is the existence of conflicting values, desires, and expectations that makes the performance of the tasks of social marketing difficult.

Despite criticism and the necessity of improving marketing performance, it is obvious that marketing has some creditable social accomplishments. Marketing has contributed significantly to the continuously rising standard of living, with the result that consumers are less fettered socially and economically. It has provided the most open society of all, along with better jobs, products, and services.

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APPENDIX A

List of media and business representatives attending the press conference held at Guilford Technical Institute on November 16, 1978. All those in attendance participated in publicizing the program or helped in the instruction.

MEDIA REPRESENTATIVES ATTENDING NOVEMBER 16

LUNCHEON/BRIEFING

Wayne Lottinville (not certain)
Carolina Peacemaker
Box 20853
Greensboro, NC 27420

Bruce Washburn
Greensboro Record
Box 20848
Greensboro, NC 27420

Nat Walker
Greensboro Daily News
Box 20848
Greensboro, NC 27420

Ken Irons
High Point Enterprise
210 Church Street
High Point, NC 27261

Biff Cole
WGHP-TV (Channel 8)
400 North Main
High Point, NC 27260

Lloyd Gordon
Henry Bogan
WBIG Radio
Box 20204
Greensboro, NC 27420

Tom Black
WGBG Radio
200 West Wendover
Greensboro, NC 27401

Steve Hibbard
WGLD Radio
101 South Main
High Point, NC 27260

Lee Martinez
WHPE Radio
Tower Avenue
High Point, NC 27261

Not in Attendance

Bailey Hobgood
WFMY-TV (Channel 2)
Drawer 22047
Greensboro, NC 27420

Lorraine Gundy
WMFR Radio
Box 27
High Point, NC 27261

Clark Bailey, Reporter*
WGHP-TV (Channel 8)

David Greene, Reporter*
Greensboro Daily News
(Article November 25)

Al Harrington
WXII-TV (Channel 12)
301 South Elm Street
Greensboro, NC 27401

*Participated in some way.

BUSINESS REPRESENTATIVES ATTENDING NOVEMBER 16

LUNCHEON/BRIEFING

Alfred Just*
UREA Formaldehyde Insulation
Piedmont Energy Planners, Inc.
Phone - 299-3255 or 373-1064

Guy Cheek, Prof. Engineer
Air Conditioning Corp.
P.O. Box 6225
Greensboro, NC 27405
Phone - 273-4472

Jack McKatherine, Dist. Manager*
Duke Power Company
233 South Main Street
High Point, NC 27260
Phone - 885-8071

John Wolfe, Dist. Manager*
Piedmont Natural Gas
720 Summit Avenue
Greensboro, NC 27405
Phone - 378-1845

Judy Spillers*
CAMCO Mfg.
Patterson Street
Greensboro, NC 27403
Phone - 292-4906

Richard Strause, N.C. Distributor
Electrolock Energy Management
Systems
Stratford Oaks Building, Suite 419
Winston-Salem, NC 27103
Phone - 725-5364 or 725-5365

Gaston Shortt, Project Engineer
Electrolock Energy Management
Systems
Stratford Oaks Building, Suite 419
Phone - 725-5364 or 725-5365

J. David Reed, Estimator
Salem Electric Co. (Insulation)
Stratford and Bethesda
Winston-Salem, NC 27103
Phone - 765-0221

Lauren Welborn, President
Welborn Plumbing and Heating Co.
1607 Ward Street
High Point, NC 27260
Phone - 882-2309

Clarence Jones, Vice President
Huffman Paint and Wallcovering
(Storm Windows)
762 North Main Street
High Point, NC 27260
Phone - 882-8147

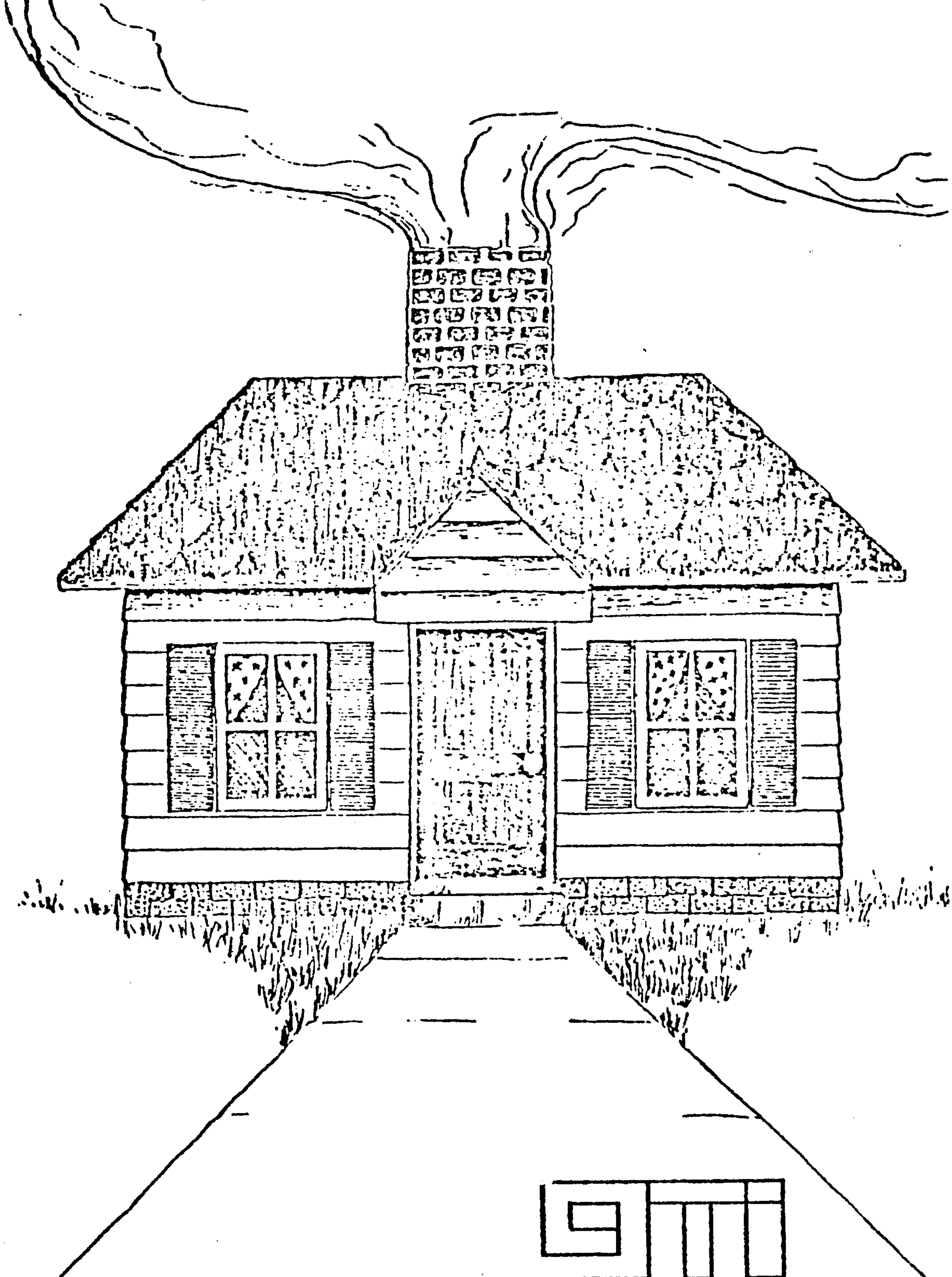
William Christensen, Project
Co-ordinator
403 Otteray Drive
High Point, NC 27262
Phone - 885-2395

*Did not attend briefing but either participated or offered to participate.

APPENDIX B

Promotional brochure distributed through retail outlets.

THIS OLE HOUSE....



GUILFORD TECHNICAL INSTITUTE • JAMESTOWN, NORTH CAROLINA 27282

...IS DRAINING YOUR POCKETBOOK

...IS HINDERING YOUR NATION'S ECONOMY

...IS JEOPARDIZING YOUR CHILDREN'S AND YOUR GRANDCHILDREN'S FUTURE

Approximately 80% of the homes in the United States are poorly insulated (even though they may have met FHA standards when built). Proper insulation alone would save 20%-50% on the electric bill in any given year. Think of it. If you spent $1,000.00 on electricity last year, an expenditure now for proper insulation could save you $500.00 this year alone!

Guilford Technical Institute in cooperation with local businesses is offering a unique eight-session course on Home Energy Conservation to help you know where and how to:

Caulk
Weatherstrip
Insulate
Plug Energy Leaks
and
Winterize your Home

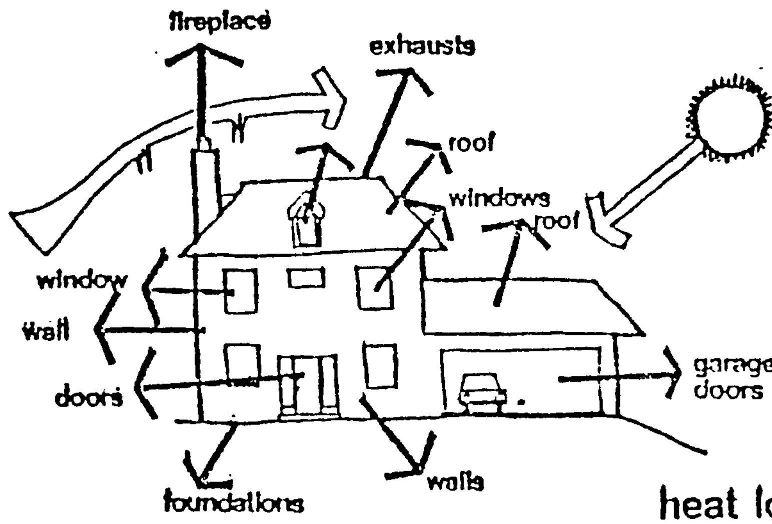
The course will consist of professional presentations from educators and local businessmen in the above areas, with specific recommendations for implementation.

There are two options on the meeting day for the Free First Session: Wednesday, November 23, from 6:30-9:30 p.m. in Room 010 of the Library Classroom Building on the Jamestown Campus; or Tuesday, November 29, at the same time and place. Interested adults 18 years of age and older are encouraged to pre-register immediately for the Free Session most convenient by contacting GTI Adult Education Personnel at 292-1101 in Greensboro or 454-1126 in High Point.

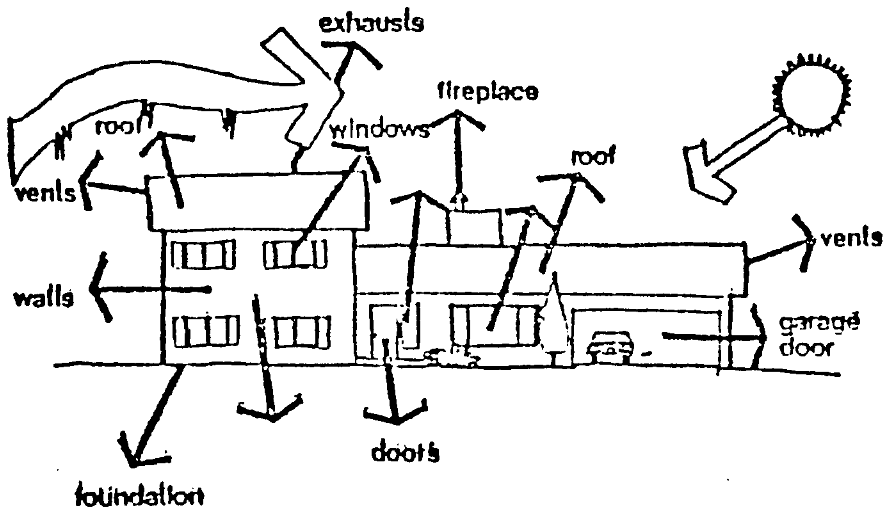
Participants wishing to complete the remaining seven sessions may do so for a registration fee of $5.00 per participant. There will be no additional charges.

Call today to indicate your preference for the first session.

ENERGY LEAKS — HEAT LOSSES



heat loss areas
in typical houses



From: SUN/EARTH. Richard L. Crowther

APPENDIX C

Radio commercials produced by Guilford Technical Institute and distributed to all radio stations.

APPENDIX II

GUILFORD TECHNICAL INSTITUTE

Jamestown, N. C.
27282

PUBLIC SERVICE COPY

Contact:

Telephone: Greensboro 292-1101
High Point 454-1126

EIGHTY PER CENT OF THE FORTY SEVEN MILLION SINGLE-FAMILY HOMES IN THE UNITED STATES ARE COSTING THEIR OWNERS MONEY THROUGH WASTED ENERGY. FIND OUT IF YOUR HOME IS ONE OF THEM BY ATTENDING A FREE HOME ENERGY CONSERVATION WORKSHOP OFFERED THROUGH THE COOPERATIVE EFFORTS OF GUILFORD TECHNICAL INSTITUTE, THE FEDERAL ENERGY ADMINISTRATION, AND THE ENERGY DIVISION OF THE STATE DEPARTMENT OF COMMERCE. THE CLASS WILL MEET WEDNESDAY, NOVEMBER 23, AND AGAIN ON TUESDAY, NOVEMBER 29, FROM 6:30 UNTIL 9:30 P.M. ON GTI'S JAMESTOWN CAMPUS. YOU'LL RECEIVE CREDIBLE, UNBIASED INFORMATION ABOUT COSTS AND BENEFITS OF ENERGY-SAVING TECHNIQUES FOR YOUR OWN HOME. LEARN TO SAVE MONEY AND ENERGY AT THE SAME TIME. ATTEND THE FREE "PROJECT CONSERVE" WORKSHOP NOVEMBER 23 OR 29 ON THE JAMESTOWN CAMPUS OF GUILFORD TECHNICAL INSTITUTE. PRE-REGISTER TODAY BY TELEPHONING GTI ADULT EDUCATION OFFICIALS AT 292-1101 IN GREENSBORO OR 454-1126 IN HIGH POINT.

Date	Early	Timing
		10 Sec.
		20 Sec.
		Stop for Chain Break
		30 Sec.
		40 Sec.
		50 Sec.
		1 Min.

GUILFORD TECHNICAL INSTITUTE

Jamestown, N. C.
27282

PUBLIC SERVICE COPY

Contact:

Telephone: Greensboro 292-1101
High Point 454-1126

Date	Init'l

10 Sec.
20 Sec.
Stop for Chain Break
30 Sec.
40 Sec.
50 Sec.
1 Min.

YOU CAN INCREASE THE VALUE AND COMFORT OF YOUR HOME AND SAVE OPERATIONAL COSTS AT THE SAME TIME. LEARN HOW FROM THE EXPERTS DURING A FREE THREE-HOUR WORKSHOP BEING OFFERED TO GUILFORD COUNTY AREA RESIDENTS THROUGH THE COOPERATIVE EFFORTS OF GUILFORD TECHNICAL INSTITUTE, THE FEDERAL ENERGY ADMINISTRATION, AND THE ENERGY DIVISION OF THE STATE DEPARTMENT OF COMMERCE. PLAN TO ATTEND THIS FREE WORKSHOP OFFERED ON NOVEMBER 23 OR NOVEMBER 29 FROM 6:30-9:30 P.M. ON THE JAMESTOWN CAMPUS OF GUILFORD TECHNICAL INSTITUTE. PRE-REGISTER TODAY BY TELEPHONING GTI ADULT EDUCATION OFFICIALS AT 292-1101 IN GREENSBORO, OR 454-1126 IN HIGH POINT.

GUILFORD TECHNICAL INSTITUTE

Jamestown, N. C.
27282

PUBLIC SERVICE COPY

Contact:

Telephone: Greensboro 292-1101
High Point 454-1126

Date | Earl

10 Sec.

20 Sec.

Stop for Chain Break

30 Sec.

40 Sec.

50 Sec.

1 Min.

LEARN HOW TO SAVE ENERGY AND MONEY RIGHT IN YOUR OWN HOME THIS WINTER. A SPECIAL THREE-HOUR WORKSHOP ENTITLED "PROJECT CONSERVE" IS BEING OFFERED FREE TO GUILFORD COUNTY RESIDENTS THROUGH THE COOPERATIVE EFFORTS OF GUILFORD TECHNICAL INSTITUTE, THE FEDERAL ENERGY ADMINISTRATION, AND THE ENERGY DIVISION OF THE STATE DEPARTMENT OF COMMERCE. THE CLASS WILL MEET WEDNESDAY, NOVEMBER 23, AND AGAIN ON TUESDAY, NOVEMBER 29, FROM 6:30 UNTIL 9:30 P.M. ON GTI'S JAMESTOWN CAMPUS. LOCAL BUSINESSMEN AND ENERGY EXPERTS WILL BE ON HAND TO DISCUSS MONEY-SAVING CONSERVATION PRACTICES AND TO HELP YOU PLAN AND IMPLEMENT A PROGRAM FOR YOUR HOME. DON'T MISS THE FREE "PROJECT CONSERVE" CLASS NOVEMBER 23 OR NOVEMBER 29 ON THE JAMESTOWN CAMPUS OF GUILFORD TECHNICAL INSTITUTE. PRE-REGISTER TODAY BY TELEPHONING GTI ADULT EDUCATION OFFICIALS AT 292-1101 IN GREENSBORO OR 454-1126 IN HIGH POINT.

APPENDIX D

Press release distributed by the North Carolina Department of Commerce.

North Carolina
Department of Commerce
P.O. Box 25249 Raleigh 27611 (919) 733-4962

James B. Hunt, Jr., Governor

SEP 2 0 1977

D.M. Faircloth, Secretary

CONTACT:
John Manuel
Project Conserve Coordinator
919/733-4492

NEWS RELEASE

FOR IMMEDIATE RELEASE

PROJECT CONSERVE UNVEILED

Raleigh -- Brian Flattery, Director of the North Carolina Energy Division, today announced the kick-off of Project Conserve, a multi-faceted energy conservation program which seeks to cut projected 1980 energy consumption in the State's residential sector by over 10 trillion BTU's. The announcement was made at a 10 a.m. news conference in the Governor's Press Conference Room in the Administration Building, Raleigh. Assisting the Director were Doug Culbreth, Chief of Conservation, John Manuel, Project Conserve Coordinator, and Lillie Murdock, Conservation Officer.

Mr. Flattery announced that, starting October 3, 1977, North Carolina homeowners will be able to get a FREE computerized energy analysis of their homes simply by filling out a questionnaire from the North Carolina Energy Division. The questionnaire, entitled, "Energy Blanket", will be mailed to most homeowners in their October utility or fuel bill. (Most of the city-owned utilities will not be mailing the questionnaire. The rural electric membership corporations will include the questionnaire as a tear-out in their October issue of Carolina Country.) Copies can also be obtained by calling the Energy Division's toll-free hotline at 1-800-662-7131 weekdays between 8 a.m. and 5 p.m.

After providing the information requested in the form, Flattery explained, the homeowner should mail the questionnaire back to the Energy Division where it will be processed by computer. The computer will analyze the information and generate a series of recommendations

(more)

for making the home more energy-efficient. Recommendations will include cost estimates for home improvements, both contractor-installed and do-it-yourself, and savings estimates likely to result from following each action. This information will then be mailed back to the home-owner by the Energy Division.

Flattery pointed out that homeowners have been given an added incentive to follow the Project Conserve recommendations. Under the Energy Conservation Act of 1977, any homeowner can claim up to 25 percent, not to exceed $100, of the cost of installing insulation and storm windows or doors in his existing home. If the credit exceeds the tax imposed, it may be carried over for the next two succeeding years. Upon request from the Secretary of Revenue, a receipt of expenditures will be required. The Act also offers homeowners' a tax credit amounting to 25 percent, not to exceed $1,000, of the cost of installing a solar heating system.

Flattery emphasized that the free home energy analysis is but one facet of the North Carolina Energy Division's Project Conserve, a program designed to save energy in the State's residential sector. Also planned under Project Conserve will be a series of workshops on saving energy at home at the State's community colleges and technical institutes. These classes will give participants first-hand knowledge on how to install insulation, storm windows and doors, caulking and weatherstripping, and a host of other energy-saving techniques. The workshops will be open to the public and will be scheduled by participating institutions on an individual basis. Further information can be obtained by calling your local community college or technical institute.

# # # # #

APPENDIX E

North Carolina Energy Division PROJECT CONSERVE.

1. PROJECT CONSERVE

1.1 WHAT IS IT?

PROJECT CONSERVE is one of several energy conservation programs sponsored by the Federal Energy Administration. The aim of PROJECT CONSERVE is to encourage the residents (owners)* of single-family dwellings to save home heating/cooling energy by one or more of the following methods:

- o increasing attic and/or floor insulation
- o adding storm windows
- o adding caulking and weatherstripping
- o adding storm doors
- o reducing (increasing) thermostat setting.

PROJECT CONSERVE I and II are two separate program approaches, either of which a State may elect to promote among its homeowners. PROJECT CONSERVE I is centered around a simple questionnaire which the homeowner completes about his residence. Data from the questionnaire are processed by the State's computer, and an analysis of potential improvement costs and fuel-cost savings is mailed back. Each respondent thus receives a simple, personalized statement of the costs of the improvements and of the money he would save in his annual fuel bill. In PROJECT CONSERVE II, the homeowner is given the "HOME ENERGY SAVERS' WORKBOOK" in which he is shown how to make the fuel-cost savings' estimates himself. From these calculations, the homeowner is able to decide which improvements are cost-effective for his home. (See Appendix A for a sample Questionnaire and HESP Workbook.)

Both PROJECT CONSERVE I and II are free, voluntary, and confidential for the homeowner. Once the computer program has processed the data and produced the personalized statement, it destroys all information about the respondent's name and address, except his ZIP code.

The goal of PROJECT CONSERVE is to reduce energy consumption; its emphasis is on the pocketbook. A homeowner is likely to make the improvements if his personal cost-benefit analysis is sufficiently favorable. He may be moved to action for other reasons as well--improving the resale value, comfort, and accustical privacy of his home or contributing to the nation's economic and energy independence--but the

---

*The program is aimed at homeowners, but some renters may receive or pick up a questionnaire/workbook.

opportunity to save money will probably be the strongest motive for participating in the program.

1.2 SOME BACKGROUND

Heating and cooling single-family homes accounts for nearly 12% of all energy used in the United States. Reduction of energy consumption in this high-use, single-family residential sector is a major goal of the FEA.

The FEA estimates that as many as 80% of the 47 million single-family dwellings in this country are inadequately insulated. A reasonable response to PROJECT CONSERVE woud save the equivalent of 90,000 bbl/day of oil--enough to heat 865,000 homes in New England (where heating demands are high) for 1 year.

FEA's research has indicated that the major barrier to a significantly higher level of retrofit actions--i.e., home improvements--is the homeowner's lack of specific, detailed, technical, and financial information. PROJECT CONSERVE is the only effective, free method currently available to provide credible, unbiased information about the costs and benefits of retrofit alternatives for a specific dwelling.

The need to conserve energy grows more urgent every day. The United States depend increasingly upon one of the world's most politically unstable areas to furnish a growing portion of our petroleum needs. The oil embargo and the subsequent increase in oil prices have made the energy crisis a severe economic problem as well. The drain of our national wealth to buy foreign oil and the inflationary impact of this unfavorable trade balance unserscore the sense of urgency with which the FEA has implemented this program.

And the good part is that <u>everybody</u> stands to gain! In addition to conserving energy:

- The homeowner will save money and increase the value and comfort of his home.
- The country will take a major step toward energy independence and improve its balance of payments.
- Other conservation programs will benefit from an increased public awareness of the need for efficient use of energy.

A well run PROJECT CONSERVE program should, in fact, have provisions for referring people to other Federal, State, and local energy conservation programs.

1.3 PILOT PROGRAM EXPERIENCE

PROJECT CONSERVE was pilot tested on a limited scale in Topeka, Kansas and Danbury, Connecticut in July and August 1974--shortly after the gasoline shortage. At that time, Danbury residents were also concerned about the short supply and higher costs of No. 2 fuel oil, their main fuel for space heating. A total of 4,446 persons were given the opportunity to take advantage of the program in two cities. In Danbury, 24.8% responded, and in Topeka, the response rate was 17.5%. Of those respondents interviewed following the program, 45% in Topeka indicated an intention to follow one or more of the recommendations; in Danbury, 85% of those interviewed said they planned to take some action as a result of receiving the PROJECT CONSERVE analysis.

Further pilot programs were run during the summer and fall of 1975 in Louisville, Indianapolis, and Minneapolis-St. Paul. Based on the results from the initial testing of the program, it was decided to make the program available to homeowners on a statewide basis. FEA has been able to fund 14 States to date. Because there was some question as to whether a questionnaire or a workbook would be more of a stimulus to encourage residential retrofit, two States (Massachusetts and New Mexico) implemented the PROJECT CONSERVE I or questionnaire program and the other 12 States are in the process of initiating the PROJECT CONSERVE II or HOME ENERGY SAVERS' PROGRAM, using the workbook.

Program Results

Two thousand three hundred and twenty-five (2,325) homeowners in Danbury, Connecticut and 2,121 in Topeka, Kansas were selected to participate in the program. These participants were sent a letter explaining the program and were provided with a questionnaire to complete and return to FEA. This information was used to assess their needs for additional insulation materials, the expected cost of the materials and labor, and the estimated savings in fuel they could expect if they were to install part or all of these materials.

Homeowners in the sample received the original questionnaire in mid-July of 1974 and were encouraged to respond by August 23. In addition to receiving the questionnaire and cover letter, part of the sample in Danbury received a letter of encouragement from the Mayor, and in Topeka some of the participants received a letter from the City/County Energy Planner. Newspaper articles, as well as announcements on radio and television in each of the cities, were used to encourage participation. Altogether about 21.3% of the original sample chose to participate by returning their questionnaire forms for the free analysis. This enthusiastic response rate has continued in the State programs; Massachusetts had a 15% rate of return and New Mexico nearly 11%.

The evaluation of the Danbury/Topeka experiment is summarized here in terms of

- o reasons for responding/not responding to the questionnaire
- o reasons for following-through (or not) on the recommended improvements

- o satisfaction with having made the improvements
- o actual reduction of heating/cooling fuel consumption in these areas.

Viewing the pilot program results this way provides some insight into how to conduct an effective PROJECT CONSERVE campaign at the State level.

Response to Questionnaire

In Danbury, 572 out of 2,325 and in Topeka, 362 out of 2,121 homeowners filled out and returned the questionnaire. What made some people respond and others not respond to PROJECT CONSERVE?

A survey conducted approximately a year after program initiation revealed that two key elements accounted for the majority of these decisions:

- o pre-existing attitudes
- o media coverage.

Pre-existing attitudes important to the program were whether the homeowner considered (a) the energy crisis to be truly severe or exaggerated and (b) the Federal Government to be interfering with his life.

Homeowners in Danbury who responded to the questionnaire were less likely to feel that the Federal Government interferes with their lives than were those in Topeka. On the other hand, homeowners in Topeka were more likely to feel that the energy crisis had been exaggerated. These pre-existing attitudes had some effect on the fact that the response rate in Danbury was 30% higher.

With regard to media promotion, the results indicate that the different types of media had varying success in the two cities. Newspaper reports reached the largest number of people in both cities, but they were more effective in Danbury than in Topeka. On the other hand, more Topeka respondents reported exposure to PROJECT CONSERVE via television than was the case in Danbury. Radio broadcasts were the least effective media approach in both cities.

PROJECT CONSERVE respondents in both cities recalled hearing or seeing information in the media more frequently than did nonrespondents. Altogether, 41.2% of the respondents and 29.3% of the nonrespondents reported learning about PROJECT CONSERVE through some media source. Those who subsequently made home improvements, regardless of whether they participated in PROJECT CONSERVE, also reported having more exposure to media information. Somewhat surprisingly, no noticeable differences were found in types of media exposure among the various income groups within the city.

When asked directly why they had responded to PROJECT CONSERVE, over 30% of those who completed the questionnaire said they "wanted to be helpful." Apparently, the original cover letters received from FEA had tapped the patriotism of many of these homeowners. Most of the other reasons given concerned the advantages respondents felt they would receive from the computer analysis.

There were, however, some variations in income groups within the cities. Although the differences were not extreme, they may have implications for future appeals used to encourage participation in PROJECT CONSERVE. Lower income groups were more influenced by altruistic motives than by personal gain, compared to the higher income groups. Upper income respondents were more likely to mention financial savings as a reason for participating in PROJECT CONSERVE.

Homeowners who did not fill out the questionnaire were asked why. Four of the reasons given account for over 70% of all the answers. Almost 25% of the nonrespondents said they had lost or mislaid the questionnaire, and 12% said they had never received one. Almost 20% said they were too busy or it was too much bother to complete the questionnaire, and 16% said their homes were already sufficiently insulated. There were few differences between the two cities or among the various income groups or other respondent classifications in reasons for not participating.

Additional factors that may have influenced the decision to participate include the encouragement received through letters or follow-up phone calls to questionnaire recipients, and communications with others not involved in PROJECT CONSERVE. The letters received from the Mayor in Danbury and the Energy Planner in Topeka had some positive influence. Approximately 44% of the respondents in each city who recalled receiving the letter said the letter had either "a lot" or "something" to do with their decision to return the questionnaire. On the other hand, only 7% of the nonrespondents said these letters had some influence on their decision <u>not</u> to return the questionnaire.

The special phone calls also had different effects on the two groups. At the time of the survey, most of the nonrespondents who had received a special telephone call could not remember having received the call. Nearly two-thirds of the respondents who had received one, however, remembered the call. Over half of this latter group said the call influenced their decision to return the questionnaire.

Retrofit Activity

In both cities, the most important factor bearing on the decision of respondents or nonrespondents to retrofit was whether or not they felt a need for improved thermal insulation. Nevertheless, people who filled out the PROJECT CONSERVE questionnaire were more likely to have made improvements than were people who did not respond:

	Danbury	Topeka
Respondents	44.0%	34.9%
Nonrespondents	40.1%	24.3%

Homeowners who said they had future retrofit plans followed the same pattern:

	Danbury	Topeka
Respondents	43.1%	38.2%
Nonrespondents	32.7%	30.3%

The overall result of PROJECT CONSERVE in encouraging retrofit activity, the, was that respondents to the questionnaire were 29% more likely to have made thermal improvements and 49% more likely to have plans for future retrofit activity.

The major reasons given for retrofitting were (a) to save money and (b) to make the house more comfortable. These two reasons account for approximately 90% of the answers to the survey. Only about 10% took action to help with the energy crisis. In other words, it appears that a desire to "help" in the energy crisis motivated people to return the questionnaire but that financial and comfort considerations were more important in influencing subsequent retrofit actions.

Satisfaction with Improvements

Respondents and nonrespondents who had retrofitted were asked if the work completed had made any noticeable differences in the comfort or appearance of their houses, their fuel costs, or the ease of regulating temperature. The majority of all homeowners interviewed said the retrofitting had improved the comfort of their homes. Many of the respondents said the effect was noticeable in the other areas also, such as the appearance of the house and the ease of regulating temperature. Both groups mentioned that their heating costs had been reduced.

Effect of Retrofitting on Energy Consumption

The results of the study are not yet complete in this regard. It is expected that the encouragement provided by PROJECT CONSERVE to improve the insulation of single-family dwellings will have a positive effect on reducing fuel consumption in both cities.

State Program Results

Massachusetts and New Mexico instituted an extensive information dissemination campaign, in addition to the media coverage used in the two pilot cities. Information hotlines, workshops, involvement of local community groups, infrared photos of homes to show heat loss, new questionnaire display racks, and various supplementary distribution methods for the questionnaires were used to publicize the PROJECT CONSERVE I program. PROJECT CONSERVE II programs will use media spots, hotlines, workshops, community groups, and a 30-minute retrofit film in addition to the "HOME ENERGY SAVERS' WORKBOOK."

Experience in Massachusetts and New Mexico, the two States where programs are nearing completion, indicates that:

- The 15% Massachusetts response rate and the 11% New Mexico response rate are excellent for a program such as PROJECT CONSERVE. The normal expected response rate for an unsolicited direct mailing, like the questionnaire, is about 3%.

- In Massachusetts, only 4% of the responses came from questionnaires distributed via supplementary means (recent tabulations in New Mexico indicate that responses may reach 10% in some areas). This return rate shows the value of direct mail as well as the disadvantages of distribution via other means.

- Red Rover (Massachusetts' panel truck carrying infrared photographic materials for analysis of heat loss in individual homes) has proved to be a valuable promotional tool.

- One of the side benefits of the PROJECT CONSERVE program is that it has helped to establish the credibility of the State Energy Office and to generally promote energy conservation awareness among the public.

Summary

The response to the pilot programs in Danbury and Topeka was good. A statewide campaign can achieve an even better response. The experience of those programs shows that many people are indeed willing to be helpful, especially in a matter of national concern. It also shows the importance of getting the right information to the public:

- The homeowner will save money.

- The homeowner can improve the comfort, appearance, and resale value of his home.

- Individual home improvements will help.

- The energy crisis is real.

The fact that many of the nonrespondents either mislaid or said they had never received a questionnaire underscores the need for a good supplemental distribution plan that will provide questionnaires for residents who either have not received them by direct mail or have mislaid or lost their first copies.

A positive, enthusiastic approach to the implementation of PROJECT CONSERVE is essential to its success. In essence, it is based on a strong selling campaign through the media, a good plan for primary and supplemental distribution, and provision for assisting and encouraging full participation by each resident of a single-family dwelling in your State. Things may go wrong. But you've got a program to sell...and a good one.

1.4 PROGRAM OPTIONS UNDER EPCA

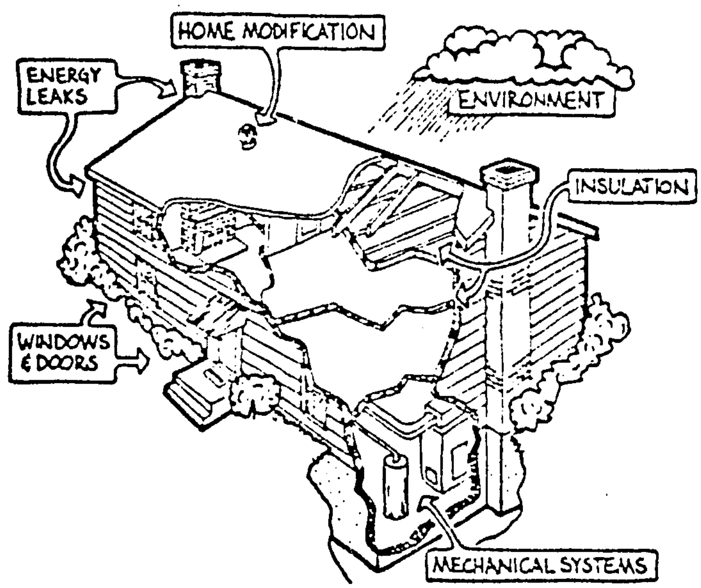
In addition to the five mandatory energy conservation programs that fall under the EPCA State Energy Conservation Plan, each State is encouraged to develop auxiliary programs, such as PROJECT CONSERVE, to facilitate the energy savings possible for that State. States interested in implementing PROJECT CONSERVE need first decide whether they are interested in the questionnaire (PROJECT CONSERVE I) or the workbook (PROJECT CONSERVE II) approach. While these programs are not mutually exclusive, FEA suggests that a State not undertake both programs since the use of the questionnaire would tend to discourage utilization of the workbook, except in workshops. However, we do not want to flatly refuse funds for both programs and would consider any State Plan proposal which could effectively merge elements of the two projects into one program. Section 2 of this manual indicates the program elements already developed within PROJECT CONSERVE I and II and defines the general responsibilities of the State in implementing the program.

APPENDIX F

Synopses of modules in Saving Energy at Home series.

Saving Energy at Home

Transparency Masters



Program Development
Department of Community Colleges
Raleigh, North Carolina

Energy conservation has become a national concern in view of the rising cost of fuel. One large group of people affected by rising fuel costs are homeowners. The need for their participation in a nationwide energy conservation program is apparent when one considers that approximately 33% of the fuel used by this country is used in residential and commercial buildings, primarily for heating and air conditioning.

The purpose of this manual is to provide materials to assist instructors in teaching homeowners the steps to take to save energy in their homes. The materials included are intended to supplement modules in the Saving Energy at Home series.

The manual provides a narrative course outline, task analyses, resources and suggested instructional supplies. The amount of time available for instruction may determine the depth of coverage and content to be taught. Overview sessions, for example, may be only several hours long and with the aid of a slide tape presentation, briefly cover caulking, weatherstripping, insulation and thermostats. Courses offered over a longer period of time may spend several hours on just one of these topics but go into much greater depth. It is recommended that the instructor review the outline, tasks and appropriate resources prior to covering each topic or module.

The materials for this course have been developed by the Program Development Section, Department of Community Colleges, Raleigh, North Carolina with Frank A. Gourley, Jr. coordinating the efforts of David Cameron, Mary Dilday and John Dilday.

The funds for the project were provided by a grant from the Federal Energy Administration in cooperation with the Energy Division, North Carolina Department of Commerce.

The Saving Energy at Home Course Outline and Instructional Materials Manual is designed to support the teaching of energy conserving actions to homeowners. It has been developed to provide assistance to instructors teaching home energy savers workshops. Instructors are encouraged to adapt this material to their specific needs.

The course outline provides a course description, overall objectives, module descriptions and demonstration materials, and a narrative outline of supporting information for each of the eight modules in the Saving Energy at Home series. Also included is a list of selected resources that focus on how-to-do-it for the homeowner and provide supporting information for the instructor.

The tasks identify specific "doing" activities that may be demonstrated or practiced by attendees to assist them in accomplishing energy saving practices on their own homes. Included are specific tasks to be practiced; general competencies to be accomplished; ways of measuring the accomplishment of the competencies; and specific skills, knowledges, and attitudes to be developed.

Suggested supplies and materials are listed that can be used for demonstration or practice in teaching the activities identified in the modules, course outline, and tasks. All items under twenty-five dollars can be purchased as supplies - those over twenty-five dollars are considered to be equipment.

Transparency masters have been provided under separate cover to assist the instructor in explaining concepts and/or drawings included in the Saving Energy at Home materials. Each master is marked to indicate the key concept and module that it supports.

Overview

The overview is the first of eight modules in the Saving Energy at Home series. A description of specific energy saving ideas is presented. The overview includes a survey of basic actions for saving energy at home. These critical areas are caulking, weatherstripping, insulation, storm windows, and thermostats.

This section of the outline is intended to supplement the slide tape presentation on Saving Energy at Home. The technical information in the presentation has been kept brief and direct. Details can be discussed in later meetings. Remember, the members of your class have chosen to attend so you can assume that they already have an interest in saving energy. Your emphasis should be on retaining their interest. The entire purpose of this session is to get the participants excited or interested enough to take what they have learned and follow up on it. A question and answer session can help identify areas of interest and concern. This outline is only a suggested guide. Modifications should be made where appropriate.

Environment

This module presents the environment as it is affected and altered by the use and flow of energy. Topics range from the effects of climate and weather on comfort to maintaining an energy efficient environment indoors. Daily habits can be developed that conserve energy.

These day-to-day practices can save energy by altering the immediate environment in small ways. The effects are cumulative. Identifying energy consuming habits and developing energy saving habits are emphasized.

Instructional activities for each module may be chosen from the tasks section to supplement the material included in the outline. The organization of the course, the total length of the course, and instructor and student interests will influence the emphases given various topics.

Energy Leaks

Energy leaks are probably the most under-rated form of energy loss, as well as the cheapest and easiest to correct. An expensive insulation job is wasted if energy leaks are not corrected first. The Energy Leaks module presents a guide to identifying and correcting leaks. Where and how to find the leaks, what materials and tools to use, and how to use them, are illustrated in a do-it-yourself manner.

Windows and Doors

Windows and doors are holes in the domestic energy envelope. If windows and doors fit poorly, leak around the edges, are very thin, or are exposed to extreme weather conditions, heat may pass through them even when they are closed. The use of storm windows and doors, weatherstripping and vestibule entries can save energy when applied to exterior doors and windows.

Insulation

Many older homes have no insulation at all. Others have far less than is now cost effective. The attic is most important, then floors, and finally the walls, in cost effectively reducing energy losses.

Insulation may be a do-it-yourself project with the proper equipment. Long sleeves, gloves, and a breathing filter are a must. Contractors are able to insulate walls and other hard to reach places. Government rebates cover storm windows and doors, correcting energy leaks and new insulation costs.

Mechanical Systems

The "Mechanical Systems" module concentrates on maintaining things that might break or need filters, lubrication, or adjustment. Things like furnaces, air conditioners, water heaters, pipes and ducts need annual inspections or maintenance. Also discussed are methods of operating household appliances in a manner to conserve energy.

Home Modifications

Home modifications sound like, and can be, major energy saving projects. However, many modifications can be simple and inexpensive while reducing energy consumption drastically. Most modifications increase the equity value of the house, others may be suitable for rented dwellings. All of the major modifications suggested in this module can pay for themselves in several years.

More Information

Ideas to make saving energy at home interesting and to help develop good energy habits stressed. Steps to organizing projects, and additional references are presented. Other energy saving possibilities at home, at work or even while driving are suggested. There is more information about other resources, books, government and private agencies.

APPENDIX G

Salesman request card.

I am interested in the possibility of having a salesman call on me to provide more information in the area of Electricity. I understand that this in no way obligates me to make a purchase.

______________________ Signed 12/12/77 Date

APPENDIX H

Questionnaire for course evaluation.

ENERGY CONSERVATION COURSE EVALUATION

I. Course Content

A. Please rank the eight segments (1-8) in order of relevance to you.

_____ overview	_____ insulation
_____ environment	_____ mechanical systems
_____ energy leaks	_____ home modifications
_____ windows and doors	_____ more information

Other (additional comments) ______________________________

____

____

____

B. If you were taking this course again, on which topics would you like more time spent; less time spent; deleted (check one for each subject).

	More time	Less time	Delete
-overview	_____	_____	_____
-environment	_____	_____	_____
-energy leaks	_____	_____	_____
-windows and doors	_____	_____	_____
-insulation	_____	_____	_____
-mechanical systems	_____	_____	_____
-home modifications	_____	_____	_____
-more information	_____	_____	_____

C. Would you like any segment of energy conservation added to the curriculum? _____ No _____ Yes (Please specify)

D. Was the total course time (8 weeks at 3 hours per week) adequate? _____ Yes _____ No

Should it be expanded? If yes, how much?
_____ No _____ Yes (How much expansion) ____________________.

Should it be shortened? If yes, how much?
_____ No _____ Yes (How much) ______________________________.

E. Did you find the participation of business and/or utility firm personnel useful?
Businesses: _____ Yes _____ No Utilities _____ Yes _____ No

F. In addition to those firms represented, would you like to see any other organization(s) participate? (If yes, please specify.)
_____ No _____ Yes (Please specify) ________________________.

II. Positive Action Taken

For each of the course segments listed, please answer the questions indicated.

A. Environment

1. Action taken by you:

2. Firms that helped in home:

3. What materials have you purchased?

   Dollar Amount: ______________

4. Number hours you worked: ________

5. Number hours hired: ____________

B. Energy Leaks

1. Action taken by you:

2. Firms that helped in home:

3. What materials have you purchased?

   Dollar Amount: ______________

4. Number hours you worked: ________

5. Number hours hired: ____________

C. Windows & Doors

1. Action taken by you:

2. Firms that helped in home:

3. What materials have you purchased?

   Dollar Amount: ______________

4. Number hours you worked: ________

5. Number hours hired: ____________

D. Insulation

1. Action taken by you:

2. Firms that helped in home:

3. What materials have you purchased:

   Dollar Amount: ________________

4. Number hours you worked: _________

5. Number hours hired: ______________

E. Mechanical Systems

1. Action taken by you:

2. Firms that helped in home:

3. What materials have you purchased:

   Dollar Amount: ________________

4. Number hours you worked: _________

5. Number hours hired: ______________

F. Home Modifications

1. Action taken by you:

2. Firms that helped in home:

3. What materials have you purchased:

   Dollar Amount: ________________

4. Number hours you worked: _________

5. Number hours hired: ______________

G. More Information

1. Action taken by you:

2. Firms that helped in home:

3. What materials have you purchased?

   Dollar Amount: ________________

4. Number hours you worked: _________

5. Number hours hired: ______________

H. Other (Please specify)

1. Action taken by you:

2. Firms that helped in home:

3. What materials have you purchased?

   Dollar Amount: ________________

4. Number hours you worked: _________

5. Number hours hired: ______________

III. Intended Action to be taken

The following questions concern intended action on your part for each segment. Please answer the questions for each segment.

A. Environment

1. Intended action to be taken by you:

2. When do you anticipate action?

3. What materials do you plan to purchase?

   Estimated dollar amount? ___________

4. Estimated number of hours you will work on the anticipated action?

5. Estimated number of hours anticipated hired:

B. Energy Leaks

1. Intended action to be taken by you:

2. When do you anticipate action?

3. What materials do you plan to purchase?

   Estimated dollar amount? ___________

4. Estimated number of hours you will work on the anticipated action?

5. Estimated number of hours anticipated hired?

C. Windows and Doors

1. Intended action to be taken by you:

2. When do you anticipate action?

3. What materials do you plan to purchase?

   Estimated dollar amount? ___________

4. Estimated number of hours you will work on the anticipated action?

5. Estimated number of hours anticipated hired?

D. Insulation

1. Intended action to be taken by you:

2. When do you anticipate action?

3. What materials do you plan to purchase?

   Estimated dollar amount? ___________

4. Estimated number of hours you will work on the anticipated action?

5. Estimated number of hours anticipated hired?

E. Mechanical Systems

1. Intended action to be taken by you:

2. When do you anticipate action?

3. What materials do you plan to purchase?

Estimated dollar amount? ___________

4. Estimated number of hours you will work on the anticipated action?

5. Estimated number of hours anticipated hired?

F. Home Modifications

1. Intended action to be taken by you:

2. When do you anticipate action?

3. What materials do you plan to purchase?

Estimated dollar amount? ___________

4. Estimated number of hours you will work on the anticipated action?

5. Estimated number of hours anticipated hired?

G. More Information

1. Intended action to be taken by you:

2. When do you anticipate action?

3. What materials do you plan to purchase?

   Estimated dollar amount? ___________

4. Estimated number of hours you will work on the anticipated action?

5. Estimated number of hours anticipated hired?

H. Other (please specify)

IV. Miscellaneous

A. Would you recommend this or a similar program to your friends?

B. Would you pay a higher tuition?
If yes, specify - $10, $15, $20, etc.

_____ No _____ Yes (if yes, specify the maximum amount you would be willing to pay)

__________ Maximum Amount

C. Any other comments:

APPENDIX I

Instructor Evaluation Form and summary of the rating and comments of the homeowners attending the last session.

COURSE EVALUATION
ANALYSIS FORM

SG - Strongly Agree
A - Agree
D - Disagree
SD - Strongly Disagree
NJ - No Basis for Judgement

ROOM LOCATION NC/108

COURSE CODE 3E-N3 COURSE TITLE Home Energy Conservation SURVEY DATE 1-31-78

INSTRUCTOR Chris Musselwhite QTR Winter YR [illegible]

TALLY (SG)+	(A)+	(D)-	(SD)-	(NJ)	CHARACTERISTIC FOR EVALUATION	RESPONSE ANALYSIS Pos.+ #	Pos.+ %	Neg.- #	Neg.- %	NJ #	NJ %	# of Res.
6	6	-	-	-	1. The classroom, furniture and equipment is adequate.	12	100					12
5	7	-	-	-	2. The information and activities are what I wanted.	12	100					12
7	5	-	-	-	3. Lectures and/or demonstrations are well presented.	12	100					12
4	8	-	-	-	4. The ratio of lecture to practice or discussion time is about right.	12	100					12
3	3	-	-	6	5. Assistance is provided to the students as they need it.	6	50			6	50	12
2	10	-	-	-	6. The instructor has adequate knowledge and skills in the subject.	12	100					12
4	7	1	-	-	7. Audio-visual materials (charts, slides, films, filmstrips) are used.	11	92	1	08			12
5	7	-	-	-	8. The instructor is enthusiastic about the subject and motivates good wor	12	100					12
10	2	-	-	-	9. The instructor is on time and meets class regularly.	12	100					12
5	7	-	-	-	10. The course is meeting my needs.	12	100					12
					(Over) for comments							

COMMENTS:

I've found a lot of interest among others (neighbors, work associates) in the course, but too late to be helpful for joining the course. Main problem--the course needed more publicity in advance. More demonstrations would be helpful.

Needs more practical application so the novice could understand and make good judgements. Think your sending weekly notices is a waste of taxpayers' money. If one wants to come they will.

Excellent course. Good presentation.

Good start and should get better as you repeat.

Great! Do it again! Class participation proved its value. There was a lot of cross-polinating and accumulation of knowledge, much of it from class members.

Please continue this course. This was a very innovative course. By allowing experts in various energy related fields to come in and talk, various perspectives on energy conservation are altered.

I enjoyed the course very much and would highly recommend the course to anyone.

OK

APPENDIX J

Questionnaire distributed at the initial orientation meeting.

QUESTIONNAIRE

1. What type of heating system does your house have?

Natural Gas	- 7	Oil	- 8
Electric	- 7	Electric Heat Pump	- 3

2. How is the heat delivered?

Steam	- 1	Forced Air	- 20
Radiant	- 2	Warm Water, etc.	- 2

3. Does your house have storm windows? Storm doors?

Yes	- 15	Yes	- 15
No	- 7	No	- 10
Thermo-pane	- 2		
Partially	- 1		

4. Does your house have attic insulation? If so, approximately how much?

Yes	- 2	8"	- 2
No	- 2	10"	- 2
2"	- 1	12-15"	- 2
3"	- 1	R-19	- 1
4"	- 4	Partially	- 1 (800 sq. ft.)
6"	- 8		

5. Does your house have wall insulation? If so, how much?

Yes	- 2	2 1/2"	- 1
No	- 5	3 1/2"	- 8
N/A	- 1	6"	- 3
?	- 5		

6. What steps have you taken to weatherize your house?

Weatherstripping - 6
Caulking - 4
Insul. H.W. Heater - 1
Insul. H.W. Pipes - 1
Storm windows - 6
Floor Insul. - 1
None - 10
Attic Insulation - 1
Replaced windows
Thermo-pane windows

7. What additional steps do you have planned to weatherize your house?

Thermo-pane windows - 1	Insulate H/W pipes - 2

Insulate Ceilings - 2
Cut back on thermostat - 1
Insulate H.W. Heater - 3
Weatherstripping - 2
None Ment. - 10
Insulation - 5
Sell it
Insulate walls - 1
Put H.W. heater time clock - 1
Plastic on windows - 1
This Class - 1
Caulking - 3
Storm windows - 1

8. How many rooms does your house have?

# Rooms	# Responses
5	4
6	4
7	6
8	8
9	2

9. How many people live in your house?

# People	# Responding
2	8
3	7
4	9
6	1

10. Is your home air conditioned?

Yes - 18
No - 5
One Room - 2

11. Approximately, what was your heating bill for last winter?

NA - 7
Not at that residence - 2
? - 2
$170
$200
$270
$300
$320
$400 - 2
$420
$440
$500

12. What is your profession?

Accounting - 2
Motel owner/operator
Personnel Admin.
Retired
RN

Atty
Science Teacher
Microbiologist
Systems Analyst
Foam Rubber Buffer
Salesman - 3
Mgr.
Textiles
Htg. and A/C - 2
Realtor
Bldg. Contractor
Solar Energy and Fireplace Dist.

13. How did you find out about this course?

T.V. - 11
Radio - 3
Newspaper - 1
 Greensboro - 5
 High Point - 3
Brochure - 5
Other
 Instructor - 5

APPENDIX K

Form used to follow up those people who attended the first meeting but did not enroll in the program.

1. The orientation met my specific objectives for the course.

    _____ Yes _____ No

    If no, please specify why/where you were disappointed. (Please be specific.)

2. I did not complete the course because:

    _____ a. Time conflicts at home/or with my job.
    _____ b. I got what I wanted from the course without going on further.
    _____ c. The class was a waste of time because

    _____ d. The facilities were not adequate.
    _____ e. The instructor wasn't adequately knowledgeable about the subject matter.
    _____ f. The class demanded too much effort on my part.
    _____ g. Other (please indicate)

3. Would you attend a course if your suggestions were implemented?