Assessing community perceptions of the public schools using public opinion polling.

Dudley I. Solomon

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ASSESSING COMMUNITY PERCEPTIONS OF THE PUBLIC SCHOOLS USING PUBLIC OPINION POLLING

A Dissertation Presented
By
DUDLEY I. SOLOMON

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of DOCTOR OF EDUCATION

March, 1971

Educational Administration
ACKNOWLEDGMENTS

The writer gratefully acknowledges his major adviser, Dr. Richard Clark, for his guidance, direction, and encouragement during the completion of this study. A debt of gratitude is also acknowledged to the perceptiveness and assistance of Dr. Arthur Eve, Dr. Thomas Hutchinson, and Dr. David Flight of the dissertation committee.

Appreciation is also extended to Charles F. Kettering II, Dr. Edward Brainard, and Dr. George Gallup for their help, assistance, and faith in the project. Dr. Samuel Houston also provided guidance and assistance with the computer and the statistical models.

A special debt of gratitude is extended by the writer to his wife, Gayla, for her patience and understanding during the course of this study.
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CHAPTER I
STATEMENT OF THE PROBLEM

In any public school system in America, professional personnel are responsible to people in their local districts as they develop and implement school board policies. As representatives of the people, boards of education are committed to reflecting the desires of the public. It is often difficult for schoolmen to determine public attitude concerning crucial educational issues. Often the prime "feedback" from the public comes through nonrepresentative pressure groups. The commitment makes it apparent that school boards and superintendents need to assess community desires in a much more sophisticated manner.

Knezevich states, "Throughout history the social institutions responsible for education of children and youth have been prime targets of criticism during periods of social upheaval."¹ This has predictive value: schools will be criticized during difficult times. Even though he recognizes that there are times when the public schools will not be under attack, the administrator of the present day school feels that the best way to disseminate information and receive feedback is through the Parents and Teachers

Association (PTA) or the Parents and Teachers Organization (PTO). Therefore, it has become imperative that a more systematic and comprehensive communication process be established in order for the administrator to identify his "publics" and have communications established with them.

When one examines how public attitudes are typically assessed, a number of shortcomings become apparent. First, in analyzing the reaction of administrators to community perception, the education system is seen, all too often, as divorced from the political system in which it is located. It is difficult to develop a quality city, county, or district school system located in a corrupt or inadequate city or county political system. Second, case studies, demographic data, economic analysis, and random interviews have been the major data sources for inferring community perceptions and attitudes. Generalizations from these sources are fraught with danger. A description or analysis of a power elite or major industry or economic force in one community is not necessarily valid for another. Third, the rationale of deciding who is an opinion leader or who can give valid feedback is open to many questions. Personal prejudices or predispositions can affect interpretation of the facts. Fourth, the fact has to be considered that both communities and leadership are dynamic, not static. Changes occur not only yearly, but daily. Community, state, and world issues
significantly affect those changes. The school administrator, insensitive to changes in the community, is left using opinions that have been related by a small pressure group or an influential local citizen who sees the public schools as the whipping boy for the frustrations of either economic or social problems that are affecting the community, state, or country. Refusal of bond referendums and demand for more strict discipline are some examples of present day feeling of the community toward these issues.

Looking at communication from the schools to the community, Carter states, "It would appear that a program of information to the general public, as a single audience, would be futile. Specific informational programs to specific publics seem indicated." In considering bond elections, Carter also found that most information was acquired by the public on an informal basis, such as telephone conversations, neighbors, friends, children, and sometimes from a teacher, but that there was no direct line of information and there was no coherent structure of communication channels. Dissemination and feedback of information through these networks appeared impossible by any criterion of effectiveness.


3Ibid., p. 24.
Persons seeking it could get information that was being disseminated by the district. School personnel who did not seek out the community might have found that such efforts would have increased community understanding. Those citizens who had already been informed did not generally seek further information; yet, they exerted a considerable effect on dissemination of information. The clearer the information, the lower the rumor content. It was also found that the issue of the school bond was an excellent way for the community to bring up its problems about curriculum and other concerns. The bond issue afforded an otherwise unavailable platform for the community to expound on a wide range of concerns about the public schools.

Carter's findings illustrate the need for: (a) a more individualized and rational communication process from the school board and administration to the various publics in the community, and (b) opportunities for all parts of the community to express specific educational concerns at non-crisis, non-bond election times, as well as when they go to the polls. The present study develops a technique which has substantial potential for meeting both of these needs.

More than ever before, administrators and school boards need accurate information as a decision-making base if they are even to begin addressing some major issues of
of our times. U. S. News and World Report identifies
discipline, students' constitutional rights, accountability,
tax increases, and the competence of educators to run the
schools as major issues of the 70's in the eyes of the
public. According to a national sample Gallup
International published in September, 1970, 56 per cent of
the adults questioned said that they would vote against
funds to finance schools; 67 per cent said that teachers
should be more accountable for students' progress; 53 per
cent opposed "tenure" rules; achievement measures by
national tests were favored by 75 per cent; and discipline
was said to be a problem according to adults, although not
as severe in the minds of students.

Developments in the public schools over the past ten
years should have clearly shown the administrator that he is
a part of a social-political system to which he must attend
if he is to be effective, and if, perhaps, he is even to
survive. A more efficient and realistic feedback system can
play a central role in linking him with this increasingly
important milieu of which he must become a part.

^4"Troubles Pile Up as School Open," U. S. News and

^5"Newsnotes," Phi Delta Kappan, September, 1970,
p. 64.
**Theory of Administration**

The author, in developing the rationale, concludes that administrators must take into account the ways individuals perceive their organization as well as the ways they might deal with the substance, not the form of administration. The concept, then, must be decision-making. Decision-making is the heart of the organization and the process of administration. Action is implicit in a decision, and the judgment is made from perceptions of the community and the organization in order that a course of action will be influenced.

In working toward a definition of perception as a decision-making theory, the author would recommend Ittelson and Cantril who said:

1. Perception can be studied only in terms of transactions, that is, concrete individuals dealing with concrete situations.
2. Perception comes into the transaction from the unique personal behavioral center of the perceived.
3. Perception occurs as the perceived creates his own psychological environment by identifying certain aspects of his own experience to an environment which he believes exists independent of his own experience. This is called externalization.

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Purpose

The present study will design and demonstrate a means for local districts to systematically sample public opinion in order to determine the perceptions of the community toward its local school policies and practices. It will show how local results can be compared to national norms. The study will develop a theoretical base for assessing the attitudes of a community. From this base, the author will develop and pilot an instrument for use by public schools.

An important purpose of the study is to devise a means for learning the criteria citizens use in judging the quality of education and the degree of excellence in their local school system. The study will enable specific issues to be investigated including the following: (1) the willingness of specific groups in a community to vote tax increases, (2) groups in the local district most likely to support and oppose bond issues, (3) attitudes of the public toward teachers, the teaching profession, local school boards, and citizen participation, (4) the kinds of information the public would like to have regarding its local schools and school problems, and (5) attitudes toward school policies.

The major objectives of the dissertation will be to: (1) define a means by which school districts can
periodically assess public opinion on a systematic basis, (2) demonstrate the method developed in (1), (3) define and demonstrate a method for comparing local results with national results, (4) develop a sampling technique which permits administrators to analyze results according to particular subgroups in the community, and (5) to identify changes in central office staff perceptions of community attitudes before and after the public opinion assessment.

Overview of Procedures

The study will review the history of polling, administrative attitudes toward feedback systems, and selected literature pertaining to polling and polling techniques. From the latter, a generalizable technique for acquiring reliable feedback on a local level will be developed. The technique will then be applied to a local context and the results will be analyzed. Finally, results of the application will be examined, and recommendations will be made for subsequent design and application.

More specifically, Chapter II will review the literature through examining the history of surveys and polling from the time of Caesar to the present day, describing the steps in the growing sophistication of modern day polling. It will also delve into the administrator's viewpoint of the community or "publics" he serves and how he has used, in making decisions, various organizations and techniques.
enabling him to assess his community's attitudes or opinions. Third, polling techniques and sampling will be examined as a scientific method which can be used with confidence in the educational world.

Chapter III will build upon the concept that for centuries leaders have been surveying or assessing their constituencies for consensus. The study will indicate that techniques have improved to the point that polling is both dependable and economically sound. Therefore, a useful feedback system can be designed for use by public school leaders. The following steps will be taken to develop a system: (1) developing a rationale for feedback systems, (2) obtaining an annual list of survey items, (3) developing survey items, (4) pretesting items, (5) establishing a survey design, (6) developing the sample, (7) assigning responsibility, (8) developing a "Handbook for Interviewers", (9) establishing a training program for interviewers, (10) handling the data, including percentage, Chi-square, and regression analysis, (11) analyzing the data, and (12) developing observations and conclusions in reporting the data.

Utilizing the developed procedures, the feedback system is applied by the author in the Arapahoe County School District Six, Littleton, Colorado. Chapter IV will describe and report the results of the case study. All
elements described in Chapter III will be tested and analyzed. Specific attention will be given to: (1) the state of information about the local schools and education, (2) communication with the public, (3) major complaints, (4) attitudes toward teaching and teachers, (5) attitudes toward school boards and their problems, (6) citizen participation, (7) financial support, (8) analysis of respondents, (9) percentage and Chi-square analysis, (10) open-end questions, (11) regression analysis for identifying "publics", (12) central office perceptions, (13) survey cost estimate, and (14) conclusions and observations.

For the summary and recommendations in Chapter V, the author will bring forth areas of concern about the study and make recommendations for improving it. Topics for future study will also be explored. The Appendixes will include the questionnaire, Interviewers Manual, and survey design used by the author in Arapahoe County.
CHAPTER II
REVIEW OF SURVEYING AND PUBLIC OPINION

As the one-room schoolhouse grew to many large attendance centers, the distance between the teachers and the people widened. Schools multiplied and the community grew in size and became more heterogeneous. People found access to information difficult, and consequently lost understanding of what schools were doing. The problem was intensified when professional administrators assumed executive responsibility for complex institutions, for then even school board members, representatives of the people, had to depend upon another agent for public opinion and information.

After World War II, the demand on education increased at an unprecedented rate. More teachers, buildings, and money became the cry from the public to the school administrator. At this time it became very clear to some school officials that what the public did not know about school problems could hurt the system's development. Simultaneously, criticism of public education following World War II further spotlighted the importance of effective relations between school, home, and community. Increasingly, administrators felt that closer ties between the people and their schools were needed as the size and complexity of districts
grew, and societal problems increased. Parent organizations were one answer to the problem of assessing public opinion.

One of the first recognized parent organizations was established by the National Congress of Mothers in 1897, and then became the National Congress of Parents and Teachers in 1924. Its units increased from about 26,000 in 1946 to more than 46,000 in 1967. Total membership increased about 8 million from 1946 to 1966 when it stabilized around the 12 million member mark.¹ Because adverse publicity suggested that the P.T.A. was a rubber stamp of the administration, another group, the Parent-Teacher' Organization, emerged in the 1960's. The P.T.O. operated more independently than either a national organization or the local school administration.

The National Citizen's Commission for the Public Schools (NCCPS), organized in 1949, was also formed to rekindle the idea of citizens banding together to act in a common cause. NCCPS grew as a result of the volume of educational criticism from industry and business. Dr. James B. Conant, then president of Harvard University, suggested the importance of stimulating people to work toward improving public education. The NCCPS existed for approximately ten years and did much to present the public's

interpretation of the problems of public school education. By responding to criticisms that had been published by the organization, superintendents used the NCCPS as a tool to defuse further criticism of their schools.

Another organization used by the public to meet and discuss school situations and improvement of the public schools since the early 1950's was the Round Table of Public Schools, which was not an action body, but tried to gather service clubs, businesses, industrial groups, farm, and labor organizations. Again, by the 1950's until the present time, much importance for feedback and feeling the pulse of the community was placed in lay advisory committees. These groups, such as the League of Women Voters, service organizations, P.T.A., and other similar organizations, providing a cross-representation of social groups within the school community, were usually selected to include people who had a vital interest in public education and were willing to give time to the study of problems.

Much has been written about the advisibility of using lay advisory committees. Parents whose children were not in school, or were attending private or parochial


schools were not always included on committees. Many times people were selected because of their political or economic status in the community. Often the ground rules by which these committees operated with the superintendent and the school board were questioned. Did they act as a recommending body or as a suggesting or policy-making body? Where did their recommendations begin and how far did the committee's responsibility extend for recommending funds or personnel to be used for particular projects? Boards of education faced the problem of their obligations to their communities and at the same time tried to follow the sometimes discrepant recommendations of advisory committees.

A number of studies have examined community economics, social classes, power structures, and other variables that might affect decisions concerning the public schools. In a 1961 study, a public leader was recognized as a member of the power elite, identified by the organizational position he held. Political leaders, high civil servants, political appointees, major business executives, military officers of high rank, or office holders in a voluntary or civic association identified leaders whom a superintendent

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could contact to gain the opinions and attitudes of his community. It was implied that a person with influence in some aspect of the political, social, or economic life of the community had a platform from which to influence community affairs. The method of using reputational or nominal leadership was also employed by administrators. By relying on the opinions of those members of the community who were perceived as qualified to identify the power structure, leaders were obtained. Emphasis was on the reputation a person enjoyed, not the position he held. The method's validity depended upon the informant's knowledge of community affairs and sensitivity to power relations. Selection was also a critical criterion. The reputational approach may also be referred to as the informal leadership pattern. Another, the social participation method, assumed that the individual's participation in a variety of activities was an index of his ability to assess the community's opinions and attitudes toward the public schools. Social participation was often used as an operational definition of public leadership. Influence, or opinion leadership, was another

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8 Ibid., pp. 23-28.
method whereby opinion leaders or personal influentials in a community were questioned though they were not necessarily holders of formal leadership positions. If a person appeared to be well-informed, he would be cultivated to assess the opinion and attitude of his community toward the public schools. This approach rejected the concept of a generalized leadership type and suggested instead that each special area of decision-making develop its own opinion leaders. One person might be asked about housing, another about transportation, and still another about education.

Bell also summarized the observable traits of persons, using over 570 items designating how to find the power structure or the leadership in a community, in order to obtain feedback concerning the public schools. He reported the major findings as:

1. Public leadership is a man's role.
2. Public leaders are most likely to be in the middle years of life; some elder members of society are powerful, but rarely are young adults described as leaders.
3. White, Anglo-Saxon, Protestants are usually the leaders.
4. Formal reputation and social participation types of leadership are displayed more often by people in the middle and upper social classes as well as those with above-average formal education.

Decision-making, or event analysis, was an historical approach to opinion gathering, based on tracing the

9Ibid., pp. 21-22.
10Ibid., pp. 28-30.
history and progression of a particular decision or event and determining who was influential in making this decision. This approach worked in reverse, but again depended upon opinions of others to determine who, in effect, was part of the power structure. Although this process was complicated and opened to many biases, it has been used. Another approach to community power-structure analysis involved identifying the number of times the person's name was mentioned in a local newspaper. This was of doubtful validity if top decision makers avoided publicity and contact with the mass media.

Traditionally, the nation's public schools have been viewed as an apolitical segment of the American scene. The need to dispel the myth that education and politics do not mix and that educators need to do considerably more research into the politics of education has been urged by Eliot.

That taboo should be exorcised, for the future of public education, at every level of government, is not only a political issue but an increasingly crucial one. It requires analysis not only in terms of political institutions, but in terms of voting behavior, ideological predispositions, the clash of interests, decision-making and the impact of individuals and organizations on nationwide trends in educational policy.12

11 Ibid., p. 31
In addition to Eliot, other writers in the educational field such as Kimbrough, Gross, Bailey, Iannaccone, and Masters have insisted that educators cannot detach themselves from political realities of life that impinge upon society's educational system. These writers deem it essential that qualities of educational leadership include a willingness to enter the arena of politics and the ability to function as a knowledgeable participant in the very real world of political activity.

The Emergence of Surveys

When Caesar Augustus, Emperor of Rome, issued his epoch-making decree which required every person in the empire to report on a given day to the city or village of

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his birth and there enroll upon the tax list, he was actually conducting one of the first major survey studies in the world's history. A reformer of rather different kind was the English philanthropist, John Howard. Becoming High Sheriff of Bedford in 1733, he started immediate efforts to improve conditions at the Bedford Jail. In effect, he made a thorough survey of prison conditions in England. When he was armed with the facts and figures, he presented his testimony to the British House of Commons. The committee, accustomed to previous experiences of testimony unsupported by detailed evidence, received Howard's knowledge with much respect. As a result, two bills were enacted almost at once to reform some of the evils he had pointed out.\(^\text{18}\) Thus, the survey, while it solved no real problem, offered accurate and convincingly described facts which proved to be effective as a basis for corrective action. He also proved the value of direct field observation of specific schedules and analysis of conditions in different places.

Between this time and World War I, many other researchers were looking at problems to be solved by survey methods. A Frenchman, Frederic LePlay,\(^\text{19}\) spent twenty-five years observing the economic and social conditions of the


\(^{19}\)Ibid., pp. 178-180.
poorer classes in Europe, Asia, and France. He had to invent his methods and live with those whom he surveyed to validate his observations.

LePlay hoped that his investigations might reveal the basic elements which were necessary for proper family and community welfare. He primarily studied their sources of income and habits of handling finances. Finding no prepared scientific methodology which he could follow, he was forced to invent his own methods. He had to be impartial and impersonal in his dealings with the people to gain their confidence. After two decades of study, in 1885, he published a partial report of his observations.

Later, by introducing the technique of observing representative families directly and in detail, LePlay opened an entirely new approach to attacking sociological problems. His chief contributions to scientific research were his use of exhaustively detailed outlines to guide his observations, his development of a technique for personal interviews, his questionnaires, and his means for verifying data. He also made considerable use of the case study, or objective description of the history and status of an individual or group.
Charles Booth\textsuperscript{20} was another social surveyor, who originated comprehensive study of community life when he investigated conditions in the notorious East Side of London. His objective was to produce a true picture of living conditions among the very poor, and from this picture show the necessity for economic aid to distressed people. He hired and trained a staff to live, observe, and interview in the area he was investigating. As a result of his diligence, he was able to bring together a very complete collection of descriptive material. In the report of his survey between 1889 and 1903, he included maps indicating the degree of poverty compared with statistical data to show "the numerical relation which poverty bears to regular earnings and comparative comfort."

At the beginning of the Twentieth Century a number of similar surveys had been started in the United States. Some of these were the Experimental Bureau of Municipal Research in New York, The Russell Sage Foundation for Social Improvement, The Paul Kellogg Survey of Cities in the United States, and the New York Regional Planning Commission relating to crime and law enforcement.

The surveys mentioned above dealt with social improvement between 1896 and 1929 in Pittsburgh and Springfield, Illinois. These soon reached into almost 3,000

\textsuperscript{20}Ibid., pp. 180-181.
general or partial surveys of our cities, investigating the social conditions present and how they tied into the economic well-being of the cities. Interviews, case studies, and questionnaires had been vastly improved by this time, but statistics were still kept on the total population which made investigation costly and of long duration. A marked and rapid increase in the use of survey techniques, especially for economic and sociological studies, was becoming a standard procedure.

An early attempt to assess the ability of party politicians to predict elections was made by Claude E. Robinson in 1932. He collected two types of data from the 1928 presidential election campaign. First, he gathered Republican estimates by county from three states. Second, from a number of political leaders and newspapermen, Robinson compiled a list of estimates by state and political party. He listed "trustworthy" estimates of Democrats in eight states. The difference between their predictions and the actual vote was striking testimony to the proposition that politicians told themselves what they wanted to hear. Robinson said that politicians, in estimating their future, suffered from the "elation complex." This was a necessary self-delusion, for "men who believe they are whipped are

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almost sure to be beaten;" but it "constitutes the chief weakness in the predictive technique of the politician," for it "opens the door to delusions of grandeur and power, and causes otherwise normal men to seek great and sweeping victories where fate holds crushing defeat in store." This was illustrated in 1960 when the Democratic party incorrectly predicted an overwhelming victory for the Kennedy-Johnson ticket. Obviously, more valid predicting techniques were needed.

Crowd analysis was another informal technique of opinion measurement. Only recently has it been elevated to the level of a "science" and been sanctified by disinterested research. Adolf Hitler, who probably had great oratorical talents of the demagogic variety, was clearly aware of these possibilities, measuring both opinion and effectiveness of speech techniques from the reactions of crowds. Hitler stressed the importance of the emotional feedback that speakers could get from crowds. If speakers were sensitive to it, it could be turned to their advantage. In democracies, political actors were compelled to be attentive to the size, composition, and behavior of crowds. It should be pointed out that not only did the speaker leave much to chance and the perceptions of the person observing, but so did the appointed persons who could be termed "experts" in assessing the crowd or public opinion as evidenced by their reactions to a speech.
In the 1930's industry and government discovered the unrecognized potential of public opinion polls as an efficient and effective method of surveying attitudes on national, international, and local issues of the day, and as a means of conducting market research. Business firms had learned that mistakes could be avoided in the marketing of their products if the reaction of the potential purchaser and his need for the product could be determined in advance. Many well-known men had entered the field, such as George Gallup, Elmo Roper, and Louis Harris. Each used a powerful process known as random sampling.

After sampling had been reasonably tested and could be used to predict the uniformity of things with shared characteristics, it was only a step to sampling the characteristic attitudes and opinions that people are assumed to share. In 1935, Fortune Magazine introduced its Fortune survey under the direction of two market-research experts, Elmo Roper and Paul Cherrington.\textsuperscript{22} The Roper Poll, as the Fortune survey became known, has been a continuing feature of the magazine. Archibald M. Crossley, who had been in

market research since 1926 (Crossley Inc.) began in 1936 to do incidental political polls, which were carried in many newspapers.23

The American Institute of Public Opinion (AIPO) - the Gallup Poll - issued its first release in October, 1935. George Gallup, the founder of AIPO, had earlier taught journalism. In 1932, he had become research director of a New York advertising agency. Gallup described the formation and objective of AIPO in these words:

After a preliminary period of experiment, beginning in 1933, the American Institute of Public Opinion, with the cooperation and support of a number of American newspapers, began a series of week-by-week national polls which have continued to the present day. The Institute's purpose was to perform the function of fact finding in the realm of opinion in the same general way as the Associated Press, the United Press, and the International News Service functioned in the realm of event. This attempt to improve and objectify the reporting of what people think met with warm response and active encouragement from editors throughout the country.24

In the years since Roper and Gallup pioneered the systematic and scientific sampling of American public opinion, many other individuals, institutions, and centers of study have emerged both here and abroad. Gallup now coordinates public opinion organizations in more than a


dozen countries throughout the world through his International Association of Public Opinion Institutes.

Since the early days of scientific opinion measurement, a few nonprofit, private polling agencies have been established in the United States and are in operation at the present time. The Bureau of Applied Research at Columbia University was the first to study opinions and attitudes of the public. The development of the University of Michigan's Survey Research Center illustrated the interdependence of governmental and academic activities in the field of attitude and opinion measurement, and in behavioral-science research. Since 1946, the Center has conducted studies on American political behavior from 1948 to 1968 investigating, mainly, voting and nonvoting publics.

In 1957, a library of polling data, the Roper Public Opinion Research Center, was established at Williams College, Massachusetts. The center has collected sample survey data from many American and foreign opinion researchers, and has made this data available to educational and nonprofit agencies.

**Sampling in Public Opinion Polls**

The significant factor which permitted surveyors to move from the crude instruments of preceding centuries to a statistically sound and practically possible polling technique was random sampling. Modern public opinion polling
has its origins in the journalistic straw votes; in the field of market research, in the development of psychological testing; and in the application of the mathematical laws of probability and sampling to human behavior.

Business firms have learned that profits can be increased and mistakes avoided in the marketing of their products if the reaction of the potential purchaser and his need for the product can be determined in advance. Business firms also seek to analyze the results of their advertising programs through this kind of research. Market surveys, then, are public opinion polls conducted usually to test the public's reaction to a new product, to discover the relative effectiveness of different ways of packaging, to identify consumer preference, and to analyze the actual or potential market for a given piece of merchandise. Large companies today maintain research departments that gather data relating to such matters as these. A large number of advertising and consulting firms make a business of reporting financial and marketing trends through the uses of surveys and random sampling.

Most important of the procedural factors, and underlying the usefulness of survey questions, interviewing techniques, and data analysis, is the application of the mathematical laws of probability. The Swiss mathematician, Jean Bernoulli, first described the science of probability
in 1713, but only recently has this knowledge been used for measurement in business and in the social sciences. The basic proposition of probability is that given chance combinations and a finite number of elements, single elements, or combinations thereof will recur in an infinite series with predictable regularity and frequency.

Some sophistication in understanding probability and sampling was necessary before pollsters could hope to measure public opinion reliably by gathering opinions of selected persons in the public. Primarily, this sophistication was achieved in American industry through its experience with production control and product standardization.

In public opinion surveys, the investigator may find it impossible or unfeasible to make direct contact with all the individual sources of his data - that is, to question every single one in the group whose reaction he is attempting to measure. A sample may be described simply as a part of the larger number, and the process of sampling in a survey means gathering the information from sources which tend to form a cross-section (or representative sampling) of the entire group from which, if time and expense permitted, it would be desirable to obtain data.

The sample should be large enough to insure that the results are within those limits of chance error that satisfy the sponsor. This is termed reliability. The simplest
procedure in sampling, ordinarily, is one which gives an equal chance or probability for every individual in the entire group to be selected as part of the sample. Before beginning to select his sample, the investigator must know the exact nature of the population he wishes to observe or measure. The ideal sample is an exact replica of the larger group of which it forms a part. The process of dividing a population into constituent parts for the purpose of making the sample truly representative, is partly a matter of the investigator's good judgment and is often called stratification. The sample, then, is a stratified sample; and when the sample is made up of random samplings from each part or stratum, the method may be termed stratified-random sampling.

Factors often considered in making up a sample for a public opinion poll include such things as age, residence, sex, religion, education, occupation, socio-economic status, and political affiliation. In many cases the stratified-random type of sample will prove more nearly representative than that selected by the purely random method.26


In sampling, the representativeness of the sample must be determined first, then its optimum size. The more homogeneous a group is, the smaller is the sample required. By and large, however, the accuracy of any sample can only be estimated. The researcher must simply take steps to guarantee in every reasonable way that the sample he selects will be both representative and reliable.\(^{27}\) Essentially, sampling consists of obtaining information from a portion of a large group, or "universe." This "universe" represents the entire lot in which some item or items of information are desired.

CHAPTER III
DESIGNING A FEEDBACK SYSTEM

Introduction

It is now possible for any school district to conduct a reliable, scientific, and economical survey which examines the community's perceptions of timeless educational issues for longitudinal study for historical value, and to assess current educational issues which are calculated to change from year to year. The breakthrough has been made by CFK Ltd. in contracting with the Gallup Organization to conduct annual surveys for the next ten years to determine how the public perceives its schools.

Just as an aspiring political candidate wants to know his chances of being elected before he announces his candidacy, a school board or superintendent wants to know the possibilities of passing a bond issue or gaining acceptance for a major policy change or an innovative practice. To engage the opinions of leaders and other persons in the community and to analyze the data would be costly and would take an unreasonably long period of time.

One way the politician or marketing researcher solves this problem is to hire a survey research agency to sample the opinions of a relatively small group. He can
then make a better judgment of his chances for success. Conversely, a superintendent can make a similar decision concerning the community's perception of issues facing the school district. It must be remembered that not only will the superintendent get information concerning the community's perception of the bond issue, but additional information will be accumulated as a guideline to be used not only as a reliability test in later surveys, but to analyze the feelings and types of perceptions that he has in his community concerning other issues.

Definition of Theoretical Basis for Perception

A phenomenological experience of an object, that is to say, the way some object or situation appears to the subject as dependent upon his own organism, as observer-involved, non-denotive, and "private," is called perception. Our lives are lived, insofar as we deal with the "appearances" of things, in an aura of observer-involvements, private significances, and lack of clear, explicit


denotation. And, great is the burden placed upon language in trying to communicate these experiences to others.3

As a result, observations through structured and semi-structured interviews can be used as a means to communicate perceptions of others to a conscious level whereby decision-making and a general direction can be taken which can be interpreted by the majority of the citizens.

Murray4 defined perceptions as a complex set in man which includes as components:

1. An intellectual part — information and ideas, values.
2. An emotional part — arising from experience of family, friends, group-membership.
3. A conative part — which implies some movement or impulse to move or to take a stand for or against.

He further states: "No one definition of perceptions will do, but they could be described as emotionally toned learning by which one reacts consistently either for or against some person, object, or idea."5

Perceiving is a process comparable with discrimination, differentiating, and observing. The term is customarily used to refer to relatively complex receptor and neural processes which underlie our awareness of ourselves and our world. This awareness is referred to as perception.

3 Ibid., p. 24.
5 Ibid.
Although the term perception is usually restricted to aspects of experience, it has certain behavioral implications. Perception of objects, situations, and relationships is often correlated with particular overt reactions.\(^6\)

From the above, the author has concluded that a definition of perception as it pertains to public opinion polling is as follows: Perceptions are those collected, stable and unstable, interpretations of received information concerning the subject of the survey. The school is here considered as a phenomenon. The impressions about the school which are held by the respondent as a collection of information, representing the school (the concept of the school) are perceptions. Some of these perceptions will be seen to have behavioral implications. For example, the perception that school buildings are too expensive has certain effects on a bond election for new construction.

Perceptions are held because of one or more of the following factors. Perceptions may be held as the result of more or less systematic investigation by the respondent, or they may be unconsciously collected emotionally, arising from the experiences of friends, family, or group membership. Perceptions may also be intuitive cognition or judgment, the impulse to move or take a stand for or against a survey item at the time of the interview.

\(^6\)Ibid., p. lll.
Theories of Perception and Their Implications to the Survey

The Core-Context theory is one of the classical theories of perception. According to the Core-Context theory, perception is not a single item but a group of inter-related parts. The elements consist of simple sensations integrated with images and/or ideas left from past experiences. Conforming to the theory, sensory components do not, in themselves, have meaning, whereas perception (the aggregate) does.

If this theory is held and the past experiences of the respondent become important to the interpretation of the response, persons with a college background may, for instance, favor education, while persons who have dropped out of school may not favor education, basing their judgments on past experiences. Persons with high income may see the value of education much differently than unemployed or low-income citizens. Older persons with more experience will perceive educational issues differently than younger persons with limited experience. Parents with children in parochial schools will view the public schools in a different light and not only in terms of religious preference, but in terms of discipline, or other factors.

The Probabilistic-Functional theory is a type of theory centering upon the phenomenon of perceptual "constancy," in which "cues" form a considerable explanatory
role. It is said that the organism, in line with the requirements of biological adaptation and using available data, tried to "reconstitute" the object, and is only able to approximate it. The object as perceived is never better than an approximation.

If this theory operates, it may serve as a "cue" to the respondent either that the school district and the superintendent are very "open" and desirous of information, regardless of its implications to the system, or that there must be something wrong with the schools and the survey is a "whitewash" or "cover-up" to justify the mistakes of the system.

The Directive-State theory is a theory of perception developed by Bruner and Postman, and is one of the earlier forms of social psychology's contributions to perception. The behavioral determinants stem from higher level processes, those having to do with other features of psychological activity. These processes carry the effects of past experience in general and include the organism's needs, tensions, value system, and biases. This theory indicates that the individual as a whole is represented by his perceptions, whether this representation can be said to be synonymous to personality, or whether some more specific and tangible mechanism can be detected as being elicited by the given stimulus situation. Be that as it may, the
behavioral determinants form a central directive state, making perception other than solely the often-described stimulus-bound end result.

The implications of this theory on the survey are that open-end questions may be biased by the demographic makeup of the community, lay-offs in certain major industries, disagreements over sex education, etc. In answering the open-end questions, the individual would be reacting to values, tensions, etc., much more vividly than he would in a structured questionnaire.

The Gestalt theory is a view of organismic activity that disavows the very logic that was used to construct the Core-Context theory and all similar forms of associationism. It is a form of emergence doctrine, in which the unit is not a building block but rather a complete product, the house itself. The theory specifies how the house comes into existence, but more especially how it operates once it exists. Form is fundamental, and once it exists it tends to persist. The experience of form need not be correlative with the external stimulus.

The relationship between the stimulus pattern received by the organism and the fields or wholes of perception may undergo transformation. The following is an illustration of the retention of essential form while transformation is undergone. A picture that has been drawn on a
rubber sheet may retain its identity even when the sheet is later stretched out of its original shape. The literal characteristics of the picture do not remain as they were. Nevertheless, it retains an essential resemblance of its original self.⁷

The respondent sees the school system not as a set of discrete operations, but as a whole. Some of the implications of this theory are: Citizens see the school as "the little red schoolhouse," which really does not exist, though they think it does. The original perception of an object remains long after that object has changed. A small school district which has grown large in a short period of time is still perceived as being small. The high school as a college preparatory institution may in reality be comprehensive in nature, but draws fire for lowering academic standards.

Topological Field theory seems to have been an attempt to develop a consistent and exclusively phenomenological psychology.

The phenomenological field is one that is experienced as extending about the individual, the phenomenological self not lying within it. The individual is treated as a point in space, and can migrate from one portion of this life space to another, thereby possessing a varying significance

in the field. Perception has to do with the individual's comprehension of his position in his life space. ⁸

To carry this theory into public opinion polling, the following considerations become important. How does the respondent perceive himself in his life space? Age, religion, and annual income become vital factors. Open-end questions would not be quite as valid if the respondent could not see the whole situation. "No opinion" or "do-not-know" answers may be given more frequently if the respondent had a low self-profile, or if he could not migrate from one point to another in his life space. This would be due to his perception of his position of not being a community leader in his life space.

An important criterion to be considered for judging perceptions is the stability of those perceptions. Bloom talks about human characteristics in our search for pervasive and durable perceptions which we tend to value and the rejection of those perceptions which we believe to be temporary and transient. Stable perceptions are more likely to be based on interactional processes, ways of relating to phenomena, life style, etc. Immediate objects of attention, fads, and mannerisms are likely to be unstable perceptions unless they are viewed as symptomatic of persistent underlying needs and processes. This is to say that basic

⁸Ibid., p. 19.
mechanisms and processes are most likely to be stable; whereas symptoms and more superficial aspects of an individual's behavior are less likely to be stable. Another interpretation may be that unconscious and deep-seated characteristics are difficult to change; whereas highly conscious and more nearly surface aspects of human behavior or personality may be more subject to change and are therefore less stable.\(^9\)

Utilizing Consultants and Voting Lists

Typically, school districts have used consultants and voting lists as a means of gathering information. The consultant is often the product of formal training or recognized leadership. The dangers of too complete reliance on formal training for perceptual accuracy are suggested in a study by Crow.\(^{10}\) He found that a group of senior medical students were somewhat less accurate in their perceptions of others after a period of training in physician-patient relationships than was an untrained control group. The danger is that a little learning encourages the perceived to respond with increased sensitivity to individual differences


without making it possible for him to gauge the real meaning of the differences he has seen.

Voting lists are also cautioned against as a true concept of the composition of the community. Many persons are not registered, many do not vote in every major election, and with the mobility of our population, there is an almost day-by-day change in our communities.

Thus, it becomes quite clear to the administrator who relies on a decentralized, open, and shared decision-making organization that the practical use of the above theories of perception become a method of operating, through the use of public opinion polling for decision-making.

Statement of Information Desired

The purpose of the school district survey is to measure and record the perception of the public toward the local school district issues, as compared with norms established by George Gallup in a national survey to be conducted annually for ten years. Such data may be reflective of the publics' attitudes toward the school district. The survey is local in scope and is based upon a representative sample of all adults.

Since perceptions, attitudes, and knowledge are closely related, many questions asked of respondents will be included for the purpose of measuring the kind and amount of
questions will test the criteria citizens use in judging the quality of their schools.

Another indicator of the community's attitudes is willingness to vote tax increases when there is a need for greater financial assistance. A detailed analysis of the results obtained on the issues of taxes and financial aid will be included in the report. The survey should also distinguish those groups within the community most likely to support or to oppose bond issues calling for greater tax increases.

The public's perception of teachers, the teaching profession, and its local school board will be covered in the survey. Other topics to be dealt with include the kinds of information the public would like to have regarding its local schools, school problems, and criticisms of school policies.

Steps in a Survey

An overview of the steps to be taken in a survey includes the following items. A survey director will first have to determine as precisely as possible the population, or universe, to be surveyed. He will then set up a sampling "frame" and sample size from a list of all the districts or precincts in a statistical universe.

For obtaining the specified precision in terms of permissible error, the surveyor should also compare several
different sampling methods such as cluster sampling, random sampling, stratified-random sampling, and sampling mechanisms such as mailing, telephoning, or personal interviewing. The most efficient sampling method can then be selected, although the time element and other administrative considerations, such as availability of maps, enumerators, data processing equipment, etc., must be taken into account.

Next, the survey director will write the questions and establish their importance through the use of competent authorized persons who will develop the final questions, or use the pre-tested questions provided by the national survey. These persons may be students, teachers, principals, or superintendents evaluated by their peers as being competent in their particular field of expertise. For pre-testing he will use these questions on a small sample of persons in order to authenticate the wording, understanding, and comprehensiveness of the question.

After the questions have been selected, the art of interviewing, interviewer selection, and training will be the next steps in the process. Processing and analyzing the questionnaire which includes percentage, Chi-square, multiple regression, open-end and central office perceptions will then be conducted. Finally, the results will be interpreted and reported. Each step will be explained in greater depth in the following pages.
Population or Universe

In the terms of the sampling statistician, the whole is the "universe." What he must devise is the method whereby a representative group can be selected from the universe that will, although much smaller than the universe, be in all important respects like the universe.

The universe normally sampled in a national public opinion poll is the civilian population of the United States over twenty-one living in private households. In the future the age will be eighteen. A truly representative sample of this universe must represent all of its elements in the same proportion as they are present in the whole. Among important elements are sex, race, age, occupation, education, economic status, and religious preference. The adult population must also be represented correctly by geographical region of the country, by cities and towns of various sizes, and by rural areas.

For example, if 12 per cent of the adult population lives on farms, then it is obvious that a representative sample of the adult population will have 12 per cent of the total number of interviews with farm residents. Similarly, since the United States Census population figures show that 52 per cent of the adult population today are women and 48 per cent are men, then a representative sample of the adult population will have 52 per cent of the total number
of interviews with women and 48 per cent with men. The same procedure should apply to a local survey. An example of this application will be described in Chapter IV.

**Sampling "Frame" and Sample Size**

Although sampling is constantly gaining greater acceptance in private industry and in government, many people are still skeptical about the accuracy of any figures obtained from a partial rather than a complete count. "The advantages a sample has over a complete count are: reduced costs for school districts, reduction in manpower and materials, vital information gathered more quickly, the obtaining of more comprehensive data."\(^{11}\)

In reviewing the literature of Parten,\(^{12}\) Cantril,\(^{13}\) Hennessy,\(^{14}\) Roth and Arkin,\(^{15}\) the National Education


Association, and Gallup, one can confidently state that a sample size of 400 respondents for any school district up to 500,000 in population can be used effectively. This would not violate the recommended allowances for sampling error of 95 in 100 cases, and has been established statistically.

According to Hennessy, "A sample of a few thousand - or maybe even one thousand - is capable, statistically, of producing an accurate reflection of the opinions of a hundred million or more people. Contrary to what may appear to be common sense, very large samples (say ten thousand to fifty thousand) are not much more accurate than medium-sized samples (fifteen hundred to five thousand), and the improved results of such large samples are almost never worth their costs."^18

It is important for the survey director to realize that the sample Hennessy is referring to is a very sophisticated type. After careful analysis of thousands of voting districts, "swing precincts" have been designated as being the most typical or representative of the general public.


Statistically these precincts can be monitored periodically and return a high percentage of accurate perceptions representing the people of the United States.

One must face the fact that the overall usefulness and reliability of a survey may actually be enhanced by reducing the sample size and using the money so saved to reduce the nonsampling errors. In a survey of human populations, this might mean more time and money on the questionnaire, hiring fewer and better interviewers, providing better training and better supervision in the field, and making more recalls on people not at home on a previous call.19

**Sampling Precision**

It is customary to refer to the precision, rather than the accuracy, of a sample estimate. Sampling is only one component of that broad field of scientific method known as statistics.20 Statistics provides the tools for collecting, analyzing, and interpreting the cumbersome masses of data that most business and government agencies must deal with in this age of science. There always exists the risk, in making an estimate from sample data, that the particular sample is not truly representative of the universe or population of the study. This risk can be set very low by using "probability sampling methods and appropriate estimating


techniques," and by taking a sufficiently large sample, although the risk can never be eliminated completely.  

Whenever we estimate something from a sample, it is most unlikely that the sample estimate will be exactly the same as the figure obtained by making a 100 per cent count. If both sample data and 100 per cent data are gathered using identical methods, the difference between the two is the sampling error. When the data gathering methods are not identical, much of the difference between sample estimate and 100 per cent count may be due to the variation of these methods.

The sample always carries with it a sampling error. However, many are unaware that for certain types of samples the degree of precision desired from the sample estimate can be estimated in advance. Such samples are called probability samples or "scientific" samples and are characterized by the fact that the probability of selection of each unit is known.

If a probability sample is used, one can specify in advance the degree of precision that he would like in his estimate. The precision specification consists of two elements: the first, for example, being that the surveyor likes his estimate to be within 5 per cent of the figure

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obtained by complete count. This error limit is called the tolerance specification. Second, the surveyor can set the risk at any desired level. Examples are ninety-nine to one that the error will not exceed 5 per cent, or in terms of the number of samples, the error will be 5 per cent or less in ninety-nine out of one hundred samples. This expression of risk is called the confidence specification. Both tolerance and confidence specifications of a probability sample must be stipulated before the required sample size can be determined. In using the instrument developed by the national poll, George Gallup has used a 5 to 7 per cent tolerance, at the 95 per cent confidence level, assuming that the sampling procedure, interviewers, and questionnaire remain constant. Another argument for using sampling is that the precision of a particular probability sample can be estimated from the sample itself. This remarkable property of probability samples provides a potent argument for using such samples in place of judgment or other non-probability samples.

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Maps

The section on sampling discussed the importance of identifying and choosing interviewing areas. The drawing of maps of the individual areas for interviewing assignments is as important as the process of selecting these areas.

Maps are one of the most important tools of the interviewing profession. The following criteria should be used in selecting maps for interviewing purposes.

1. They must be up-to-date maps showing the most recent subdivisions.

2. They must be maps that show in detail such features as towns and roads, as well as corporate boundaries of towns, townships, and counties. Such natural features as brooks, lakes, and rivers should be shown.

3. The maps should be black and white outline maps so that they can be easily "marked-up" and copied.

4. They should be large enough for easy reading. For example, one inch equals one mile in rural areas, and 1,000 feet equals one inch in urban situations.

Reproductions of the specific area should be prepared for the interviewer, instead of the large original maps. The maps on the following two pages are examples of
maps supplied for an interviewing assignment, one for an urban assignment and the other for a rural assignment. The numbers indicate the boundaries of the interviewing area. The interviewer should begin the interview in this particular illustration in the area marked by the survey director as X-1.

**Developing and Pre-Testing the Questionnaire**

Question making is an art. It is suggested that the pre-tested questions used for the national survey be used on the initial survey.

In opinion polling, there are three basic types of questions:

1. The open-end question, in which the respondent is free to answer in his own words about the issue presented to him.

2. The three-way question, which is a yes, no, no opinion type.

3. The multiple choice question, which further expands on the yes-no question giving more alternatives of too much, too little, etc.

4. Adapting the open-end question by giving the respondent three to four preconceived answers on specific questions.
In devising the questions, one must make sure the order is correct in order to obtain as true an opinion as possible.

Gallup's five-question foundation for an approach to one opinion follows: 23

1. One open-end question, which introduces the issue in an easy, pleasant, exploratory manner, breaks the ice between the pollster and respondent when it's the opening question of the entire survey, indicates what's ahead for the respondent, and induces a significant reply without unduly influencing that reply. It's a sort of springboard from which to jump into the next and more specific question.

2. A second open-end question which reflects further attitudes and clarifies opinion on the first free-answer question.

3. A three-way or multiple choice question which brings out specific attitudes and sharply pinpoints details in the replies already recorded in the first two questions.

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4. An adapted open-end or multiple choice question which might clarify former replies, or ask "why?"

5. A multiple choice question which brings out intensity of feeling on the answers previously recorded.

In writing the questions one should try to:

1. Use as few words as possible and yet appear natural.

2. Avoid argumentative questions, especially at the beginning of the questionnaire, and control bias pertaining to the school district. The survey director should realize that positive, negative, and biased questions can play an important part in a questionnaire if the questions are constructed purposefully. Gage, Leavitt, and Stone found that "questions of negative, positive, or of bias nature are loaded with acquiescence set, and may belong to the family of authoritarian and conformity dispositions. On the basis of this reasoning they stated the hypothesis that negative items have greater validity than positive items for the measurement of authoritarianism. More specifically, the
negative items would be more valid than the positive items.  "24

3. Select four or five other educators qualified to determine the feasibility of the question. This will help establish the face validity of the question if these persons are qualified in the eyes of the profession and recommended by other professionals for their expertise in these matters. Another approach for selecting questions is to compile a number of opinion statements from teachers, community, or administrators representing their reactions to the public schools and constructing a Likert-type scale to evaluate and reword the questions into two forms, one positive and the other negative.


5. Use good grammar, not slang.

6. Avoid educational "pedagese."

7. Many times when dealing with the public it is felt that it does not comprehend certain questions, therefore demanding that the question developer "talk down" to the respondent. This is not necessarily so, if the question is

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well-worded and if the respondent is considered
a respected member of the community and if the
school district is vitally interested in his opinion.

8. Avoid double meanings.

9. Make sure the desired information will be
reported through the question.

10. Make the transition from one question to another
as smooth as possible.

11. Keep the questionnaire within a twenty minute
interviewing time.

12. Pre-test by using the questionnaire with a ran-
dom sample of at least twenty persons.

13. Read "Feel Their Pulse," National School Public
Relations Association of the National Education
Association, 1955, Washington, D. C.

The object of pre-testing is to simulate as nearly
as possible the conditions under which the survey will take
place and to find and correct any difficulties that may
arise.

In conducting a national survey, the results of a
pre-test are discussed in a group session attended by the
field director, the interviewers, and the study director
responsible for the questionnaire under discussion. Very
significant changes are sometimes recommended on the basis
of these discussions. In addition, because of the pre-test, the field director is able to recommend interviewing procedures that may aid in the work of the interviewers. Through constant concern with questionnaire problems, pre-test interviewers become adept at the type of criticism that enables them to correct questionnaire difficulties and faulty interviewing procedures. The questions for the national surveys will be developed, authenticated, pre-tested, and made available to all school districts throughout the United States.

What is Interviewing?

Basically, interviewing is a system of "asking and answering." It is an old art which has been highly developed and specialized in our day. The Socratic dialogues of Plato are one of the earliest examples of a probing, purposeful interviewing method. Today, however, interviewing has taken on a different meaning and use for people. Interviewing is used in connection with applications for school matriculation, public assistance, and jobs. In addition, interviewing has gained a special connotation in connection with its use in social research.

In social research, interviewing is an "asking and answering" system used to collect data. Usually the data sought is opinion. On some occasions, however, the purpose
purpose may be the fact gathering or population research similar to that conducted by the Bureau of Census.

The core of any data gathering organization is the interviewers—men and women who objectively gather opinions and facts on questionnaires from people in their areas and send them to the survey director for tabulation and reports.

It is crucial when working with voluntary interviewers that the "variable bias" factor which affects the nonsampling error part of the survey be recognized. The interviewers may be overly committed to the schools, thereby bringing in a factor which will alter the results of the survey. Kish states, "Each interviewer has an individual average 'interviewer bias' on the responses in his workload, and we consider the effect of a random sample of these biases on the variance of sample means. This effect is expressed as an interviewer variance which decreases in proportion to the number of interviewers."\textsuperscript{25}

The measurement of nonsampling variable errors in surveys is a complex subject with many writers\textsuperscript{26}


contributing varying opinions as to its importance. The main focus should be on training the interviewers to remain as impartial as possible. They should be afforded an intensive and comprehensive course in interviewing with emphasis on the survey being used.

Emphasis should also be placed on the fact that in face-to-face interviewing, the interviewer can measure other aspects of the respondent, such as his appearance and emotional state, thereby reducing the likelihood of misunderstanding between them. Also, the opportunity to establish rapport, to explain or clarify and to probe for further details, nuances or answers provides a more reliable base for validity in reportings.27

Recruitment of Interviewers

In recruiting interviewers, one will find that many parent groups are happy to assist the local school district. The following should be controlled as closely as possible in order to maintain reliability.

1. Do not assign over five interviews to each person as the interviews take forty to sixty minutes to administer.

2. Try to get as large a cross-section of parents as possible. This will help in preventing a bias in the answering of questions.

3. Make sure each interviewer has a back-up or substitute in the event of illness or other reason for not interviewing.

4. Assign a captain or team leader to ten interviewers. They can assume responsibility for picking up and delivering materials, plus filling in if the necessity arises.

5. Be sure to inform potential interviewers that a four to five hour training session will be necessary. Provide babysitting services if at all possible.

6. Emphasize the importance of remaining neutral as the interview is being conducted. This is absolutely mandatory if the service the interviewers are performing is to be for the betterment of their children's education and for the community as a whole.

7. Explain in recruiting interviewers that you are asking for approximately ten hours of their time during the next seven days.

9. Be prepared to start interviewing immediately after the training session. The interviewers are excited and interested in their assignment at this time and will want to start immediately. If time is permitted to lag between training and interviewing, interest will be lost and the instructions will possibly be forgotten.

**Processing Questionnaire Responses**

The reduction of the thousands of questionnaire pages to a relatively few pages of statistical tables can be delineated into three steps: Step A - coding the answers, Step B - punching coded answers on data cards, Step C - counting and sorting the coded answers on data processing machines.

**Step A.** In order to deal with the numerous individual answers to open-end questions, yes, no, and no opinion questions, it is necessary to set up a coding system whereby replies of the same nature can be grouped into categories. After the various categories have been designated, a number or code is assigned to each one. A miscellaneous category is recommended to cover those answers which are not related to the other categories.
The example given below shows some of the categories with numbered codes which could be assigned to the question, "In your own opinion, in what respects are your local schools particularly good?"

1. Good teachers
2. Innovations
3. Field trips
4. High academic standards
5. Positive attitude of community
6. No split or double sessions
7. Administration
8. Facilities
9. Curriculum
10. Special education
11. Athletic program
12. Individualized instruction

These categories are twelve out of a possible twenty-five or more for this particular question. The person doing the coding, after carefully reading the answers, would put the number or letter of the appropriate category in the margin of the questionnaire to be later counted.

Step B. After the coding has been completed, this information can then be transferred to key punch cards. The data will then be in a form which can be more easily counted and analyzed. All the variables such as age, occupation,
etc. should also be punched.

Step C. The example given below illustrates what can be done with the information after it has been key-punched and fed to the data processing machine.

Example question: "Do you think teachers should have the right to strike?" 1[ ]Yes, 2[ ]No, 3[ ]Don't Know.

To find out how many people answered the question in these three ways, the machine can be set to count the answers to each of the three codes. Code #1 - 179, Code #2 - 206, Code #3 - 12, Total = 398. In other words, 179 approved of teachers having the right to strike while 206 disapproved and 12 had no opinion.

To identify publics through coding, you can get a break-down of a particular group or public and, then, using the computer, have it search for the yes, no, and no opinion answer for a particular area you are searching. For instance, using the three criterion variables - ages twenty-one to twenty-five, the $10,000 bracket of income, and in a professional field - the computer can search and give a complete rundown as to how many people responded affirmatively or negatively or had no opinion to the question, "Did you vote in the last bond election?"

Another area where one should be cognizant is the no opinion or no answer reply. Of the respondents, 2 to
25 per cent may answer questions in this manner. If this occurs, the question should be analyzed, if the percentage of negative responses is in the 2 to 25 per cent range to see if enough information was given so that the question was understood, or if the public really chose not to commit itself one way or another on this particular issue.

**Percentage**

In analyzing the data, the results should be tabulated in a percentage form, thereby comparing the local school district's score to the national norm. This information will have to be carefully investigated to see if the question was one of a positive or negative nature. Also, the number of percentage points, either going away from or toward the national norm, will be another indicator as to the degree of importance. The first step of the procedure is to go to the following established tables to find the percentage rank area to give a guidepoint for the validity concerning that particular question. In analyzing the questionnaire, it must be remembered that the confidence level range is at the 95 per cent level. This is not 100 per cent validity and it should be used as a predictor only.

The following tables may be used in estimating the sampling error of any percentage in the survey. The computed allowances have taken into account the effect of the sample design upon sampling error. They may be
interpreted as indicating the range (plus or minus the figure shown) within which the results of repeated samplings in the same time period could be expected to vary 95 per cent of the time, assuming the same sampling procedure, the same interviewers, and the same questionnaire are used.

For example, if the indicated percentage is between 45 and 55 per cent, the interpreted number for 45 could be 39 to 51. This spread is considerable and should be used with caution in making conclusive decisions as to the public's perception of a particular problem.

TABLE 1.--Recommended Allowance for Sampling Error of a Percentage\(^a\) (In Percentage Points at 95 in 100 Confidence Level)\(^b\)

<table>
<thead>
<tr>
<th>Sample Size</th>
<th>1500</th>
<th>1000</th>
<th>750</th>
<th>600</th>
<th>400</th>
<th>200</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentages near 10</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Percentages near 20</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Percentages near 30</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Percentages near 40</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Percentages near 50</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Percentages near 60</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Percentages near 70</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Percentages near 80</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Percentages near 90</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

\(^a\)Table furnished by George Gallup of the Gallup Organization, Inc.

\(^b\)The chances are 95 in 100 that the sampling error is not larger than the figures shown.
Table 1 should be used in the following manner. If a reported percentage is 33 for a group which includes 1500 respondents, proceed to row "Percentage near 30" in the table and go across to the column headed "1500." The number at this point is 3, which means that the 33 per cent obtained in the sample is subject to a sampling error of plus or minus 3 points. Another way of saying it is that very probably (95 chances out of 100) the average of repeated samplings would be somewhere between 30 and 36, with the most likely figure the 33 obtained.

In comparing survey results in two samples, such as men and women, the question arises as to how large the difference between them must be before one can be reasonably sure that it reflects a real difference. In the following table the number of points which must be allowed for in such comparisons is indicated.

Two tables are provided: Table 2 is for percentages near 20 or 80; Table 3 for percentages near 50. For percentages in between, the error to be allowed is between that shown in the two tables.

To illustrate how the tables are used, the following example is given. If 50 per cent of the men respond a certain way and 40 per cent of the women respond in the same way, can it be said with any assurance that the 10 point
TABLE 2.—Recommended Allowance for Sampling Error of the
Difference\(^{a}\) (In Percentage Points
at 95 in 100 Confidence Level)\(^{b}\)

<table>
<thead>
<tr>
<th>Size of Sample</th>
<th>Percentages Near 20 or Percentages Near 80</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>750</td>
</tr>
<tr>
<td>750</td>
<td>5</td>
</tr>
<tr>
<td>600</td>
<td>5</td>
</tr>
<tr>
<td>400</td>
<td>6</td>
</tr>
<tr>
<td>200</td>
<td>8</td>
</tr>
</tbody>
</table>

\(^{a}\)Table furnished by George Gallup of the Gallup Organization, Inc.

\(^{b}\)The chances are 95 in 100 that the sampling error is not larger than the figures shown.

TABLE 3.—Recommended Allowance for Sampling Error of the
Difference\(^{a}\) (In Percentage Points
at 95 in 100 Confidence Level)\(^{b}\)

<table>
<thead>
<tr>
<th>Size of Sample</th>
<th>Percentages Near 50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>750</td>
</tr>
<tr>
<td>750</td>
<td>6</td>
</tr>
<tr>
<td>600</td>
<td>7</td>
</tr>
<tr>
<td>400</td>
<td>7</td>
</tr>
<tr>
<td>200</td>
<td>10</td>
</tr>
</tbody>
</table>

\(^{a}\)Table furnished by George Gallup of the Gallup Organization, Inc.

\(^{b}\)The chances are 95 in 100 that the sampling error is not larger than the figures shown.
difference reflects a real difference between men and women on the question? The sample contains approximately 750 men and 750 women.

Since the percentages are near 50, Table 3 is consulted. Since the two samples are about 750 persons each, the number in the column headed "750" is located, which is also in the row designated "750." The number 6 is found which means that the allowance for error should be 6 points, and that in concluding that the percentage among men is somewhere between 4 and 16 points higher than the percentage among women, there should be error only about 5 per cent of the time. Therefore, it can be concluded with considerable confidence that a difference exists in the direction observed, and that it amounts to at least 4 percentage points.

If, in another case, men's responses amount to 22 per cent and women's to 24 per cent, Table 2 is consulted because these percentages are near 20. By locating the number 5 in the column headed "750," it is obvious that a 2 point difference is inconclusive.

Validity of Responses

In order for the investigator to use the tables which have been designed, the following considerations should be observed: (1) the allowances for error are considerable, (2) by using a hypothesis on each question based
on sex, a finer tolerance may be achieved, (3) the number of
tests on which men and women might differ significantly can
vary; therefore, the assumption of analyzing each question
for men/women difference should be investigated carefully,
and (4) the tables used as indicators only are of value in
drawing generalized conclusions. They are based on "safe"
or "conservative" values which exceed the actual values
computed statistically.

Other authors treating this problem, but in dif-
ferent ways, are Travers\textsuperscript{28} and Kish.\textsuperscript{29} Travers uses a fac-
tor analysis for each problem considered and the testing of
hypotheses or alternative hypotheses to determine if the
answer is valid or just a matter of chance. Analysis of
variances is another technique used for testing hypotheses.
Kish discusses propagation of variance, replicated sampling,
and random splitting.

\textbf{Chi-Square Analysis}

The Chi-square test\textsuperscript{30} is a suitable test for
analyzing frequency data in which persons have been

\textsuperscript{28}Robert M. W. Travers, \textit{An Introduction to

\textsuperscript{29}Leslie Kish, \textit{Survey Sampling} (New York: John

\textsuperscript{30}J. P. Guilford, \textit{Fundamental Statistics in
categorized according to whether they are "in favor of," "indifferent to," or "opposed to" some statement of opinion. There are, of course, many other classifications which may be made, but the number of categories must be two or more. The technique is usually referred to as a goodness-of-fit type in that it may be used to test whether a significant difference exists between an observed number of objects or responses falling in each category and an expected number based on the null hypothesis.

In order to be able to compare an observed with an expected group of frequencies, the investigator must be able to state what frequencies would be expected. The null hypothesis states the proportion of objects falling in each of the categories in the presumed population. In the case of this study it is the proportion obtained in *How the Nation Views the Public Schools* by Gallup International. From the null hypothesis the expected frequencies may be deduced. The Chi-square technique tests whether the observed frequencies are sufficiently close to the expected ones to be likely to have occurred under $H_0$.

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The null hypothesis may be tested by

\[ x^2 = \sum_{i=1}^{k} \frac{(O_i - E_i)^2}{E_i} \]

where \( O \) = observed number of cases categorized in the \( i \)th category

\( E \) = expected number of cases in the \( i \)th category under \( H_0 \)

\[ \sum_{i=1}^{k} \] directs one to sum over all \( k \) categories

The above formula directs one to sum over \( k \) categories the squared differences between each observed and expected frequency divided by the corresponding expected frequency.

If the agreement between the observed and expected frequencies is close, it follows that the difference \( (O_i - E_i) \) will be small and as a result the Chi-square value will be small. On the other hand, if the divergence is large the Chi-square value will also be large. Generally speaking, the larger the Chi-square value is, the more likely it is that the observed frequencies did not come from the population on which the null hypothesis is based.

The sampling distribution of Chi-square under \( H_0 \) can be shown to follow the Chi-square distribution with degrees of freedom equal to \( k - 1 \), where \( k \) stands for the number of
categories in the on-sample classification case. If the probability associates with the occurrence under $H_0$ of the obtained Chi-square for $df - k - 1$ is equal to or less than the previously determined value of alpha ($\alpha$) then $H_0$ may be rejected. Otherwise, $H_0$ will be retained.

Regression Analysis

In addition to the Chi-square analysis, the study director may use multiple linear regression to determine the unique contribution of proper subsets of predictor variables to selected criterion variables. The contribution of a set of variables to prediction may be measured by the difference between two squares of multiple correlation coefficients ($R^2$s), one obtained for a regression model in which all predictors are used, called the full model (FM), and the other obtained for a regression equation in which the proper subset of variables under consideration has been deleted; this model is called the restricted model, (RM). The difference between the two $R^2$s may be tested for statistical significance with the variance ratio test. The hypothesis tested states, in effect, that these variables contribute nothing to the determination of the expected

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criterion values that is not already present in the restricted prediction system. The general formula used to test this hypothesis is as follows:

\[ F = \frac{(R^2_f - R^2_r)}{(1 - R^2_f) / (df)_1} \]

where \( R^2_f \) = squared multiple correlation obtained from the full model

\( R^2_r \) = squared multiple correlation obtained from the restricted model in which the proper subset of predictor variables under consideration has been deleted

\( (df)_1 \) = the difference between the number of unknown parameters in the full model and the restricted model

\( (df)_2 \) = the difference between the dimension of any one of the predictor vectors and the number of unknown parameters in the full model

There are several possible interpretations of the unique contribution of a variable to the prediction of a criterion. One interpretation is such that if a variable is making a unique contribution, then knowledge of that variable furnishes information about the criterion. Another explanation is that if a variable is making a unique contribution, then two Ss, who are unlike on the variable but who
are exactly alike or are matched on the other predictors, will differ on the criterion.

Regression models should be run in which selected demographic variables are used to predict criterion responses in the various areas of the Gallup questionnaire. In addition, the study director should determine the unique contribution of specific subsets of these predictor variables to the various full models. The predictor variables should contain information about sex, race, educational level, occupation, income, age, and religion and include the following:

1. Sex (coded 0 if male, 1 if female)
2. Race (coded 0 if white, 1 otherwise)
3. Educational level (scored on an 8-point scale)
4. Occupation I (coded 1 if business or professional, 0 otherwise)
5. Occupation II (coded 1 if clerical or sales, 0 otherwise)
6. Occupation III (coded 1 if skilled labor, 0 otherwise)
7. Occupation IV (coded 1 if unskilled, 0 otherwise)
8. Occupation V (coded 1 if other, 0 otherwise)
9. Income (scored on a 9-point scale)
10. Age Group I (coded 1 if between 21-29, 0 otherwise)
11. Age Group II (coded 1 if between 30-49, 0 otherwise)
12. Age Group III (coded 1 if 50 or older, 0 otherwise)
13. Age Group IV (coded 1 if "won't say," 0 otherwise)
14. Religion I (coded 1 if Protestant, 0 otherwise)
15. Religion II (coded 1 if Catholic, 0 otherwise)
16. Religion III (coded 1 if Jewish, 0 otherwise)
17. Religion IV (coded 1 for all others, 0 otherwise)

Procedure for Regression Analysis

Each of the independent variables (predictors) should be used to ascertain the extent to which the various criteria could be predicted from a knowledge of the seventeen independent variables. In addition, the study director should formulate restricted models in which information about sex, race, educational level, occupation, income, age, and religion are deleted separately from the full model in order to determine the unique contribution of each of the mutually exclusive subsets in question to the predictive efficiency of the full model. In this way the study
director should be able to explain as much as possible of the criterion variance which was attributable to the desired subsets.

**Analysis of Central Office**

The study director, to gain further insight concerning the question of the validity of the present feedback system, should pre-test the central office decision-making staff.

Using the same instrument to be used in the survey, the central office, including the superintendent, should answer the survey according to how it perceives the community's responses. The answers should be tabulated and processes separately and then compared by percentage with the responses from the community.

The purpose of analyzing the central office staff is twofold. First, the feedback received from the community is much more valid when compared with the staff hypothesis. Second, the "inflated ego" syndrome, which many politicians and school officials subscribe to because of their lack of a randomly sampled feedback mechanism, allows a "reality" factor to be introduced. If the survey is to be of value to the district, then its perceptions must be compared with the perceptions of the community.
Reporting of Findings

In reporting the findings, an introduction should describe the purpose of the study. In succeeding paragraphs, the research procedure should be explained, followed by the state of information about the local schools and education, the communication with the public, the major complaints, the attitudes toward teaching and teachers, attitudes toward school boards and their problems, citizen participation, financial report, and finally, the observations and conclusions with the statistical data for the above areas.

The report should include an analysis of the respondents concerning the makeup of the universe stating: the number of people involved in the survey, the number of men and women, racial composition, and a listing of the type of business or industry in which the chief wage earner or head of the household works. This analysis could also state the highest level of education attained, whether the respondents attended the schools in the community in which they now live, a breakdown on the age of the respondents, and their religious preference. The various income categories in the community can be reported as well.

It is necessary to consider the type of reporting to be given directly to the community. If the report is to be made to the local newspapers, it should be in a concise and
condensed form. If the report is to the school board, the
director may wish to give the narrative section describing
the statistics, excluding the statistical tables, and a
resume of the open-end questions. If it is to be given to
parents, he may wish it to be in a written form such as a
newsletter or booklet. It is very important that the group
receiving the information be carefully considered in the
reporting procedure in the event that any information taken
out of context will not be misconstrued or misunderstood.
Hennessy says:

There is no reason, therefore, to apply only
statistical tests to your data or to present only
quantitative analyses. Although it is generally
supposed by quantitative and other objective forms
of interpretation are to be preferred in dealing
with survey data, it is quite proper to engage in
the subjective art of speculation and to apply,
under certain conditions, tests of taste, aesthetics,
and value preferences. Scientific method and
the rules of fair play require only that all analys-
es be described in enough detail to avoid mis-
leading others, and that all conclusions, however
arrived at, are presented as modestly and as simply
as possible.33

The following should serve as criteria when inter-
preting data from the questionnaire:

1. Do not compound mistakes. Check the percent-
ages, the variables and the question thoroughly.

33 Bernard C. Hennessy, Public Opinion (2nd ed.:
Belmont, Calif.: Wadsworth Publishing Co., 1970),
pp. 122-23.
2. Develop alternative hypotheses. If a question is badly worded, the question is not an issue. If the words have different meanings in various geographic regions, such as the southeastern section of the United States as compared to the northeastern, the question is not an issue. The questionnaire was originally devised for use in the United States.

3. If "no opinion" occurs frequently and in a high percentage, the interviewer received some answer, whether it was relevant or not. This material should be studied to determine if the question was improperly worded or if the answer could be produced in another way.

4. The last page of the report may present alternatives to the superintendent, not only in interpreting results, but in questions for further study or action.
CHAPTER IV

UTILIZING THE FEEDBACK SYSTEM
WITH A SCHOOL DISTRICT

To this point, the author has established the purpose for the study, developed a hypothesis, reviewed the literature, and designed a theoretical base upon which school districts may assess their communities to obtain a more comprehensive and reliable feedback mechanism to be used as one basis for decision-making. Chapter IV will describe an actual application.

The author has experienced many situations as a public school administrator where individuals in the community found immediate gratification as a result of their expressions of dissatisfaction via the telephone and appearances at school board meetings. In finding that many school boards and superintendents were asking themselves to what extent such feelings were felt in their communities, the author discussed the question with Charles F. Kettering II, of CFK Ltd., an educational foundation.

After discovering that CFK Ltd. had commissioned Gallup International, a survey organization, to assess the people of the United States as to their perceptions of American education, the author suggested that the survey be used on a local basis. By being adapted for the use of
individual school districts, it could be used to assess the feelings in a community as well as to compare local findings to national results. Dr. George Gallup was contacted as to the feasibility of the project and concurred that it was indeed practical and of value to the educational community. With the cooperation of CFK Ltd. and the Gallup Organization, the author was given full use of all materials and assistance in designing a more useful feedback system for local school districts.

**Steps in Taking a Survey of a Local School District**

Chapter III covered in depth the steps in designing a systematic feedback system. The author, in planning the design for the Arapahoe survey, used the following:

1. Developed a rationale for the survey. This encompassed the hypothesis that the information desired was not available elsewhere.

2. Development of questions, pre-testing for validity and reliability.

3. Survey design and sample. In this case the Gallup design and sample was replicated. Future survey directors may wish to consult a local university or college for expert guidance, as this is a crucial factor in obtaining the proper
sample. Time and effort can be saved by the use of accurate data.

4. Assigning responsibility by the survey director. To insure reliability of the survey, the director must furnish training and strict controls for the interviewers. This also helps to cut down on sample error.

5. Interviewers' manual and training program. This describes in detail the responsibilities of the survey director, necessary forms, complete instructions for the interviewers and a descriptive detail of the total survey.

6. Sampling procedure. Identify the survey area using voting precincts or census tracts. Establish starting points and the number of respondents desired. Again, this is a crucial area and the assistance of an expert is recommended.

7. Handling the data. Determine the most efficient and economical way of handling the data. A computer is recommended as it saves time, cuts down on errors, and provides readable data.

8. Report to the superintendent. After the data has been analyzed and compared, the survey director should provide a summary, conclusions, and alternatives.
Overview

A rationale for the feedback system was developed with the Arapahoe County Schools, Littleton, Colorado. After studying survey designs and samples, the national design was replicated, utilizing 398 respondents. A comprehensive interviewers' manual for educational polling was adapted by the author using the Gallup techniques. The detailed training program for interviewers is included as Appendix B. Also included as part of the appendix is an outline of the survey director's responsibilities. Sampling procedure, the precision to be expected, and instructions for the interviewers are covered in this chapter.

The results of the local study were analyzed and processed in a much more comprehensive way than the national survey which uses percentages only. The author used percentage and Chi-square to define areas that are significant at the .01 level to help identify particular publics (such as persons not having children in the public schools) in Arapahoe County who perceive questions to be of major importance to them. In helping to identify groups in the community, multiple regression analysis was also used to define the unique contribution a variable such as age or education might have on a particular question.

Using the above criteria, the following areas were investigated:
1. State of information about the school district
2. The schools' communication with the public
3. Major complaints
4. Attitudes toward teaching and teachers
5. Attitudes toward school boards and their problems
6. Citizen participation
7. Financial support
8. Composition of the sample
9. Open-end questions asked of the community in Arapahoe County
10. Multiple linear regression
11. Central office perceptions of the community

A cost estimate for conducting a similar survey was developed, although it should be remembered that these are approximate figures. The concluding section of the chapter contains the conclusions and some preliminary results of the survey.

Rationale for Feedback System

The author's contact with the school district was instigated by the fact that concerns prompted personnel of the Arapahoe County School District Six, Littleton, Colorado, to devise a means of measuring what the people of the community thought of their schools. One of these concerns was the so-called "taxpayer's revolt" which is
evidenced by pressures on budgets, budget cuts, and resultant curtailments in programs or services.

Heretofore, much of this information remained untapped—feedback was obtained via the telephone or other unsystematic ways. There is some question as to the validity of this type of limited feedback.

Another concern was that the school's communication channels were too frequently limited to parents of students in the public school system. As a result, two significant citizens groups were bypassed: parents of students in the parochial or private schools, and, persons who either do not have children, or whose children are either too young to be in school or have completed secondary schooling. These groups are also voters and/or taxpayers and are required to support the public school system.

One realistic index of the public's attitude toward its school is the willingness of the people in a community to vote tax increases when there is need for greater financial assistance. A detailed analysis of the results obtained on this issue of taxes and financial aid is included in this report.

Annual List of Questions, Pre-Testing and Development

Perception toward two broad types of educational issues was the basic consideration in developing the
questions. Many questions in the survey were concerned with timeless educational issues. These might provide a longitudinal study of historical value over a period of years. For example, questions were developed on objectives of schooling, and the cost of education. Current educational issues which change from year to year were also considered. For example, these might deal with narcotics, sex education, taxpayer's revolt, student unrest, and curriculum relevancy. These issues are decided upon by the national panel, composed of superintendents, principals, students, and teachers, which is convened to establish this criteria for the national poll. This process could also be used by a local school district.

Many of the questions used in the survey were inserted mainly for the purpose of measuring the amount of information possessed by the community regarding local schools, since attitudes, and knowledge have been shown to be closely related. Other areas covered in the present survey deal with perceptions of the public toward teachers, the teaching profession, local school boards, the kinds of information the public would like to have regarding local schools, the awareness of the public of school problems, and criticisms of school policies.

The author participated in the writing, assembling, and pre-testing of the questions included as Appendix A, along with a panel of five public school educators considered to be leaders in their respective fields. These questions were selected after many pre-tests were conducted in the Interviewing Center maintained by the Gallup Organization in Hopewell, New Jersey, and in a pilot study undertaken in twenty-seven areas of the country. Of the ninety-six questions submitted, only fifty met the criterion of being suitable for use in the survey after being rewritten and pre-tested. The forty-six which did not qualify contained errors in authenticity and wording. Some had double meanings and many were irrelevant and could be grouped in other acceptable questions. Length of the survey was another consideration for non-acceptance.

**Establishing Validity and Reliability**

The survey director will have to ask the following questions:

1. Is the purpose of the survey fully and clearly stated?
2. Is the topic of sufficient concern and importance?
3. Is it carefully and logically organized?
4. Are the questions clearly and briefly worded?
5. Can the questions be answered briefly?
6. Is the information asked for available elsewhere?

7. Is the questionnaire in good mechanical form—that is, printed or typewritten and easy to read?

8. Can the respondent answer in a reasonable time?

9. Is a summary of the results promised?

If the survey director feels that the questionnaire meets the above requirements, the next step is to try it on a small sample of approximately fifteen persons. This will reveal items which are misunderstood and other faults in the design.

Tabulating and interpreting can also become problems and should be investigated. Inspection of successful questionnaires used by others will often uncover design problems.

The validity of a questionnaire depends largely upon judgment. Nevertheless, the survey director should take every possible precaution to develop as objective an instrument as possible for gathering reliable data.

Collecting information through the use of questionnaires or interviews is far less difficult than interpreting and summarizing what the information means. This fact points up the basic weakness of the survey method. Although the survey, properly conducted, provides an efficient means of learning details about a current situation or problem, the director still must arrive, through straight thinking, at generalizations and principles which follow
from the facts established. It is not really facts that solve problems, but the conclusions directors draw from these facts through reflective thought.\footnote{\textit{Tyrus Hillway, Introduction to Research} (Boston: Houghton Mifflin Co., 1956), p. 195.}

The Arapahoe School District then had the option of using all of the questions or only a selected few, and the opportunity of inserting questions it would like included in the survey. The reason for not including any questions of its own was twofold; time and effort. The complete list of questions included in the questionnaire is contained in the appendix.

\textbf{Survey Design and Sample}

Arapahoe County School District Six, Littleton, Colorado, was organized in 1864 and embraces the southwest portion of the Denver Metropolitan Area, amounting to approximately twenty-eight square miles, which is 3.4 per cent of the total Arapahoe County Area. The District has a population of approximately 50,000, which is 36.2 per cent of the total of Arapahoe County. The enrollment of 17,000 students with a per-pupil expenditure of $688.00 results in a total general fund budget of $12 million for the school district.

Included within the District is the City of Littleton, the County Seat, incorporated in 1890, with an
estimated 1966 population of 17,700, being located on U. S. Highway 85, approximately 11 miles from the State Capitol in Denver. The major growth within Littleton in the last ten years has been a direct result of the annexation of unincorporated residential developments surrounding the city.

Industry accounts for a very small area of the land geographically. The major industry is aero-space, the Martin-Marietta Company. Exclusive of the original city limits, the major portion of residences within Littleton are in new areas having homes with a value of $25,000 to $40,000.

The design of the sample is that of a replicated probability sample down to the block level in the case of urban areas, and to segments of townships in the case of rural areas. These forty-five voting precincts, taken together, represent a very good approximate microcosm of the district. After stratifying the county geographically in order to insure conformity of the sample with the latest available estimate of the Census Bureau of the distribution of the adult population, urban, rural, and suburban sampling locations were selected on a strictly random basis in all areas (see page 94).

Since this sampling procedure is designed to produce a sample which approximates the adult civilian population (twenty-one and older) living in private households in the
United States (that is, excluding those in prisons and hospitals, hotels, religious, and educational institutions, and on military reservations), the survey results can be applied to this population for the purpose of projecting percentages into the number of people, e.g., public school, private school, etc. The manner in which the sample is drawn also produces a sample which approximates the population of private households in Arapahoe County, is consistent with the national survey in design, and is compared for the differences. Therefore, survey results can also be projected in terms of the number of households when appropriate (see Appendix C).

**Assigning Responsibility**

As the survey director, the author had to assign responsibility to other members of the central office. A secretary made up the lists of volunteer interviewers, typed the questionnaire for printing, obtained the master map from the planning department of the county, added new residences from the school district attendance center, made up the badges, obtained writing materials, and arranged for the training room to be available with refreshments. A room was also cleared next to the secretary where the author had the use of a telephone and storage for materials. The director's center was open all five days from 9:00 A.M. until 9:00 P.M. in the event that an interviewer needed
immediate information. This occurred seven times. Ten women were assigned as team leaders to assist interviewers, deliver or pick up materials, utilize a substitute, or fill in if necessary. These decisions concerning housing have to be made by the survey director, realizing that the facilities need not be elaborate. It is important that the validity of the survey be kept by maintaining a critical watch over the entire operation.

Interviewers' Manual and Training Program

A comprehensive manual which was adapted and modified by the author from the Gallup Organization was used with the eighty-six volunteer interviewers. Second only to the questions, this part is probably the most crucial as it affects the reliability of the survey to a considerable extent. Up to this time, many researchers have felt that non-professional interviewers were not competent from the standpoint of training or personal bias influencing the respondent and rendering the instrument invalid. The author dealt with this concern by utilizing the intensive five-hour training session and practice, and by using the actual document on other interviewers. The comprehensiveness of the manual was sufficient to enable the survey to be completed within the time parameters. The only check made on the interviewers was a subjective one which included four phone calls. These calls complimented the survey and interviewers.
Interviewers were given maps of the area to which they were assigned, with a starting point indicated, and required to follow a specified direction. At each fourth occupied dwelling unit, interviewers were instructed to select respondents by following a prescribed systematic method as outlined in the Interviewers' Manual and by a male-female assignment. This procedure was followed until the assigned number of interviews was completed.

**Sampling Procedure**

The first procedure was to select the area and define it in the following terms: voting precincts (of which there were forty-five), geographic area, and any new housing constructed in the past eighteen months. The other requirements were that persons over twenty-one years of age were to be interviewed and that the entire community to be considered part of the sample, not tax-paying families only.

George Gallup continually up-dates his computer, by precincts, as to voting trends and census. Thereby, the definition of the area as to voting precincts was fed into the computer along with the qualifying variables of age, sex, urban, suburban, and rural status, and the area then was split into fifteen major components and each major component subdivided into three sub-components. At this point the author used the book of random numbers to select the starting points for each of the forty-five sub-areas;
one to equal northeast corner, two to equal northwest corner, three to equal southeast corner, and four to equal southwest corner.

After the starting points were established, the interviewers were directed to go clockwise from the starting point and to skip the corner house, start on the second house, and then take every fourth house until they had five interviews. If there were a refusal or no response, they were to go to the next house and then take every fourth house. Each of the forty-five areas had two interviewers, one starting and filling the quota of five interviews. The second interviewer stayed in close contact with the initial interviewer in order that the interval would not be broken and that the male-female allowance could be maintained. The required ten interviewers then could be achieved.

The interviewers experienced only three refusals. The high acceptance was attributed to the excellent publicity given by local newspapers, radio, and television stations. Two front-page articles appeared, and a total of fifteen spot announcements on the radio and one announcement on television were aired.

**Handling the Data**

The data was gathered by the author. Since the school district did not have a computer, an arrangement was made with a local university to provide a computer
programmer and computer time. The information to be obtained and the method of analysis were presented to the statistician.

The entire program was run for the percentages in approximately sixteen hours; Chi-square in approximately thirty-eight hours; and the regression analysis in fifty hours. This included key punching, programming time, reruns and some analysis. Actual computer on-line time was two hours and forty minutes. The open-end questions were done by the author by hand analysis. This procedure took one hundred and forty hours.

In reviewing and analyzing the information for percentage, all of the questions were coded and compared against the national norm established by Gallup. Every question on the survey was compared by percentage with the national norm and then Chi-square analysis was applied to determine if the differences found in the Littleton District were statistically different from those found in the national norm. Forty questions were selected to be analyzed by multiple linear regression analyses to determine the unique contribution or factor to help describe the particular public, with its perception or opinion, that the school district should be aware of. Forty were selected because they were adaptable to analysis and were not open-end type questions.
Report to the Superintendent on How the Public Perceives the Arapahoe School District and Education

Judging by the answers to many questions included in the survey, the conclusion can be drawn that the public perceives that it is, at best, only partly informed about its schools and somewhat poorly informed about education itself.

When adults were asked to give an appraisal of the amount of their knowledge concerning the Arapahoe schools, only 18 per cent replied "quite a lot." At the other extreme, 28 per cent frankly admitted that they knew "very little," while 54 per cent felt they had "some" information about the schools. When a Chi-square goodness-of-fit test was applied to check these results against the norm established in the Gallup Poll, the difference was found to be significant at the .01 level. The difference was such that while parents are not well informed in school matters, the adult population in Arapahoe is better informed than the average adult population of the United States, judging from Gallup's study which found that 42 per cent know "very little," 40 per cent "some" and 18 per cent "quite a lot."

Parents of children now attending the public schools were obviously better informed than those persons without children in the public schools; but even in this group of parents, the percentage saying they knew "quite a lot" about the local schools was far from impressive, only 20 per cent.
All adults surveyed were asked if they knew the names of their local school officials, with these results:

TABLE 4.--Percentage of Persons Who Named the Superintendent, Elementary Principal, High School Principal, President of the School Board

<table>
<thead>
<tr>
<th>Official</th>
<th>Percentage Who Knew</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superintendent of Schools</td>
<td>58</td>
</tr>
<tr>
<td>Principal of local elementary school</td>
<td>73</td>
</tr>
<tr>
<td>Principal of local high school</td>
<td>33</td>
</tr>
<tr>
<td>President of school board</td>
<td>26</td>
</tr>
</tbody>
</table>

By actually stating the name of the principal, parents in Arapahoe County were more knowledgeable about who was principal at the elementary level, but less well-informed at the senior high level. Knowledge about who was superintendent of schools and president of the school board was fairly comparable to national norms.

In order to gain insight into the extent of the public's knowledge in specific areas, questions requiring a higher level of knowledge were included. Those who reported that they "didn't know" provide evidence of the lack of information in these special areas and an unwillingness even to make a guess.
TABLE 5.—Extent of "Didn't Know" Knowledge in Specific Areas

<table>
<thead>
<tr>
<th>Specific Area</th>
<th>Percentage Who Didn't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a shortage of classroom space?</td>
<td>9</td>
</tr>
<tr>
<td>Are there many high school drop-outs?</td>
<td>41</td>
</tr>
<tr>
<td>What percentage of high school graduates go on to college?</td>
<td>23</td>
</tr>
<tr>
<td>What is the cost per year to educate a child in the local schools?</td>
<td>47</td>
</tr>
</tbody>
</table>

While the results are far from encouraging in the above areas, in three out of four of the categories the Arapahoe parents were more informed than parents in the national study. The one exception is the question concerning high school drop-outs, where the national poll indicated that 30 per cent were not informed. While 53 per cent of the adults polled gave a dollar figure to the costs per child per year in the public schools in Arapahoe, it is interesting to note that the estimates ranged from $100 to $4,000.

Supporting statistics from related questions are shown in Tables 6-17.
TABLE 6.--Extent of the Knowledge of Citizens About the Public Schools

<table>
<thead>
<tr>
<th></th>
<th>Public School Parents %</th>
<th>Parochial School Parents %</th>
<th>&quot;No Children in School&quot; by %</th>
<th>&quot;District Totals by %&quot;</th>
<th>&quot;Gallup Noms by %&quot;</th>
<th>&quot;Chi-square&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quite a lot</td>
<td>18</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>18</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>54</td>
<td>18</td>
<td>12</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>59</td>
<td>18</td>
<td>12</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>58</td>
<td>18</td>
<td>12</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23</td>
<td>18</td>
<td>12</td>
<td>23</td>
</tr>
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<td>17</td>
<td>18</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.62</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer to pages 65-67 for allowance of sampling error (use column 400).

*4* Significant at .01 level.
<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did know</td>
<td>56</td>
<td>58</td>
<td>46</td>
<td>25</td>
<td>68</td>
<td>66</td>
<td>58</td>
<td>52</td>
</tr>
<tr>
<td>Didn't know</td>
<td>44</td>
<td>42</td>
<td>54</td>
<td>75</td>
<td>32</td>
<td>34</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>0.65</td>
<td>12.07</td>
<td></td>
<td>0.58</td>
<td>0.35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aRefer to pages 65-67 for allowance of sampling error (use column 400).
bSignificant at .01 level.
TABLE 8.--Extent of Knowledge of Name of Neighborhood Elementary School Principal

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did Know</td>
<td>47</td>
<td>73</td>
<td>24</td>
<td>18</td>
<td>76</td>
<td>87</td>
<td>47</td>
<td>65</td>
</tr>
<tr>
<td>Didn't Know</td>
<td>53</td>
<td>27</td>
<td>76</td>
<td>82</td>
<td>24</td>
<td>13</td>
<td>53</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>108.01b</td>
<td>1.34</td>
<td></td>
<td></td>
<td>21.10b</td>
<td>3.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aRefer to pages 65-67 for allowance of sampling error (use column 400).

bSignificant at .01 level.
TABLE 9.--Extent of Knowledge of Name of the Area High School Principal\textsuperscript{a}

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup No Children in Schools by %</th>
<th>Gallup Public School Norms by %</th>
<th>Gallup Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did know</td>
<td>40</td>
<td>33</td>
<td>26</td>
<td>15</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Didn't know</td>
<td>60</td>
<td>67</td>
<td>74</td>
<td>85</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>8.13\textsuperscript{b}</td>
<td>4.28</td>
<td></td>
<td>57.57\textsuperscript{b}</td>
<td>1.78</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Refer to pages 65-67 for allowance of sampling error (use column 400).
\textsuperscript{b}Significant at .01 level.
<table>
<thead>
<tr>
<th>Responses</th>
<th>No Children in School</th>
<th>No Parochial School Parents</th>
<th>Total</th>
<th>Chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>26</td>
<td>26</td>
<td>100</td>
<td>8.72</td>
</tr>
<tr>
<td>No</td>
<td>72</td>
<td>74</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>If blank</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Refers to pages 65-67 for allowance of sampling error (use column 400).
<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>56</td>
<td>68</td>
<td>49</td>
<td>55</td>
<td>65</td>
<td>71</td>
<td>51</td>
<td>46</td>
</tr>
<tr>
<td>No</td>
<td>29</td>
<td>23</td>
<td>29</td>
<td>16</td>
<td>29</td>
<td>24</td>
<td>35</td>
<td>50</td>
</tr>
<tr>
<td>Don’t know/no answer</td>
<td>15</td>
<td>9</td>
<td>22</td>
<td>29</td>
<td>6</td>
<td>5</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>24.73&lt;sup&gt;b&lt;/sup&gt;</td>
<td>5.98</td>
<td></td>
<td></td>
<td>5.03</td>
<td></td>
<td>3.37</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave a $ figure</td>
<td>43</td>
<td>53</td>
<td>40</td>
<td>40</td>
<td>45</td>
<td>55</td>
<td>54</td>
</tr>
<tr>
<td>Don't know</td>
<td>57</td>
<td>47</td>
<td>60</td>
<td>60</td>
<td>55</td>
<td>45</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>16.24&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.0</td>
<td></td>
<td></td>
<td>12.85&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>1.63</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).  
<sup>b</sup>Significant at .01 level.
TABLE 13.--Comparative Data With Respect to High School Drop-Outs in the Community

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite a few</td>
<td>26</td>
<td>8</td>
<td>24</td>
<td>8</td>
<td>28</td>
<td>8</td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td>Almost none</td>
<td>41</td>
<td>51</td>
<td>36</td>
<td>44</td>
<td>46</td>
<td>52</td>
<td>44</td>
<td>62</td>
</tr>
<tr>
<td>Don't know</td>
<td>30</td>
<td>41</td>
<td>37</td>
<td>48</td>
<td>22</td>
<td>40</td>
<td>27</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>75.36&lt;sup&gt;b&lt;/sup&gt;</td>
<td>10.69&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>94.75&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>5.70</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
### TABLE 14.

**Extent of Knowledge of Citizens About Percentage of High School Graduates From Local High School Who Go On to College**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms No Children in Schools by %</th>
<th>Gallup Norms Public School Parents by %</th>
<th>Gallup Norms Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gave actual % figure</td>
<td>67</td>
<td>77</td>
<td>65</td>
<td>70</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>74</td>
<td></td>
<td>72</td>
<td>78</td>
<td>75</td>
</tr>
<tr>
<td>Don't know</td>
<td>33</td>
<td>23</td>
<td>35</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>18.00&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.46</td>
<td></td>
<td>9.69&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.01</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
TABLE 15.—Comparative Data of Citizens With Respect to Approval or Disapproval of Schools Giving Courses in Sex Education

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>No Children in Schools by %</th>
<th>Public School Parents by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve</td>
<td>71</td>
<td>79</td>
<td>71</td>
<td>80</td>
<td>71</td>
</tr>
<tr>
<td>Disapprove</td>
<td>22</td>
<td>15</td>
<td>20</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>No opinion</td>
<td>7</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>Chi-square</td>
<td></td>
<td>13.03\textsuperscript{b}</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Refer to pages 65-67 for allowance of sampling error (use column 400).\textsuperscript{b}Significant at .01 level.
<table>
<thead>
<tr>
<th>Responses</th>
<th>Parochial School Parents by %</th>
<th>Public School Parents by %</th>
<th>No Children in Schools by %</th>
<th>District Totals by %</th>
<th>Gallup Norms</th>
<th>Chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67</td>
<td>69</td>
<td>69</td>
<td>67</td>
<td>58</td>
<td>15.73b</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>28</td>
<td>25</td>
<td>67</td>
<td>33</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>100</td>
<td>9</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Refer to pages 65-67 for allowance of sampling error (use column 400).

*Significant at .01 level.*
TABLE 17.—Citizens Who During the Preceding Year Read a Book that Dealt With Education

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>16</td>
<td>22</td>
<td>15</td>
<td>19</td>
<td>17</td>
<td>23</td>
<td>19</td>
<td>42</td>
</tr>
<tr>
<td>No</td>
<td>84</td>
<td>78</td>
<td>85</td>
<td>81</td>
<td>83</td>
<td>77</td>
<td>81</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi-square
|                        | 10.66\(^b\) | 0.85                | 8.11\(^b\)          | 8.25\(^b\)        |

\(^a\)Refer to pages 65-67 for allowance of sampling error (use column 400).
\(^b\)Significant at .01 level.
The Schools' Communication With the Public

In order to ascertain data regarding the different media, the kind of information received, and the kind of information that the parents in Arapahoe would like to have, a series of questions was included in the questionnaire.

The first question in this area asked: "During the last year, have you received any newsletter, pamphlet, or any other material telling what the local schools are doing?" A total of 88 per cent of the entire sample answered "yes", as opposed to 35 per cent in the national study. A marked difference appears between those with no children and those with children in the public schools. In the former case, 56 per cent said they had received such material from the schools as opposed to 94 per cent of those who have children now attending the local public schools. When the Arapahoe sample is tested against the national norms, the Chi-square value is significant beyond the .01 level. It seems apparent that the Arapahoe sample is receiving better coverage in the way of newsletters, pamphlets, and other materials telling about the schools than the national norms.

A majority of all persons (65 per cent) indicated that they had read articles in the local newspapers during the last month, which differed significantly from the report of 36 per cent in the Gallup study. Only 15 per cent said
they had seen something on television about the schools in this same interval of time.

In spite of the expressed exposition to a variety of educational media, the Arapahoe residents sampled said that they would like to know more about the schools. The importance of this for the school community cannot be overemphasized. When they were asked, "Would you like to know more about the schools in this community?", more than three-fourths (77 per cent) said "Yes." This result exceeded the national study by 12 per cent, and this finding agrees with other studies that have dealt with the public's interest in education. What is even more striking is that 71 per cent of the parents without children in school want more information about the schools.

A summary to certain pertinent questions appears in Tables 18-22.
TABLE 18.--Citizens Who Had Received Any Direct Communication From the Public Schools

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>35</td>
<td>88</td>
<td>16</td>
<td>56</td>
<td>57</td>
<td>94</td>
<td>44</td>
<td>92</td>
</tr>
<tr>
<td>No</td>
<td>61</td>
<td>9</td>
<td>81</td>
<td>35</td>
<td>39</td>
<td>4</td>
<td>52</td>
<td>8</td>
</tr>
<tr>
<td>Can't recall</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>496.84&lt;sup&gt;b&lt;/sup&gt;</td>
<td>93.92&lt;sup&gt;b&lt;/sup&gt;</td>
<td>179.44&lt;sup&gt;b&lt;/sup&gt;</td>
<td>22.46&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).
<sup>b</sup>Significant at .01 level.
<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>60</td>
<td>65</td>
<td>54</td>
<td>40</td>
<td>65</td>
<td>70</td>
<td>77</td>
<td>75</td>
</tr>
<tr>
<td>No</td>
<td>34</td>
<td>26</td>
<td>39</td>
<td>51</td>
<td>29</td>
<td>21</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Can't recall</td>
<td>6</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>15.12&lt;sup&gt;b&lt;/sup&gt;</td>
<td>5.37</td>
<td></td>
<td>13.01&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td>0.17</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).
<sup>b</sup>Significant at .01 level.
TABLE 20.--Citizens Who Had Received Any Information By Radio About the Local Schools$^a$

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36</td>
<td>21</td>
<td>32</td>
<td>16</td>
<td>39</td>
<td>22</td>
<td>46</td>
<td>29</td>
</tr>
<tr>
<td>No</td>
<td>58</td>
<td>69</td>
<td>61</td>
<td>79</td>
<td>55</td>
<td>67</td>
<td>51</td>
<td>54</td>
</tr>
<tr>
<td>Can't recall</td>
<td>6</td>
<td>10</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>43.79$^b$</td>
<td>9.44$^b$</td>
<td>45.14$^b$</td>
<td>17.23$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^a$Refer to pages 65-67 for allowance of sampling error (use column 400).

$^b$Significant at .01 level.
TABLE 21.—Comparative Data With Respect to Persons Having Heard Anything About the Public Schools on Television

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>35</td>
<td>15</td>
<td>33</td>
<td>19</td>
<td>36</td>
<td>15</td>
<td>53</td>
<td>21</td>
</tr>
<tr>
<td>No</td>
<td>59</td>
<td>75</td>
<td>61</td>
<td>75</td>
<td>59</td>
<td>75</td>
<td>43</td>
<td>67</td>
</tr>
<tr>
<td>Can't recall</td>
<td>6</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>10</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>25.19b</td>
<td>7.03b</td>
<td></td>
<td></td>
<td></td>
<td>0.18b</td>
<td></td>
<td>6.05</td>
</tr>
</tbody>
</table>

*aRefer to pages 65-67 for allowance of sampling error (use column 400).

*bSignificant at .01 level.
TABLE 22. --Extent of the Desire of Citizens for Additional School Information\(^a\)

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>65</td>
<td>77</td>
<td>55</td>
<td>71</td>
<td>77</td>
<td>78</td>
<td>74</td>
<td>96</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>23</td>
<td>45</td>
<td>29</td>
<td>23</td>
<td>22</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>25.19(^b)</td>
<td>7.03(^b)</td>
<td></td>
<td></td>
<td>0.18(^b)</td>
<td></td>
<td></td>
<td>6.04</td>
</tr>
</tbody>
</table>

\(^a\)Refer to pages 65-67 for allowance of sampling error (use column 400).
\(^b\)Significant at .01 level.
The Major Complaints

The overriding complaint against public schools seems to be a perceived lack of discipline. It may be that the importance of discipline in the minds of the sampled public is a result of disorders on college campuses and in some of the secondary schools.

Parochial school parents seem to be the most critical of public schools in the matter of discipline, as 75 percent of these parents thought public schools were "not strict enough." Many cited the attempt to maintain better discipline as one advantage of parochial over public schools. In analyzing the data and comparing the Arapahoe sample percentages with those from the national norms, the Chi-square value was significant beyond the .01 level. The Arapahoe sample was critical of the level of discipline, but not as critical as the national norm group.

A discussion of the discipline issue could not be complete without paying attention to the regulation of children's dress for school. The Arapahoe sample was critical of the dress code, but not as critical as the national norm group. This is substantiated by looking at the percentages and Chi-square values in the following tables. The replies showed that the better educated are the least critical. Of the major religious groups, the Catholics are the most critical.
TABLE 23.--Extent of Perception of Citizens About Discipline in the Local Schools

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup No Children in Schools by %</th>
<th>Gallup Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too strict</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not strict enough</td>
<td>49</td>
<td>41</td>
<td>52</td>
<td>43</td>
<td>45</td>
<td>39</td>
</tr>
<tr>
<td>Just about right</td>
<td>44</td>
<td>47</td>
<td>39</td>
<td>25</td>
<td>52</td>
<td>53</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>5</td>
<td>11</td>
<td>7</td>
<td>32</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>36.66(^b)</td>
<td>66.55(^b)</td>
<td></td>
<td></td>
<td>82.11(^b)</td>
<td>6.16</td>
</tr>
</tbody>
</table>

\(^{a}\)Refer to pages 65-67 for allowance of sampling error (use column 400).
\(^{b}\)Significant at .01 level.
TABLE 24.--Perceptions of Citizens With Respect to Extent of Regulation of Student Dress

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater</td>
<td>53</td>
<td>39</td>
<td>55</td>
<td>41</td>
<td>50</td>
<td>38</td>
<td>63</td>
<td>65</td>
</tr>
<tr>
<td>Less</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>12</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>All right as is</td>
<td>36</td>
<td>45</td>
<td>31</td>
<td>37</td>
<td>42</td>
<td>47</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>No opinion</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>40.16b</td>
<td>6.52</td>
<td></td>
<td></td>
<td>33.74b</td>
<td></td>
<td>16.61b</td>
<td></td>
</tr>
</tbody>
</table>

^a Refer to pages 65-67 for allowance of sampling error (use column 400).
^b Significant at .01 level.
Perceptions Toward Teaching and Teachers

The following tables describe the perceptions of the Arapahoe adult community toward teaching and teachers. Undoubtedly no better measure of the public's esteem for teaching and for schools can be found than parents' views toward teaching as a profession. The responses of the sampled group are as follows.

In general, the perceptions expressed, about entering the profession and the level of salaries, paralleled results from the national norm. However, the people in Arapahoe are much more opposed to automatic raises (67 per cent) as opposed to Gallup's survey group (45 per cent). This difference was significant beyond the .01 level when tested with the Chi-square goodness-of-fit test. The Arapahoe district was emphatic in its feelings against unionization of the teaching staff with 60 per cent opposed to it. The national norm was 40 per cent. The view was expressed that the local system was not encountering any problems in attracting or keeping good teachers. (This was in sharp contrast with results from the Gallup poll.) Along with this feeling, it was expressed that the district had the right to drop or fire teachers due to the ease of recruiting and maintaining an excellent staff.
TABLE 25.--Perceptions of Citizens Toward Teaching as a Careera

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>75</td>
<td>78</td>
<td>69</td>
<td>72</td>
<td>81</td>
<td>80</td>
<td>78</td>
<td>75</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>11</td>
<td>18</td>
<td>12</td>
<td>12</td>
<td>10</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>10</td>
<td>11</td>
<td>13</td>
<td>16</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>5.12</td>
<td>1.92</td>
<td>5.19</td>
<td>6.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aRefer to pages 65-67 for allowance of sampling error (use column 400).
### TABLE 26: Perceptions of Citizens With Respect to Teachers' Salaries

<table>
<thead>
<tr>
<th></th>
<th>Parochial School Norms</th>
<th>Public School Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parents by %</td>
<td>Parents by %</td>
</tr>
<tr>
<td>Too high</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Too low</td>
<td>33</td>
<td>44</td>
</tr>
<tr>
<td>Just about right</td>
<td>31</td>
<td>45</td>
</tr>
<tr>
<td>Don't know/No answer</td>
<td>22</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

|                      | 100                    | 100                 |
| Chi-square           | 15.81b                 | 2.42                |

*Refer to pages 65-67 for allowance of sampling error (use column 400). Significance at 0.01 level.*
<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>44</td>
<td>28</td>
<td>45</td>
<td>31</td>
<td>45</td>
<td>27</td>
<td>32</td>
</tr>
<tr>
<td>Not Automatic</td>
<td>45</td>
<td>67</td>
<td>43</td>
<td>61</td>
<td>47</td>
<td>69</td>
<td>51</td>
</tr>
<tr>
<td>No opinion</td>
<td>11</td>
<td>5</td>
<td>12</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>78.99&lt;sup&gt;b&lt;/sup&gt;</td>
<td>8.99</td>
<td></td>
<td></td>
<td>62.00&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>2.89</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
TABLE 28.--Perceptions of Citizens Toward Unionization of Teachers

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Noms by %</th>
<th>District Totals by %</th>
<th>Gallup Noms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Noms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Noms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>45</td>
<td>31</td>
<td>43</td>
<td>35</td>
<td>47</td>
<td>30</td>
<td>49</td>
<td>33</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>60</td>
<td>41</td>
<td>55</td>
<td>38</td>
<td>61</td>
<td>43</td>
<td>54</td>
</tr>
<tr>
<td>No response</td>
<td>15</td>
<td>9</td>
<td>16</td>
<td>10</td>
<td>15</td>
<td>9</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi-square 66.69^b 5.79 71.45^b 2.68

^aRefer to pages 65-67 for allowance of sampling error (use column 400).
^bSignificant at .01 level.
TABLE 29.--Perceptions of Citizens Toward Giving Teachers the Right to Strikea

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>37</td>
<td>45</td>
<td>37</td>
<td>52</td>
<td>38</td>
<td>44</td>
<td>35</td>
<td>54</td>
</tr>
<tr>
<td>No</td>
<td>59</td>
<td>52</td>
<td>57</td>
<td>44</td>
<td>57</td>
<td>53</td>
<td>62</td>
<td>42</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>11.18b</td>
<td>6.60</td>
<td>6.45</td>
<td>4.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aRefer to pages 65-67 for allowance of sampling error (use column 400).
bSignificant at .01 level.
TABLE 30.--Perceptions of Citizens With Respect to the Difficulty of Employing Competent Teachers

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>52</td>
<td>22</td>
<td>49</td>
<td>21</td>
<td>54</td>
<td>22</td>
<td>51</td>
<td>35</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>61</td>
<td>31</td>
<td>47</td>
<td>34</td>
<td>65</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>16</td>
<td>17</td>
<td>20</td>
<td>32</td>
<td>12</td>
<td>13</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>173.73&lt;sup&gt;b&lt;/sup&gt;</td>
<td>21.39&lt;sup&gt;b&lt;/sup&gt;</td>
<td>150.45&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
## TABLE 31.-Comparative Data With Respect to the Difficulty of Retaining Competent Teachers

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>48</td>
<td>22</td>
<td>46</td>
<td>18</td>
<td>49</td>
<td>23</td>
<td>48</td>
<td>35</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>57</td>
<td>31</td>
<td>44</td>
<td>40</td>
<td>61</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>17</td>
<td>21</td>
<td>23</td>
<td>38</td>
<td>11</td>
<td>16</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Totals</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>114.84&lt;sup&gt;b&lt;/sup&gt;</td>
<td>21.95&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>86.16&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>2.77</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38</td>
<td>55</td>
<td>32</td>
<td>46</td>
<td>45</td>
<td>57</td>
<td>39</td>
<td>58</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>13</td>
<td>19</td>
<td>9</td>
<td>27</td>
<td>13</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>49</td>
<td>32</td>
<td>49</td>
<td>45</td>
<td>28</td>
<td>30</td>
<td>46</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>51.29&lt;sup&gt;b&lt;/sup&gt;</td>
<td>7.97</td>
<td></td>
<td>33.71&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td>4.49</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).  
<sup>b</sup>Significant at .01 level.
TABLE 33.--Perceptions of Citizens With Respect to Teacher Satisfaction

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>35</td>
<td>37</td>
<td>32</td>
<td>37</td>
<td>39</td>
<td>37</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>35</td>
<td>30</td>
<td>35</td>
<td>32</td>
<td>35</td>
<td>30</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Don't know/ no answer</td>
<td>30</td>
<td>33</td>
<td>33</td>
<td>31</td>
<td>26</td>
<td>33</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>4.49</td>
<td>0.79</td>
<td></td>
<td></td>
<td>8.59</td>
<td>0.13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Refer to pages 65-67 for allowance of sampling error (use column 400).*
<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>More</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>12</td>
<td>12</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Less</td>
<td>17</td>
<td>26</td>
<td>16</td>
<td>24</td>
<td>20</td>
<td>26</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>About same</td>
<td>34</td>
<td>30</td>
<td>34</td>
<td>21</td>
<td>35</td>
<td>31</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>37</td>
<td>33</td>
<td>39</td>
<td>45</td>
<td>33</td>
<td>31</td>
<td>39</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi-square            | 22.89\(^b\)       | 6.79                 | 7.56              | 8.95                        |

\(^a\)Refer to pages 65-67 for allowance of sampling error (use column 400).
\(^b\)Significant at .01 level.
Perceptions Toward School Boards and Their Problems

The perceptions expressed about the school board were more negative than those found in the national study of Gallup. The following tables should illustrate the differences that appeared.

The perception existed that the board is only doing a "fair" to "above average" job. Yet, the respondents did not feel that the board is politically motivated in making decisions. These results differed significantly from Gallup who found that 25 per cent of his sample responded that the school board was doing an "excellent" job, whereas only 3 per cent of the Arapahoe sample rated the board as "excellent." On the other hand, the Arapahoe sample did not attribute as much political motivation to decision-making on the part of the board, and this difference was significant beyond the .01 level using a Chi-square test. There were questions raised by the Arapahoe group as to the efficiency and cost effectiveness of the schools. The Gallup sample, in general, was less critical.
TABLE 35.--Evaluation by Citizens of the Effectiveness of the Local School Boarda

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>25</td>
<td>3</td>
<td>22</td>
<td>0</td>
<td>29</td>
<td>4</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Above average</td>
<td>16</td>
<td>16</td>
<td>14</td>
<td>5</td>
<td>19</td>
<td>19</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Fair</td>
<td>21</td>
<td>44</td>
<td>20</td>
<td>41</td>
<td>22</td>
<td>45</td>
<td>17</td>
<td>39</td>
</tr>
<tr>
<td>Poor, terrible</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>31</td>
<td>31</td>
<td>38</td>
<td>47</td>
<td>21</td>
<td>27</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>177.88b</td>
<td>34.45b</td>
<td>156.10b</td>
<td>12.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer to pages 65-67 for allowance of sampling error (use column 400).

bSignificant at .01 level.
<table>
<thead>
<tr>
<th>Responses</th>
<th>Parochial Gallup School Parents by %</th>
<th>Public Gallup School Parents by %</th>
<th>District Totals by %</th>
<th>Chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44</td>
<td>44</td>
<td>43</td>
<td>127.68b</td>
</tr>
<tr>
<td>No</td>
<td>39</td>
<td>35</td>
<td>25</td>
<td>18.72b</td>
</tr>
<tr>
<td>Don't know/answer</td>
<td>17</td>
<td>22</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Refer to pages 65-67 for allowance of sampling error (use column 400).
TABLE 37.--Extent of Interest of Citizens in Becoming Members of the School Board<sup>a</sup>

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>32</td>
<td>38</td>
<td>28</td>
<td>33</td>
<td>36</td>
<td>39</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>No</td>
<td>68</td>
<td>62</td>
<td>72</td>
<td>67</td>
<td>64</td>
<td>61</td>
<td>60</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>6.58</td>
<td>0.84</td>
<td></td>
<td></td>
<td>1.24</td>
<td></td>
<td>0.16</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).
TABLE 38.--Perceptions of Citizens With Respect to Efforts of the School Board to Improve the Quality of Education

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>69</td>
<td>54</td>
<td>63</td>
<td>36</td>
<td>77</td>
<td>58</td>
<td>63</td>
<td>41</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>8</td>
<td>10</td>
<td>13</td>
<td>12</td>
<td>8</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>20</td>
<td>38</td>
<td>27</td>
<td>51</td>
<td>11</td>
<td>34</td>
<td>21</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi-square

- Gallup Norms: 80.71<sup>b</sup>
- No Children in Schools: 22.99<sup>b</sup>
- Public School Parents: 172.08<sup>b</sup>
- Parochial School Parents: 16.10<sup>b</sup>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
TABLE 39.--Perceptions of Citizens With Respect to the Efforts of the School Board to See That the Schools Function Efficiently and at the Lowest Cost

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>62</td>
<td>38</td>
<td>56</td>
<td>23</td>
<td>70</td>
<td>41</td>
<td>58</td>
<td>46</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>19</td>
<td>15</td>
<td>21</td>
<td>15</td>
<td>18</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>23</td>
<td>43</td>
<td>29</td>
<td>56</td>
<td>15</td>
<td>41</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>110.44&lt;sup&gt;b&lt;/sup&gt;</td>
<td>31.95&lt;sup&gt;b&lt;/sup&gt;</td>
<td>183.43&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
TABLE 40.--Perceptions of Citizens With Respect to Efforts of the School Board to Provide Buildings at Reasonable Costs

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>40</td>
<td>54</td>
<td>40</td>
<td>61</td>
<td>36</td>
<td>52</td>
<td>51</td>
<td>71</td>
</tr>
<tr>
<td>No</td>
<td>49</td>
<td>40</td>
<td>47</td>
<td>33</td>
<td>54</td>
<td>43</td>
<td>38</td>
<td>17</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>11</td>
<td>6</td>
<td>13</td>
<td>6</td>
<td>10</td>
<td>5</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi-square: 35.13<sup>b</sup> 12.90<sup>b</sup> 37.69<sup>b</sup> 4.69

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).
<sup>b</sup>Significant at .01 level.
<table>
<thead>
<tr>
<th></th>
<th>Parochial Gallup School Norms by %</th>
<th>Public Gallup School Norms by %</th>
<th>District Totals by %</th>
<th>Chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>65</td>
<td>40</td>
<td>62</td>
<td>218.98b</td>
</tr>
<tr>
<td>No, no opinion</td>
<td>12</td>
<td>28</td>
<td>21</td>
<td>45.09b</td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>31</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Don't know/answer</td>
<td>9</td>
<td>29</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.86b</td>
</tr>
</tbody>
</table>

Refer to pages 65-67 for allowance of sampling error (use column 400).
Citizen Participation

In the area of citizen participation, the Arapahoe sample was decidedly more involved than the national sample in attending lectures, meetings, and social occasions in the local schools during the past year. This participation can be interpreted to indicate that the public is concerned about the schools and the community. The differences were statistically significant from those of the Gallup survey. A further manifestation of this trend can be seen in the amount of PTA participation. On the other hand, attendance at school board meetings was similar to the national norms. This suggests that consideration should be given to changing the format and/or meeting place of the local school board.

The following tables more accurately identify the Arapahoe responses in this area.
TABLE 42.--Comparative Data With Respect to the Extent of Contacts With the Schools by Citizens

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>37</td>
<td>78</td>
<td>17</td>
<td>22</td>
<td>59</td>
<td>89</td>
<td>56</td>
<td>77</td>
</tr>
<tr>
<td>No</td>
<td>59</td>
<td>21</td>
<td>77</td>
<td>73</td>
<td>41</td>
<td>11</td>
<td>43</td>
<td>23</td>
</tr>
<tr>
<td>No answer</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Chi-square

- 287.18^b
- 1.25
- 118.31^b
- 4.36

^aRefer to pages 65-67 for allowance of sampling error (use column 400).

^bSignificant at .01 level.
TABLE 43.--Extent of Attendance of Citizens at School Board Meetings

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Norms by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>17</td>
<td>21</td>
<td>16</td>
<td>13</td>
<td>18</td>
<td>22</td>
<td>16</td>
<td>29</td>
</tr>
<tr>
<td>No</td>
<td>83</td>
<td>79</td>
<td>84</td>
<td>87</td>
<td>82</td>
<td>78</td>
<td>84</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>4.51</td>
<td>0.46</td>
<td></td>
<td></td>
<td>3.45</td>
<td></td>
<td>3.02</td>
<td></td>
</tr>
</tbody>
</table>

*a*Refer to pages 65-67 for allowance of sampling error (use column 400).
TABLE 44.--Extent of Membership of Citizens in PTA or Similar Parents' Groups

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>52</td>
<td>69</td>
<td>65</td>
<td>71</td>
</tr>
<tr>
<td>No</td>
<td>48</td>
<td>31</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td></td>
<td>36.82^b</td>
<td></td>
<td>0.38</td>
</tr>
</tbody>
</table>

^aRefer to pages 65-67 for allowance of sampling error (use column 400).^bSignificant at .01 level.
<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No time</td>
<td>21</td>
<td>7</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Not interested</td>
<td>11</td>
<td>1</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>No PTA or similar group</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>16</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>48^b</td>
<td>31^b</td>
<td>35^b</td>
<td>29^b</td>
</tr>
</tbody>
</table>

^aRefer to pages 65-67 for allowance of sampling error (use column 400).
^bTotals equal number who do not belong.
TABLE 46.--Extent of Regular Attendance at Meetings of PTA or Similar Organizations by Members

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regularly</td>
<td>22</td>
<td>29</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>Not regularly</td>
<td>30</td>
<td>40</td>
<td>28</td>
<td>41</td>
</tr>
<tr>
<td>No answer</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>52&lt;sup&gt;b&lt;/sup&gt;</td>
<td>69&lt;sup&gt;b&lt;/sup&gt;</td>
<td>65&lt;sup&gt;b&lt;/sup&gt;</td>
<td>71&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).
<sup>b</sup>Total equals per cent of those regularly attending PTA.
TABLE 47.--Reasons Given for Members Not Regularly Attending Meetings of PTA or Similar Organizations

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No time</td>
<td>20</td>
<td>13</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Not interested</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>24</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>39&lt;sup&gt;b&lt;/sup&gt;</td>
<td>40&lt;sup&gt;b&lt;/sup&gt;</td>
<td>28&lt;sup&gt;b&lt;/sup&gt;</td>
<td>41&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).
<sup>b</sup>Total equals per cent of those not regularly attending PTA.
Financial Support

One potentially useful criterion of the perception of a school district toward the public school system is its readiness to support the schools financially by voting for an increase in taxes if the schools need more money. The situation in Arapahoe, though statistically different from the Gallup norm, was not particularly different if one examines the percentages. Unfortunately, slight differences become statistically significant if the sample size becomes large enough. This seems to be the case in the four questions relating to financial support. A closer examination of the following tables should verify the above.
### TABLE 48.--Extent of Willingness of Citizens to Support Schools Financially

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>For</td>
<td>45</td>
<td>41</td>
<td>41</td>
<td>29</td>
<td>51</td>
<td>43</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Against</td>
<td>49</td>
<td>45</td>
<td>53</td>
<td>55</td>
<td>44</td>
<td>43</td>
<td>56</td>
<td>54</td>
</tr>
<tr>
<td>Don't know/no answer</td>
<td>6</td>
<td>14</td>
<td>6</td>
<td>16</td>
<td>5</td>
<td>14</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>45.17&lt;sup&gt;b&lt;/sup&gt;</td>
<td>13.77&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td>55.58&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
TABLE 49.--Comparative Data With Respect to Willingness to Vote in the Last School Bond Election

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>41</td>
<td>50</td>
<td>36</td>
<td>31</td>
<td>45</td>
<td>53</td>
<td>49</td>
<td>54</td>
</tr>
<tr>
<td>No</td>
<td>49</td>
<td>43</td>
<td>55</td>
<td>64</td>
<td>44</td>
<td>40</td>
<td>40</td>
<td>29</td>
</tr>
<tr>
<td>Can't recall</td>
<td>10</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>11</td>
<td>7</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>14.37^b</td>
<td>2.68</td>
<td></td>
<td></td>
<td>10.30^b</td>
<td></td>
<td>1.63</td>
<td></td>
</tr>
</tbody>
</table>

^aRefer to pages 65-67 for allowance of sampling error (use column 400).
^bSignificant at .01 level.
TABLE 50.--Comparative Data With Respect to Extent of Willingness of Citizens to Vote For Increase in Taxes For Support of the Public Schools

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>For</td>
<td>64</td>
<td>71</td>
<td>60</td>
<td>33</td>
<td>73</td>
<td>76</td>
<td>45</td>
<td>64</td>
</tr>
<tr>
<td>Against</td>
<td>24</td>
<td>14</td>
<td>30</td>
<td>38</td>
<td>18</td>
<td>11</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Can't recall</td>
<td>12</td>
<td>15</td>
<td>10</td>
<td>29</td>
<td>9</td>
<td>13</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>395.95&lt;sup&gt;b&lt;/sup&gt;</td>
<td>155.98&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>232.63&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>22.88&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Refer to pages 65-67 for allowance of sampling error (use column 400).

<sup>b</sup>Significant at .01 level.
### TABLE 51.--Perceptions of Citizens Toward Federal Government Aid for College Education

<table>
<thead>
<tr>
<th>Responses</th>
<th>Gallup Norms by %</th>
<th>District Totals by %</th>
<th>Gallup Norms by %</th>
<th>No Children in Schools by %</th>
<th>Gallup Norms by %</th>
<th>Public School Parents by %</th>
<th>Gallup Norms by %</th>
<th>Parochial School Parents by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal govt. pay</td>
<td>16</td>
<td>6</td>
<td>15</td>
<td>15</td>
<td>17</td>
<td>4</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Parents &amp; students pay</td>
<td>70</td>
<td>76</td>
<td>71</td>
<td>65</td>
<td>69</td>
<td>78</td>
<td>70</td>
<td>78</td>
</tr>
<tr>
<td>Other methods</td>
<td>14</td>
<td>18</td>
<td>14</td>
<td>20</td>
<td>14</td>
<td>18</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Chi-square</td>
<td>31.47b</td>
<td>2.09</td>
<td>38.98b</td>
<td></td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a*Refer to pages 65-67 for allowance of sampling error (use column 400).

*b*Significant at .01 level.
Composition of the Sample

The following tables describe in detail the composition of Arapahoe adults who participated in the local survey. Because of the sampling procedures employed, it can be assumed to be representative of the voting population in that community. The classification breakdown in the following tables should be useful in future educational planning for the district, inasmuch as this information is typically not readily available to the educational planner.
<table>
<thead>
<tr>
<th></th>
<th>National Totals</th>
<th>No Children in Schools</th>
<th>Public School Parents</th>
<th>Parochial School Parents</th>
<th>Private School Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base figures</td>
<td>398</td>
<td>68</td>
<td>318</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>Per cent of total</td>
<td>100</td>
<td>17&lt;sup&gt;a&lt;/sup&gt;</td>
<td>80&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup>Sum exceeds 100 because some parents have children attending more than one kind of school.
<table>
<thead>
<tr>
<th></th>
<th>District Totals</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Figure</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>124</td>
<td>31</td>
</tr>
<tr>
<td>Women</td>
<td>274</td>
<td>69</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>100</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whites</td>
<td>394</td>
<td>99</td>
</tr>
<tr>
<td>Negroes</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>100</td>
</tr>
</tbody>
</table>
TABLE 54.--Analysis of Respondents in Respect to Business or Industry the Chief Wage Earner in the Family Works in and the Kind of Work He Does

<table>
<thead>
<tr>
<th>Occupation</th>
<th>District Totals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Figure</td>
<td>Percentage</td>
</tr>
<tr>
<td>Business and professional</td>
<td>252</td>
<td>63</td>
</tr>
<tr>
<td>Clerical and sales</td>
<td>82</td>
<td>20</td>
</tr>
<tr>
<td>Skilled labor</td>
<td>43</td>
<td>11</td>
</tr>
<tr>
<td>Unskilled labor</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td>County Totals</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Raw Figure</td>
<td>Percentage</td>
</tr>
<tr>
<td>21 to 29 years</td>
<td>51</td>
<td>13</td>
</tr>
<tr>
<td>30 to 49 years</td>
<td>291</td>
<td>73</td>
</tr>
<tr>
<td>50 years and over</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>Undesignated</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>100</td>
</tr>
</tbody>
</table>
TABLE 56.--Analysis of Respondents by Religious Preference

<table>
<thead>
<tr>
<th>Religion</th>
<th>District Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Figure</td>
</tr>
<tr>
<td>Protestant</td>
<td>298</td>
</tr>
<tr>
<td>Roman Catholic</td>
<td>78</td>
</tr>
<tr>
<td>Jewish</td>
<td>4</td>
</tr>
<tr>
<td>All others</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
</tr>
</tbody>
</table>
TABLE 57.--Analysis of Respondents as to Total Amount of Annual Income

<table>
<thead>
<tr>
<th>Annual Income</th>
<th>District Totals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw Figure</td>
<td>Percentage</td>
</tr>
<tr>
<td>15,000 and over</td>
<td>169</td>
<td>43</td>
</tr>
<tr>
<td>10,000 to 14,999</td>
<td>143</td>
<td>36</td>
</tr>
<tr>
<td>7,000 to 9,999</td>
<td>52</td>
<td>13</td>
</tr>
<tr>
<td>5,000 to 6,999</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>4,000 to 4,999</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3,000 to 3,999</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2,500 to 2,999</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Under 2,499</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Undesignated</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>398</td>
<td>100</td>
</tr>
</tbody>
</table>
Open-End Questions Asked of the Community in Arapahoe County

"What do you think are the biggest problems with which the public schools in this community must deal?" The public felt that overcrowded schools, drugs, and large classes were of the greatest import at this time. Of the respondents, 44 per cent mentioned overcrowding, while 37 per cent mentioned drugs. Money, discipline, parent-school communication, good teachers, salaries, social problems, and individualized instruction were also mentioned as some of the biggest problems with which public schools have to deal.

The public responded in many ways to the question, "Do the subjects taught in elementary and high school fit students for the kind of world we live in?". The basic feeling was that there should be more stress on vocational education and courses in social living, so that students might better cope with the world when they leave school. In summarizing these two questions, Arapahoe County respondents are very sophisticated, as compared to the national public, in that they are cognizant of the problems relating to drugs and are aware of the need for a curriculum which is relevant to the society in which they are living.

In reviewing the question asking, "Do you approve or disapprove of the school giving courses in sex education?",
The predominant number of responses to the question, "If you were to become a school board member, what changes in the schools would you favor?", again came in the area of money spent on new construction and the overall use of money. The concern about over-crowded schools was also significant. Other areas mentioned were as follows: better teachers, higher salaries, lack of discipline, more stress on vocational education, a longer school year, adequate special services, no busing, merit pay, girls' athletics, more intramurals, a better fine arts program, fewer competitive sports, more emphasis on the 3 R's, elimination of tenure, more parent-community involvement, more reliance on professional educators, and pupil-teacher ratio being too high. The areas mentioned were diverse and showed that the community had many concerns, but the specific ones were mainly on new construction and less crowded schools. If we were to surmise that they did not want more money spent on new construction, then maybe we would have to follow the thinking of different types of organization for the school, freeing the students, year-round schools, and/or other methods of using buildings in ways other than traditional. This might open some areas for investigation for the school board and the administration.

The community seemed concerned by the lack of information about the content of courses, the cost of education
per student, how the budget is constructed, and the total curriculum the student would be exposed to in the kindergarten through grade twelve experience in Arapahoe County. These areas of concern were indicated by the responses to the question, "Would you like to know more about the schools in this community?". There was some concern shown, (not of significant importance), in the areas of comparison with other school districts. Along with this same question, another question was asked pertaining to the school-parent relationship. The majority of respondents replied that the main contacts are "Back to School Night" and parent-teacher conferences. A few functions are attended, mainly if a respondent's own child is directly involved. They feel that these contacts are very interesting, but that they do not get information concerning the total school program or the content of the courses to which the children are being exposed.

The question was posed to the community concerning membership and attendance in the PTA or similar groups. The majority of people were disappointed in such organizations and felt that too much time was spent in social activities and not in relevant and meaningful programs concerning children and their growth. They wished for programs to be directly related to the activities in which their children were involved.
The following tables present the responses given to the open-end questions and their related percentages.

**TABLE 58.**--Analysis of Citizens on the Biggest Problems With Which the Public Schools Must Deal

<table>
<thead>
<tr>
<th>Problems</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-crowding - large classes</td>
<td>44</td>
</tr>
<tr>
<td>Drugs</td>
<td>37</td>
</tr>
<tr>
<td>Money</td>
<td>10</td>
</tr>
<tr>
<td>Discipline</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

**TABLE 59.**--Analysis of Citizens on the Best Source of Information About the Local Schools

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspapers.</td>
<td>41</td>
</tr>
<tr>
<td>School newsletter - papers sent home</td>
<td>31</td>
</tr>
<tr>
<td>Students.</td>
<td>18</td>
</tr>
<tr>
<td>PTA or parent meetings</td>
<td>8</td>
</tr>
<tr>
<td>Don't know.</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

**TABLE 60.**--Changes Favored by Citizens Should They Become School Board Members

<table>
<thead>
<tr>
<th>Changes Favored</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money spent on new construction, and use of money</td>
<td>30</td>
</tr>
<tr>
<td>Less crowded schools, less crowded classes</td>
<td>25</td>
</tr>
<tr>
<td>Better teachers</td>
<td>19</td>
</tr>
<tr>
<td>Salaries</td>
<td>8</td>
</tr>
<tr>
<td>Discipline</td>
<td>8</td>
</tr>
<tr>
<td>Vocational education</td>
<td>8</td>
</tr>
<tr>
<td>No answer</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Other subjects mentioned by citizens included:

longer school year, special services, no bussing, merit pay, girls athletics, fine arts, more intramurals, less
competitive sports, the three R's, eliminate tenure, parent-community involvement, rely on professional educators, and pupil-teacher ratio too high.

TABLE 61--The Kind of Information the Citizens Would Like to Have About the Public Schools

<table>
<thead>
<tr>
<th>Information</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses taught</td>
<td>40</td>
</tr>
<tr>
<td>Cost of education - budget</td>
<td>35</td>
</tr>
<tr>
<td>Total curriculum</td>
<td>20</td>
</tr>
<tr>
<td>No answer</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

TABLE 62.--Citizens Responses As to Where the Public Schools are Particularly Good

<table>
<thead>
<tr>
<th>Good Respects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>34</td>
</tr>
<tr>
<td>Administrators</td>
<td>23</td>
</tr>
<tr>
<td>Curriculum</td>
<td>23</td>
</tr>
<tr>
<td>No opinion</td>
<td>12</td>
</tr>
<tr>
<td>High academic standards</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Other good respects mentioned included: innovations such as variable scheduling, Runyan School, attitude of community, single sessions, facilities very good, students have voice, PTO, special education, communications, discipline, school board, summer school athletic program.
Multiple Linear Regression Analysis

In Table 63, the full and restricted regression models appear, concerning the state of information about the school district. Of the ten demographic criteria investigated on pages 75 and 76, seven of the forty full models could be predicted better than chance by the seventeen criteria. These were variables 9, 17A, 17B, 32, 42A, 18, and 16A. Each of the $R^2$s (amount of criterion variance explained) was checked against chance for predictability by the variance ratio test (F-test). As one reads the column headed "full," one cannot help but note the low predictability which appears in all of the models, even the seven which were significantly better than chance. This is partially explained by the range of score permitted on the criterion variable. In most cases it was a two-point or three-point scale. This severe curtailment in the variability of the criterion measure resulted, of course, in much lower $R^2$s than the investigator would like. In addition to checking the significance of the predictability of the full model, the investigator sought to determine if the unique contribution of sex, race, educational level, occupation, income, age, or religion was significant in those full models which had significant predictability. In model 9, 17A, and 17B, the unique contribution of age was significant at the .01 level.
<table>
<thead>
<tr>
<th>Criterion Question</th>
<th>Full</th>
<th>Sex</th>
<th>Race</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Age</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(9) How much do you know about the local schools?</td>
<td>.1070[^a]</td>
<td>.1009</td>
<td>.1052</td>
<td>.0978</td>
<td>.0987</td>
<td>.1054</td>
<td>.0591[^b]</td>
<td>.1015</td>
</tr>
<tr>
<td>(17A) Do you know the name of the superintendent?</td>
<td>.1143[^a]</td>
<td>.1117</td>
<td>.1139</td>
<td>.0985</td>
<td>.1116</td>
<td>.1136</td>
<td>.0400[^b]</td>
<td>.1080</td>
</tr>
<tr>
<td>(17B) Do you know the name of the elementary school principal?</td>
<td>.1556[^a]</td>
<td>.1346</td>
<td>.1529</td>
<td>.1443</td>
<td>.1322</td>
<td>.1556</td>
<td>.0988[^b]</td>
<td>.1538</td>
</tr>
<tr>
<td>(17C) Do you know the name of the high school principal?</td>
<td>.0699</td>
<td>.0695</td>
<td>.0698</td>
<td>.0694</td>
<td>.0543</td>
<td>.0695</td>
<td>.0388</td>
<td>.0559</td>
</tr>
<tr>
<td>(42A) Do you know the name of the president of the board?</td>
<td>.0773[^a]</td>
<td>.0772</td>
<td>.0771</td>
<td>.0560</td>
<td>.0646</td>
<td>.0773</td>
<td>.0615</td>
<td>.0689</td>
</tr>
<tr>
<td>(33) Is there a shortage of classroom space?</td>
<td>.0524</td>
<td>.0524</td>
<td>.0492</td>
<td>.0511</td>
<td>.0459</td>
<td>.0490</td>
<td>.0429</td>
<td>.0349</td>
</tr>
<tr>
<td>(32) Guess at cost per child per year in your community?</td>
<td>.1347[^a]</td>
<td>.0978[^b]</td>
<td>.1327</td>
<td>.1102</td>
<td>.1296</td>
<td>.1330</td>
<td>.1283</td>
<td>.1254</td>
</tr>
<tr>
<td>(19) Are there many high school dropouts in this community?</td>
<td>.0336</td>
<td>.0336</td>
<td>.0335</td>
<td>.0331</td>
<td>.0153</td>
<td>.0285</td>
<td>.0291</td>
<td>.0311</td>
</tr>
</tbody>
</table>
TABLE 63.--Continued

<table>
<thead>
<tr>
<th>Criterion Question</th>
<th>Full</th>
<th>Sex</th>
<th>Race</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Age</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(18) What percentage of your high school graduates go on to college?</td>
<td>0.0922&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.0920</td>
<td>0.0918</td>
<td>0.0857</td>
<td>0.0784</td>
<td>0.0504&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.0856</td>
<td>0.0886</td>
</tr>
<tr>
<td>(16A) Have you read any book in the last year dealing with education?</td>
<td>0.0752&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.0642</td>
<td>0.0752</td>
<td>0.0305&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.0641</td>
<td>0.0750</td>
<td>0.0664</td>
<td>0.0597</td>
</tr>
</tbody>
</table>

<sup>a</sup>Significant at the .01 level.

<sup>b</sup>Unique contribution significant at the .01 level.
Since age was scored as four categorical vectors and not as a continuous variable, it takes more than a regression analysis to determine if the relationship were positive or negative, based on the wording and intent of the question. All one can state, based on the regression analysis, is that age is a factor in these questions. In Model 32, the unique contribution of sex was significant in determining whether or not the respondent would guess as to the cost per child per year in the public schools.

Again, we have to consider if this were positive for a higher rating or negative for a lower rating as sex was coded as two vectors in the original computer run. In Model 18, income had a unique contribution, which was significant in the explanation of the respondent's reply to the question which dealt with the percentage of the high school graduates from the school district who go on to college. In the case of question 42A, none of the variables made a significant contribution. This might be explained by the problem of multi-collinearity - a high relationship among the predictor variables making a unique contribution to the explanation of the criterion variable.

In all cases, the unique contribution of a variable or set of variables is determined or estimated by subtracting from the $R^2$ for the full model in question, the $R^2$ for the restricted model. Thus, for Model 17B, the unique
contribution of age is obtained by subtracting .0988 from .1556. This yields an estimate of .0568 as the unique contribution for age. This can be checked for significance by the variance ratio test which was described earlier in Chapter III on page 74.

The regression models concerning communication with the public appear in Table 64. It is noteworthy that only Model 10A had significant predictability, and that the unique contribution of age was the significant factor. Again, since age was coded as four categorical vectors instead of a continuous variable, it is difficult to determine with regression procedures whether the relationship is positive or negative. The question in Model 10A was concerned with whether the respondent had received any newsletter, pamphlet, or any other material telling what the local schools were doing.

In Table 65, two models were investigated for predictability which dealt with the major complaints of the respondents. In both cases predictability was weak and not significant for the regression models.

Ten full regression models were generated which were concerned with attitudes of the respondents toward teaching and teachers and they appear in Table 66. Only two models (Model 24 and Model 28) had significant predictability. Model 24 was concerned with the issue of whether the
<table>
<thead>
<tr>
<th>Criterion Question</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Religion</th>
<th>Sex</th>
<th>Race</th>
<th>Age</th>
<th>Full R^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10) Have you received a newsletter, etc., local schools are doing?</td>
<td>.1214^a</td>
<td>.1078</td>
<td>.1203</td>
<td>.1059</td>
<td>.1064</td>
<td>.0901b</td>
<td>1.023</td>
<td>.0531</td>
</tr>
<tr>
<td>(11) Last month have you read anything in the newspapers about the schools?</td>
<td>.0273</td>
<td>.0370</td>
<td>.0373</td>
<td>.0386</td>
<td>.0390</td>
<td>.0410</td>
<td>.0412</td>
<td>.0421</td>
</tr>
<tr>
<td>(12) Have you heard anything about the schools on the radio?</td>
<td>.0493</td>
<td>.0481</td>
<td>.0482</td>
<td>.0483</td>
<td>.0490</td>
<td>.0492</td>
<td>.0493</td>
<td>.0494</td>
</tr>
<tr>
<td>(13) Television? Anything the past month?</td>
<td>.0562</td>
<td>.0563</td>
<td>.0567</td>
<td>.0571</td>
<td>.0572</td>
<td>.0573</td>
<td>.0574</td>
<td>.0575</td>
</tr>
<tr>
<td>(15) Would you like to know more about the schools?</td>
<td>.0563</td>
<td>.0564</td>
<td>.0565</td>
<td>.0566</td>
<td>.0567</td>
<td>.0568</td>
<td>.0569</td>
<td>.0570</td>
</tr>
</tbody>
</table>

^aSignificant at the .01 level.
TABLE 65.--$R^2$s For Regression Models Concerned With Major Complaints

<table>
<thead>
<tr>
<th>Criterion Question</th>
<th>Full</th>
<th>Sex</th>
<th>Race</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Age</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(20) How do you feel about discipline in the schools?</td>
<td>.0410</td>
<td>.0394</td>
<td>.0408</td>
<td>.0406</td>
<td>.0322</td>
<td>.0410</td>
<td>.0406</td>
<td>.0154</td>
</tr>
<tr>
<td>(21) Greater or less regulation of school dress?</td>
<td>.0358</td>
<td>.0358</td>
<td>.0358</td>
<td>.0312</td>
<td>.0226</td>
<td>.0334</td>
<td>.0289</td>
<td>.0313</td>
</tr>
<tr>
<td>Criterion Question</td>
<td>Full</td>
<td>Sex</td>
<td>Race</td>
<td>Education</td>
<td>Occupation</td>
<td>Income</td>
<td>Age</td>
<td>Religion</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>-------</td>
<td>-----------</td>
<td>------------</td>
<td>--------</td>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td>(30) Would you like your child to be a teacher?</td>
<td>0.0454</td>
<td>0.0375</td>
<td>0.0454</td>
<td>0.0344</td>
<td>0.0349</td>
<td>0.0431</td>
<td>0.0434</td>
<td>0.0408</td>
</tr>
<tr>
<td>(24) How about the salaries of teachers?</td>
<td>0.0898&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.0883</td>
<td>0.0898</td>
<td>0.0671</td>
<td>0.0807</td>
<td>0.0880</td>
<td>0.0801</td>
<td>0.0715</td>
</tr>
<tr>
<td>(26) Should teachers be given automatic raises?</td>
<td>0.0390</td>
<td>0.0389</td>
<td>0.0190</td>
<td>0.0388</td>
<td>0.0212</td>
<td>0.0373</td>
<td>0.0384</td>
<td>0.0379</td>
</tr>
<tr>
<td>(28) How do you feel about teachers joining labor unions?</td>
<td>0.0912&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.0846</td>
<td>0.0890</td>
<td>0.0912</td>
<td>0.0817</td>
<td>0.0912</td>
<td>0.0475&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.0743</td>
</tr>
<tr>
<td>(29) Should teachers have the right to strike?</td>
<td>0.0545</td>
<td>0.0504</td>
<td>0.0542</td>
<td>0.0540</td>
<td>0.0401</td>
<td>0.0541</td>
<td>0.0365</td>
<td>0.0487</td>
</tr>
<tr>
<td>(22A) Does this system have a hard time getting teachers?</td>
<td>0.0559</td>
<td>0.0533</td>
<td>0.0552</td>
<td>0.0492</td>
<td>0.0464</td>
<td>0.0487</td>
<td>0.0438</td>
<td>0.0472</td>
</tr>
<tr>
<td>(22B) Does this system have a hard time keeping good teachers?</td>
<td>0.0584</td>
<td>0.0511</td>
<td>0.0563</td>
<td>0.0515</td>
<td>0.0553</td>
<td>0.0505</td>
<td>0.0451</td>
<td>0.0538</td>
</tr>
<tr>
<td>Criterion Question</td>
<td>Full</td>
<td>Sex</td>
<td>Race</td>
<td>Education</td>
<td>Occupation</td>
<td>Income</td>
<td>Age</td>
<td>Religion</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>-----------</td>
<td>------------</td>
<td>--------</td>
<td>-----</td>
<td>----------</td>
</tr>
<tr>
<td>(27A) Are there some teachers in the system who should be dropped or fired?</td>
<td>0.0516</td>
<td>0.0514</td>
<td>0.0474</td>
<td>0.0466</td>
<td>0.0371</td>
<td>0.0463</td>
<td>0.0450</td>
<td>0.0425</td>
</tr>
<tr>
<td>(23) Are teachers generally satisfied or dissatisfied with pay and conditions?</td>
<td>0.0417</td>
<td>0.0395</td>
<td>0.0403</td>
<td>0.0371</td>
<td>0.0242</td>
<td>0.0346</td>
<td>0.0389</td>
<td>0.0393</td>
</tr>
<tr>
<td>(25) Are teachers paid more or less than in comparable systems?</td>
<td>0.0753</td>
<td>0.0654</td>
<td>0.0753</td>
<td>0.0549</td>
<td>0.0586</td>
<td>0.0732</td>
<td>0.0740</td>
<td>0.0747</td>
</tr>
</tbody>
</table>

*aSignificant at the .01 level.

bUnique contribution significant at .01 level.
respondents thought salaries in the community for the teachers were too low, or just about right. Model 28 dealt with how the public feels about teachers joining labor unions. While both Model 24 and 28 had significant predictability, age was the unique contribution significant in Model 28. However, question 24 had significant predictability with none of the predictors making a significant unique contribution.

Table 67 contains the regression models concerning the respondents' attitudes toward school boards and their problems. Four of the seven full models had significant predictability: Model 42B, 42E, 43A, and 42D. Model 42B was concerned with how good a job the respondent thought the school board was doing. While none of the unique contributions were significant in the case of Model 42B, race and income of the respondent were the highest contributors to the response. The question of whether the respondent thought the board was politically motivated was investigated in Model 42E. The highest unique contribution to Model 42E was made by occupation. However, this contribution was not statistically significant. Question 43A had significant predictability with none of the predictors making a significant unique contribution. Finally, question 42D had significant predictability with occupation making a significant unique contribution.
<table>
<thead>
<tr>
<th>Criterion Question</th>
<th>Sex</th>
<th>Race</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Age</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(42B) How good a job do you think the school board does?</td>
<td>.0980</td>
<td>.1010</td>
<td>.0879</td>
<td>.0776</td>
<td>.1002</td>
<td>.0774</td>
<td>.0896</td>
</tr>
<tr>
<td>(42C) Does the board work hard to improve the quality of education?</td>
<td>.0606</td>
<td>.0567</td>
<td>.0586</td>
<td>.0423</td>
<td>.0583</td>
<td>.0473</td>
<td>.0480</td>
</tr>
<tr>
<td>(42D) Does the board work to see that schools function efficiently?</td>
<td>.0789</td>
<td>.0785</td>
<td>.0645</td>
<td>.0479</td>
<td>.0772</td>
<td>.0682</td>
<td>.0621</td>
</tr>
<tr>
<td>(34) Are school buildings too expensive?</td>
<td>.0223</td>
<td>.0358</td>
<td>.0340</td>
<td>.0305</td>
<td>.0351</td>
<td>.0320</td>
<td>.0269</td>
</tr>
</tbody>
</table>
TABLE 67.--Continued

<table>
<thead>
<tr>
<th>Criterion Question</th>
<th>Full</th>
<th>Sex</th>
<th>Race</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Age</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(35A) Is money spent foolishly by the board or administration?</td>
<td>.0487</td>
<td>.0215</td>
<td>.0486</td>
<td>.0470</td>
<td>.0385</td>
<td>.0423</td>
<td>.0455</td>
<td>.0465</td>
</tr>
</tbody>
</table>

*aSignificant at the .01 level.

*bUnique contribution significant at the .01 level.
In Table 68 the $R^2$s for the regression models involving citizen participation are located. Only two models were investigated, and only one of them had significant predictability. Model 42F sought to determine whether the respondent had ever attended a school board meeting. The principal contributor or explainor of this variable was the age of the respondent making this unique contribution which was significant at the .01 level.

Table 69 indicates regression models about financial support of the schools. About the only thing worth noting was the lack of predictability in the four models which were investigated. None of the full models could predict better than chance at the .01 level of significance.

Two reasons can be cited: (1) the community could be very homogeneous, and (2) when a criterion instrument was used, there was a wide range of scores. In a questionnaire such as the one used in Arapahoe County when individuals were responding "yes," "no," or "don't know," in essence there was only a three point scale. This limits variability and when the independent variable is taken out and then examined, the sensitivity in terms of the criterion instrument is lacking. Questions should have at least a five point scale to maximize the use of multiple linear regression.
TABLE 68.--R²s For Regression Models Involving Citizen Participation

<table>
<thead>
<tr>
<th>Criterion Question</th>
<th>Full</th>
<th>Sex</th>
<th>Race</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Age</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(41)Have you ever attended any occasion in a school building during the last year?</td>
<td>.0512</td>
<td>.0462</td>
<td>.0502</td>
<td>.0393</td>
<td>.0367</td>
<td>.0507</td>
<td>.0425</td>
<td>.0470</td>
</tr>
<tr>
<td>(42F)Have you ever attended a school board meeting?</td>
<td>.0957(^a)</td>
<td>.0951</td>
<td>.0939</td>
<td>.0803</td>
<td>.0789</td>
<td>.0941</td>
<td>.0584(^b)</td>
<td>.0833</td>
</tr>
</tbody>
</table>

\(^a\)Significant at the .01 level.

\(^b\)Unique contribution significant at the .01 level.
TABLE 69.—$R^2$s For Regression Models About Financial Support

<table>
<thead>
<tr>
<th>Criterion Question</th>
<th>Full</th>
<th>Sex</th>
<th>Race</th>
<th>Education</th>
<th>Occupation</th>
<th>Income</th>
<th>Age</th>
<th>Religion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(36A) Would you vote for or against a tax increase?</td>
<td>.0240</td>
<td>.0220</td>
<td>.0239</td>
<td>.0236</td>
<td>.0152</td>
<td>.0146</td>
<td>.0238</td>
<td>.0202</td>
</tr>
<tr>
<td>(37A) Did you vote in the last school bond issue?</td>
<td>.0621</td>
<td>.0580</td>
<td>.0600</td>
<td>.0537</td>
<td>.0537</td>
<td>.0578</td>
<td>.0273</td>
<td>.0613</td>
</tr>
<tr>
<td>(37B) Did you vote for or against the last bond issue?</td>
<td>.0628</td>
<td>.0623</td>
<td>.0625</td>
<td>.0587</td>
<td>.0491</td>
<td>.0626</td>
<td>.0222</td>
<td>.0590</td>
</tr>
<tr>
<td>(38) Do you favor the federal government or local taxes for college education?</td>
<td>.0431</td>
<td>.0342</td>
<td>.0373</td>
<td>.0350</td>
<td>.0274</td>
<td>.0383</td>
<td>.0390</td>
<td>.0381</td>
</tr>
</tbody>
</table>
Central Office Perceptions

The central office personnel, including the superintendent, answered the questionnaire as to how they perceived the community would respond to the questions. The report will only describe the questions where there was an evident discrepancy between the perceived answers and the actual responses.

TABLE 70.--Approval or Disapproval of Schools Giving Courses in Sex Education

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve</td>
<td>55</td>
<td>79</td>
</tr>
<tr>
<td>Disapprove</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>No opinion</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

TABLE 71.--Approval or Disapproval of Sex Education Courses Discussing Birth Control

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve</td>
<td>50</td>
<td>67</td>
</tr>
<tr>
<td>Disapprove</td>
<td>50</td>
<td>28</td>
</tr>
<tr>
<td>No opinion</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>
As a result of the survey, a citizens' committee and the school district appointed a committee to study the feasibility of instituting a sex education program for the district.

The community responded quite favorably concerning the question: "Would you like to know more about the schools in this community?" Still, the central office perceived that 100 per cent of the people would want to know more about the schools. This is evidently a major area of concern for the district. As a result of the survey, the district has become more specific concerning the type of information it disseminates to the public. Much more communication has been directed to the non-public school parents in the areas of curriculum and finance.

Regarding the question: "Can you name the superintendent, elementary school principal, and senior high school principal?" the central office felt that 100 per cent of all the people knew the name of the superintendent, while the community said 58 per cent knew his name. The name of the elementary principal received 100 per cent from the central office and 73 per cent from the community. The name of the high school principal received a 60 per cent perception, while the community said 33 per cent knew his name. This can be explained by the interest parents have for the elementary school vis-a-vis the high school. It still
indicates the effects of ego involvement in meeting the expectations of the central office staff.

Regarding the question: "What percentage of the high school graduates from your high school go on to college, do you think?", the central office felt that 85 per cent would be the community's perception. The actual community perception was 70 per cent.

TABLE 72.—Are There Many High School Drop-Outs in this Community?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite a few</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>Almost none</td>
<td>40</td>
<td>51</td>
</tr>
<tr>
<td>Don't know</td>
<td>40</td>
<td>41</td>
</tr>
</tbody>
</table>

TABLE 73.—How Do You Feel About the Discipline in the Local Schools—Is it Too Strict, Not Strict Enough, Or Just About Right?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too strict</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Not strict enough</td>
<td>60</td>
<td>41</td>
</tr>
<tr>
<td>Just about right</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>Don't know</td>
<td>0</td>
<td>11</td>
</tr>
</tbody>
</table>
TABLE 74.--Do You Think Salaries in This Community For the Teachers are Too High, Too Low, Or Just About Right?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too high</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Too low</td>
<td>0</td>
<td>42</td>
</tr>
<tr>
<td>Just about right</td>
<td>80</td>
<td>37</td>
</tr>
<tr>
<td>Don't know</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

This points up the discrepancy of the community's feelings and the teachers' concerning salaries, and how the central office perceives their feelings. Immediately after the report was made public, the superintendent and the teachers' association established salaries as the number one priority.

TABLE 75.--How Do You Feel About Teachers Joining Labor Unions?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>No</td>
<td>100</td>
<td>60</td>
</tr>
<tr>
<td>Don't know</td>
<td>0</td>
<td>9</td>
</tr>
</tbody>
</table>
TABLE 76.—Do You Think Teachers Should Have the Right to Strike?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>No</td>
<td>100</td>
<td>52</td>
</tr>
<tr>
<td>Don't know</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

The central office personnel perceived the community as responding with the amounts of $500 to $700 as the cost per child per year in the public schools of their community. The community actually responded with the amount of $100 to $4,000.

TABLE 77.—Do You Think That School Buildings Are More Expensive Than They Need to Be?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>100</td>
<td>54</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Don't know</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>
TABLE 78.—Suppose the Local Schools Said They Needed Much More Money. As you feel at This Time, Would You Vote For or Against Raising Taxes For This Purpose?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>For</td>
<td>65</td>
<td>41</td>
</tr>
<tr>
<td>Against</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Don't know</td>
<td>5</td>
<td>14</td>
</tr>
</tbody>
</table>

TABLE 79.—Can You Recall How You Voted in the Last Bond Election? For or Against the Bond?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>For</td>
<td>40</td>
<td>71</td>
</tr>
<tr>
<td>Against</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Can't recall</td>
<td>60</td>
<td>15</td>
</tr>
</tbody>
</table>

This was interesting as the central office felt that most of the community did not recall how they voted and would only vote for the current issues at hand. The community decidedly felt that they had supported the school district.
TABLE 80:—Does the School Board Work Hard to See That the Schools Function Efficiently and at the Lowest Cost?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Central Office by %</th>
<th>Community by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>62</td>
<td>38</td>
</tr>
<tr>
<td>No</td>
<td>38</td>
<td>19</td>
</tr>
<tr>
<td>Don't know</td>
<td>0</td>
<td>43</td>
</tr>
</tbody>
</table>

**Cost Estimate of Survey.**

In considering the cost of the survey, it was found that the modified probability with stratification components was the most economical when considering the results of a $\pm 5-7$ per cent sampling error using four hundred respondents. The cost per pupil for the survey can be estimated in this proportion.
TABLE 81.--Estimate of Cost Per Pupil For School Districts Desiring to Survey Their Community Using Public Opinion Polling Techniques

<table>
<thead>
<tr>
<th>Pupil Population</th>
<th>Cost Per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 8,000</td>
<td>50 cents</td>
</tr>
<tr>
<td>8,001 - 10,000</td>
<td>45 cents</td>
</tr>
<tr>
<td>10,001 - 12,000</td>
<td>40 cents</td>
</tr>
<tr>
<td>12,001 - 14,000</td>
<td>35 cents</td>
</tr>
<tr>
<td>14,001 - 16,000</td>
<td>30 cents</td>
</tr>
<tr>
<td>16,001 - 19,000</td>
<td>25 cents</td>
</tr>
<tr>
<td>19,001 - 21,000</td>
<td>23 cents</td>
</tr>
<tr>
<td>21,001 - 24,000</td>
<td>20 cents</td>
</tr>
<tr>
<td>24,001 - 26,000</td>
<td>18 cents</td>
</tr>
<tr>
<td>26,001 - 29,000</td>
<td>16 cents</td>
</tr>
<tr>
<td>29,001 - 35,000</td>
<td>14 cents</td>
</tr>
<tr>
<td>35,001 - 40,000</td>
<td>12 cents</td>
</tr>
<tr>
<td>40,001 - 45,000</td>
<td>11 cents</td>
</tr>
<tr>
<td>45,001 - 48,000</td>
<td>10 cents</td>
</tr>
<tr>
<td>48,001 - 54,000</td>
<td>9 cents</td>
</tr>
<tr>
<td>54,001 and up</td>
<td>5-7 cents</td>
</tr>
</tbody>
</table>

In computing the cost of a survey, the following factors were taken into consideration:

1. Time of survey director
2. Statistician for survey and sample design
3. Computer programmer
4. Computer time
5. Printing of questionnaire
6. Training of interviewers
7. Use of free interviewers
8. Maps
9. Secretary
10. Telephone at no charge
11. Headquarters at no charge
12. Analysis and report
Conclusions

1. While the voters of Arapahoe County School District Six seem well-informed about school activities, they are not so well informed when it comes to educational matters.

2. While the community expects teacher salaries to be higher, they seem reluctant to tax themselves for this purpose.

3. It is quite evident that the district would be quite receptive to the concept of differentiated staffing. Investigation of the single-salary schedule might be appropriate.

4. The role of the school board is not well known or understood, possibly due to lack of public awareness.

5. Since they have little or no basis for judging the quality of education in the Arapahoe County Schools as opposed to knowledge about educational activities and programs, pressures seem to be lacking for improving the quality.

6. From the public relations viewpoint, the areas that seem to be uppermost in the minds of the community are the cost of school buildings and the efficient management of the tax dollar. The public seems to be demanding not only how much
money is being spent, but in what areas. It is very apparent that the community has no conception of the cost for educating a child on a yearly basis.

7. It seems quite evident that the public is unenlightened about teacher organizations, salaries, fringe benefits, and other concerns of teachers.

8. The public seems better informed at the elementary level than at the secondary level as to its personnel and its programs.

9. The public has accepted the right of teachers to strike but not to join unions.

10. The public is confident that it can recruit and maintain a high caliber of professional educators at relatively low costs.

11. The community is willing to accept courses in sex education if the teachers are adequately prepared in the subject.

12. The school is still one of the best informers of curriculum and program. Further concentration should be placed in this area.

13. School personnel should be the best informants of program and policy to the community.

14. Local newspapers and written communications from the school are the major sources of information.
about the schools, when you consider the media as a communicator. This is only useful as one-way communication, as there is little opportunity for feedback.

15. Citizens groups, such as the Superintendent's Cabinet and the PTA, do serve as a feedback mechanism and should be encouraged on the local school level.

16. Public opinion can and should be used to take advantage of upcoming situations, such as bond referendums, curriculum change, buildings, and other anticipated problems.

17. School district polling is less important if the objective is to find out whether the community is in favor of or opposed to the school board. This is better accomplished during election time. It is more effective in assessing the perceptions of the community toward curriculum and future changes.

18. The hours for interviewing found to be most effective were after 6:30 P.M. and on weekends.

19. The use of a majority of multiple choice questions with at least four and preferably five answers is easier to code and the statistics are much more useful in gaining discrimination for analyses.
20. Open-end questions should be limited as the time they take to hand code and evaluate is both tedious and error-prone, and the results are not worth the time expended.

21. As a result of the survey, the superintendent disseminated the entire report to the newspapers, radio, television, and to the entire group of 110 lay persons representing all of the schools which composed the Superintendent's Council. In a follow-up study completed two months after the polling had taken place, the following has been instituted:

a. Pilot programs in four schools will be instituted on sex education.

b. The local teachers' organization was counseled by the central office and given full cooperation in disseminating information to the public.

c. Attendance has gained considerably at school board meetings. When asked why they are attending, persons have replied that the survey had a bearing on it.

d. There is much greater knowledge of the three unknown "publics" - private schools, parochial schools, and persons without
children in school. Mailings have been sent by the central office to these publics.

e. Action groups have been established by each principal to review and make recommendations to the superintendent concerning the survey.

f. The teachers' organization supported the administration's dissemination of the survey. It concurred with the recommendations of the Superintendent's Council concerning the need to inform the community about the teacher and his problems.

g. The survey caused central office personnel to re-evaluate their perceptions of the community and themselves. More time is spent in the schools by central office personnel.

h. The district plans to survey the community once each year.

i. The superintendent stated, "The survey has done more in public relations and promoting openness in this community than any other program we have utilized. I feel that the community and district personnel are looking at goals and working more closely together as a result of the survey. The conclusions will certainly be acted upon."
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Leaders in American education must possess a keen awareness of public perception toward what is going on in the schools. They must be sensitive to changes in the perceptions, for change is happening, and it is surprisingly rapid.

In the public school systems of America, professional personnel, as they continuously develop school improvements, are responsible to citizens. As citizen representatives, boards of education are established and committed to reflect the desires of the public. Due to this concept, school boards and superintendents need scientific systems to assess community desires. It is often difficult for schoolmen to determine public perceptions concerning crucial educational issues. Often the prime feedback from the public comes from pressure groups, telephone calls, and face-to-face conversations. Educators undoubtedly wonder to what extent such feedback represents widely held or limited views.

Developments in the public schools over the past ten years should have shown the administrator that he is a part of a socio-political system to which he must attend if he is
to be effective, and if, perhaps, he is even to survive. A more efficient and realistic feedback system can play a central role in linking him with this increasingly important milieu of which he must become a part.

As one means of ascertaining on a systematic basis public reactions to schools and their successes and weaknesses over the years, some school district have used public opinion surveys. Never before, however, have the results and questions of national annual polls on education been available for school district educators to use in this process. Through the public opinion sampling process, educators can ascertain public perceptions regarding crucial problems and issues. If the sampling is accomplished periodically, and if some of the basic questions are repeated, it is possible to gauge shifts in public perceptions.

Sampling public perception represents a means for learning how citizens judge the quality of their schools and the criteria used in determining excellence, or lack of it, in their local school system. Surveys enable specific educational issues to be investigated, such as the following: community willingness to support tax increases, perceptions toward teachers and the school board, types of information the public desires regarding their schools, and public awareness of school problems.
For example, these sample questions indicate some of the actual issues about which information can be obtained. What do you think are the biggest problems with which the public schools in this community must deal? How do you feel about the discipline in the local public schools - is it too strict? not strict enough? or just about right? From your own personal viewpoint, what is the best source of information about the local schools? Suppose the local public schools said they needed more money. As you feel at this time, would you vote to raise taxes for this purpose, or would you vote against taxes for this purpose? Do you feel that the local public schools are doing a good job of teaching the bad effects of drug use? Do you think teachers should be given automatic raises, or should raises be given to some and not to others? How much do you know about the local schools, quite a lot? some? or very little? Do you approve or disapprove of schools giving courses in sex education? Would you like to know more about the public schools in this community? To utilize school buildings to the fullest extent, would you favor keeping the school open the year round?

Although sampling is constantly gaining greater acceptance, many persons are skeptical of the accuracy of data obtained from a partial rather than a complete count.
Some of the advantages are: reduced cost for school districts, reduction in manpower and materials, and vital information gathered more quickly.

The major objectives of the study were to define a means by which school districts could periodically assess public perceptions on a systematic basis and demonstrate the method that was developed for comparing local results with national results. A sampling technique was developed which would permit administrators to analyze results according to particular subgroups in the community and to identify changes in the central office staff's perceptions of community attitudes before and after the public opinion assessment.

Chapter III was devised to answer the following questions. What do you as a public school administrator want to know in a specific sense? Why are you using the survey method and taking a poll? In other words, what is your exact purpose? When will you conduct the poll and will it be done before you have so many particular problems that they all cannot be faced at one time? Where will you conduct the poll? What are the area limits? Would it be in one specific area of the school district or would it encompass the entire community? How will you do it? Will you use the interview method or use a questionnaire which would be mailed to the respondents? Who will do it? Can
you use volunteers, such as parents belonging to the Parent Teacher Association, the League of Women Voters, or some other such volunteer group? How will you finance it? Is this to come from local funds or will you ask organizations to finance the survey? What will you do with the results? In what manner will they be reported to the community, and in what manner will they be acted upon?

The study was local in scope and based on a representative sample of all adults. Since perceptions, attitudes, and knowledge are closely related, many questions asked of respondents were included for the purpose of measuring the amount of information possessed by representative citizens regarding their local schools.

The sample embraced a total of 398 adults. It can be described as a modified probability sample of the school district. A total of eighty-six trained interviewers took part in the survey which was carried out in every area of the district. The respondents were selected by utilizing stratified sampling procedures developed by George Gallup, based on polling precincts located within the district. These precincts, taken together, represent a true microcosm of the district.

In Chapter III a manual was designed for school personnel who wish to sample items on the annual poll. It is assumed such school personnel know little or nothing about
conducting a poll. The contents include: (1) rationale for feedback systems, (2) obtaining annual lists of survey items, (3) how to develop a survey item, (4) pre-test of items, (5) survey procedure, (6) how to develop the sample, (7) maps and how to use them, (8) assigning responsibility, (9) recruitment of interviewers, (10) training program for interviewers, (11) handling the data, (12) analysis of the data, (13) summarizing the findings, (14) assessing perceptions of central office staff, and (15) cost estimates.

Questions included in the questionnaire were selected from the 1969 Annual Gallup Poll on, "How the Nation Views the Public Schools." These questions were selected after pre-tests were conducted in the Interviewing Center maintained by the Gallup Organization in Hopewell, New Jersey, and in a pilot study undertaken in twenty-seven areas of the country.

Conclusions

The survey is not merely a fact-finding device. It may result in important hypotheses or conclusions that may solve serious current problems, even though disclosures might be threatening.

A superintendent from a large school district, when interviewed by the author, stated after listening to the advantages of public opinion polling, "I would not allow it to happen here, because I control the attitudes and opinions
this proposition, the individual schools or areas represented would take on greater significance. Possibly, groups within the entire district or representative individuals would have a voice in implementing change in the local public schools.

The survey is also useful in providing information for comparison studies and in identifying trends. Longitudinal studies, based on sampling, can prove to be of sound value by the school district, not only for data gathering, but also for economic, social, and psychological reasons.

In polling a school district, it is advantageous to create an awareness through the press, radio, and television. This results in better acceptance, credibility of the interviewers, and reduces the number of respondents refusing to be interviewed.

Public opinion polling can accelerate the process of democracy by accurate and swift reporting. By using the results of a survey and insuring the wide dissemination of its comments and the action taken, once again it helps implement and accelerate the process of democracy.

**Recommendations**

As a result of the study concerning community perceptions of the public schools and the designing of a more scientific feedback system, the author makes the following recommendations. These are suggested not only to improve
upon the process, but are suggested for further study by persons concerned with this particular problem.

It is recommended that a school district undergo a survey once a year, thereby comparing results with the national survey and with other school districts using the same procedure. The community is kept informed as to the concerns of the total district and the action being planned or taken by the superintendent if polling is undertaken annually.

Student and teacher opinion polling should be considered, whereby a feedback system is devised to assist the local administrator to anonymously sample his constituency for better communication. A principal of a high school could use this device to assist in assessing his students' perceptions, not only of the curriculum, but of the school environment, teachers, community, and himself as an effective person in the school. In large schools the same problem of communications exists as is found in large school districts. The local administrator should have regular and factual feedback from his staff. It is important that the teachers know that their perceptions of the school have been heard and are acted upon.

The use of students as interviewers should also be explored to a greater extent. Research has not shown much success, according to the last study done by the University
of this school district. Why should I allow the community responses to become public knowledge and be printed in the local newspaper?"

The attitude expressed by the superintendent can be acceptable only if one operates on the theory of checks and balances, and if the superintendent is in a position to leave his employment when the check or balance demands that he do so. This attitude causes interruption and confusion in the educational program. It could even lower the output and morale of the teachers working in this atmosphere. Middle management would have to retain a status quo position in order to weather the storm as the superintendent manipulates the district. With changing signals, the manipulation could not be communicated rapidly to middle management for interpretation and dissemination to the teachers, students, and the community.

This leads one to ask the question, "Should certain segments of a school district be given a veto over the central district action that they strongly oppose?" This would not imply a group of sovereign subdistricts coming to the fore, but a central district which grants a veto power in extreme cases to its constituents. This implies that major issues can be brought up in a referendum and the superintendent would then have a mandate, whether it would be renewable or ongoing, to be put into operation. Under
of Michigan in 1955. With proper training, students could be satisfactory and use the experience as a classroom situation. During the past year, many states have lowered the voting age to eighteen, which would seem a perfect opportunity for students to experience and practice democracy, while obtaining the community's perceptions by using polling techniques.

Empirical studies should be conducted to evaluate the effectiveness of the surveys and the recommendations to school districts.

A five point scale should be used in handling regression analysis data, thereby creating a greater sensitivity for the question. The author used a three point scale which reduced the availability of discrimination pertaining to a question. Therefore, many questions could not show a significant difference or a unique contribution when compared with the independent variables. It was found that in determining publics as to variables, the use of percentages in this particular study was actually of more value than the use of regression analysis.

For further research, the referendum system is being recommended. This is a system that more closely resembles the election process and is, therefore, more easily understood by the participating citizens. Moreover, this approach can dramatically reveal the relationship between
the way people live and the way they vote. There is greater reality and excitement in this procedure than in the sample survey approach.

There is a growing desire in America for persons to "have a say" in the operations of the local school district. In sampling surveys, the question often arises, "Why was I chosen?" or conversely, "Why haven't I ever been polled?" The referendum can serve this purpose better than the sampling survey, which, by nature, must be limited to a few hundred persons out of the entire population because of money and effort required in the selection of samples and in the interviewing of individuals selected.

The ballot survey is a simulated election, insuring that more than a sample of the district would be polled. In an election polling place, the choice is limited to parties and their candidates. Voters often feel they do not have a real opportunity to express their feelings concerning major issues. In the proposed referendum, the ballot is delivered to the individual's home, eliminating problems voters often encounter in going to the polling place on election day - such as lack of babysitters, the nature of their work, or inclement weather.

Interviewer bias, one of the disadvantages of survey sampling, could be bypassed. The questions would be worded similarly. However, the respondent would mark his answers
directly and place the ballot in a sealed envelope. The only identification would be the number of the precinct, township, or election district which would assure complete confidence in the voter's anonymity.

Here again, students could be utilized, both for economic purposes and in providing a laboratory for the learning of democratic processes. Ballots could be distributed, collected, and tabulated, producing the excitement present in an actual election, especially when the significance of the vote for the entire community is established.

Perhaps of greatest interest is the opportunity provided by this system to show how people in the community live and what their perceptions are as to the local public school district. In short, the referendum system offers the chance to make politics more understandable and, therefore, more meaningful. It provides citizens with the chance to see democracy at work, in fact, to participate in the process.

It should be remembered that perceptions of the community will change. Decisions must be made on many grounds, involving many facts, judgments, hunches, and commitments. The school district cannot take one measurement and operate on those facts for years. Continual checks have to be made, tempered by the facts that the poll is not 100 per cent correct, and that community perceptions will change.
Public opinion sampling provides a means of testing and establishing principles, comparing the past with the present, predicting the future, identifying trends, and, thereby, giving the school districts a sound basis for action.

Previously, school districts used the following philosophy: If public opinion does not threaten the school district, it is ignored. If it threatens the school district, it is corrected. If it supports the school district, it is nurtured and rewarded. As a result of the study, school districts now have an instrument which, if used, will allow action instead of reaction.
Hello, I'm from the Littleton Public Schools. I'd like to talk with you about education and the schools in your community. The questions I am asking appeared on a recent national poll conducted by George Gallup.

As you know, in some communities there are three kinds of schools -- the public schools, the parochial (or church related schools), and the private schools (sometimes called "independent schools").

1a. First, I'd like to know if you have any children in the local public schools?
   1[ ]Yes 2[ ]No
   In parochial schools?
   1[ ]Yes 2[ ]No
   In private schools?
   1[ ]Yes 2[ ]No

2a. Did you attend the schools in the community in which you now live?
   1[ ]Yes 2[ ]No

3. If someone asked you to give your idea of a good school, what are all the things that come to your mind? That is, what are some of the things that would make you decide that a school is a good school?
4a. In your own opinion, in what respects are your local PUBLIC SCHOOLS particularly good?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

b. In what respects not so good?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

5a. Do you think children who go to parochial schools get a better education than the children attending the public schools in this community?
   1[ ]Yes  2[ ]No  v[ ]Don't Know

b. Do you think children attending private schools get a better education than the children attending the public schools in this community?
   1[ ]Yes  2[ ]No  v[ ]Don't Know
6. What do you think are the biggest problems with which the PUBLIC SCHOOLS in this community must deal?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

7. Many articles have been written about the fact that the subjects taught in elementary and high school do not fit students for the kind of world we live in. How do you feel about this? What subjects would you cut out of the curriculum or give less emphasis to? What subjects would you add or give more emphasis to?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

8a. Do you approve or disapprove of school giving courses in sex education?
   1[ ]Approve  2[ ]Disapprove  v[ ]No Opinion

b. Would you approve or disapprove if these courses discussed birth control?
   1[ ]Approve  2[ ]Disapprove  v[ ]No Opinion

9. How much do you know about the local schools, quite a lot, some, or very little?
   1[ ]Quite a Lot  2[ ]Some  3[ ]Very Little

a. During the last year, have you received any newsletter, pamphlet, or any other material telling what the local schools are doing?
   1[ ]Yes  2[ ]No  v[ ]Can't Recall
b. If "YES": What material have you received?

____________________________

c. Just your own best guess, how many have you received during the past year?

____________________________

11. During the last month have you read any article in the newspapers about local schools?
   1[ ]Yes  2[ ]No  v[ ]Can't Recall

12. Have you heard anything about local schools on radio during this period?
   1[ ]Yes  2[ ]No  v[ ]Can't Recall

13. How about television?
   1[ ]Yes  2[ ]No  v[ ]Can't Recall

14. From your own personal viewpoint, what is the best source of information about the local schools?

____________________________

15a. Would you like to know more about the schools in this community?
   1[ ]Yes  2[ ]No

b. If "YES": What kind of information would you like to have?

____________________________

____________________________

____________________________

16a. Have you read any book in the last year that deals with education?
   1[ ]Yes  2[ ]No

b. If "YES": What is the name of the book(s)?

____________________________
17a. Do you happen to know the name of the superintendent of schools?
   1[ ] Yes 2[ ] No

b. Do you happen to know the name of the principal of the ELEMENTARY SCHOOL in your neighborhood?
   1[ ] Yes 2[ ] No

c. Do you know the name of the principal of the HIGH SCHOOL attended by the children in your neighborhood?
   1[ ] Yes 2[ ] No

18. What percentage of the high school graduates from your high school go on to college, do you think?
   __________ %  v[ ] Don't Know

19. Are there many high school drop outs in this community?
   1[ ] Quite a Few 2[ ] Almost None  v[ ] Don't Know
   x[ ] Comment: ____________________________

20. How do you feel about the discipline in the local schools -- is it too strict, not strict enough, or just about right?
   1[ ] Too Strict 2[ ] Not Strict Enough 3[ ] Just about Right  v[ ] Don't Know

21. Some people feel the schools do not go far enough in regulating the way boys and girls dress for school. Do you think there should be greater regulation of the way children dress for school, or less?
   1[ ] Greater 2[ ] Less 3[ ] All Right as it is
   v[ ] No Opinion

22a. Do you think this local PUBLIC SCHOOL SYSTEM has a hard time getting good teachers?
   1[ ] Yes 2[ ] No  v[ ] Don't Know

b. Do you think this local PUBLIC SCHOOL SYSTEM has a hard time keeping good teachers?
   1[ ] Yes 2[ ] No  v[ ] Don't Know

23. From what you know, are teachers in your community pretty well satisfied with their pay and working conditions or are they dissatisfied?
   1[ ] Satisfied 2[ ] Dissatisfied  v[ ] Don't Know

24. Do you think salaries in this community for the teachers are too high, too low, or just about right?
   1[ ] Too High 2[ ] Too Low 3[ ] Just about Right
   v[ ] Don't Know
25. Are teachers in this community paid more money, or less money, than teachers in other comparable communities?
   1[ ] More  2[ ] Less  3[ ] About Same  v[ ] Don't Know

26. Do you think teachers should be given automatic raises, or should raises be given to some and not to others?
   1[ ] Yes, Automatic  2[ ] No, Not Automatic  v[ ] No Opinion

27a. Do you think there are some teachers in the local public school system who should be dropped or fired?
   1[ ] Yes  2[ ] No  v[ ] Don't Know

b. If "YES": Why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

28. How do you feel about teachers joining labor unions?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

29. Do you think teachers should have the right to strike?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

30. Would you like to have a child of yours take up teaching in the public schools as a career?
   1[ ] Yes  2[ ] No  v[ ] Don't Know
31. Where does the money come from to support your local schools?


32. What is your guess as to the cost per child per year in the public schools of your community?  
$________ Yearly  v[ ]Don't Know

33. Do you think there is a shortage of classroom space in this community?  
1[ ]Yes 2[ ]No  v[ ]Don't Know

34. Do you think that school buildings are more expensive than they need to be?


35a. Do you think money is spent foolishly by the school authorities or the local school board?  
1[ ]Yes 2[ ]No  v[ ]Don't Know

b. If "YES": How?


36a. Suppose the local PUBLIC SCHOOLS said they needed much more money. As you feel at this time, would you vote to raise taxes for this purpose, or would you vote against raising taxes for this purpose?  
1[ ]For 2[ ]Against  v[ ]Don't Know
b. Why do you feel this way?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

37a. Did you happen to vote in the last school bond election?

1[ ]Yes 2[ ]No  v[ ]Can't Recall

If "NO" skip to Question 38.

b. Can you recall how you voted? Did you vote for or against the bond?

1[ ]For 2[ ]Against  v[ ]Can't Recall

c. Why did you vote this way?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

38. Some people say that the Federal Government should pay all of the cost of a college education. Others believe that most of the costs should continue to be paid, as now, by parents and students. Which do you favor?

1[ ]Federal Government Pay 2[ ]Parents and Students pay 3[ ]Other

ASK THE FOLLOWING QUESTION ONLY OF RESPONDENTS WHO HAVE CHILDREN ATTENDING SCHOOL (Q.1)

39. Now, we'd like to know something about the school-parent relationship. Thinking now of your oldest child in school during this last year, will you tell me how much contact you have had with that child's teacher or school. For instance, have you attended any of his classes? Any other school functions? How many times have you talked personally with his teacher? Generally speaking, what has been your reaction -- have these
experiences or discussions been generally satisfactory and helpful, or not?

ASK THE FOLLOWING QUESTION ONLY OF RESPONDENTS WHO HAVE CHILDREN ATTENDING SCHOOL (Q.1)

40a. Do you belong to the PTA or a similar group?
   1[ ]Yes  2[ ]No

b. If "YES": Do you attend meetings regularly during the school year, or not?
   1[ ]Regularly  2[ ]Not Regularly

c. If "NOT REGULARLY": Will you please tell me why you do not regularly attend?

   ________________________________

   ________________________________

d. If "NO" in part a: Since you do have children in school, what are your reasons for not belonging to the PTA or a similar group?

   ________________________________

   ________________________________
41. Have you attended any lecture, any meeting, or any social occasion in any local school building during the last year?
   1[ ]Yes  2[ ]No  v[ ]Can't Recall

42a. Now, a few questions about the local school board. First, do you happen to know the name of the president of the board?
   1[ ]Yes  2[ ]No

b. How good a job do you think the school board does?

   ____________________________

   ____________________________

c. Does it work hard to improve the quality of education?
   1[ ]Yes  2[ ]No  v[ ]Don't Know

d. Does it work hard to see that schools function efficiently and at the lowest cost?
   1[ ]Yes  2[ ]No  v[ ]Don't Know

e. Do you think it is politically motivated? That is, do local politics play a part in decisions made by the board?
   1[ ]Yes  2[ ]No  v[ ]Don't Know

f. Have you ever attended a school board meeting?
   1[ ]Yes  2[ ]No

   If "YES": When was the last time you attended?
   ____________________________

43a. If someone asked you to be a school board member, would you be interested?
   1[ ]Yes  2[ ]No

b. Why do you say that?
   ____________________________

   ____________________________

   ____________________________
44. If you were to become a school board member, what changes in the schools would you favor?


And now, finally, just a few questions about yourself so that we can be sure we have an accurate cross-section of the American public.

(63) 45. Could you tell me the kind of business or industry the CHIEF WAGE EARNER (Head of Household) in your immediate family works in and the kind of work he does there?

KIND OF BUSINESS________________________
KIND OF WORK________________________

(64) 46. What was the last grade or class you COMPLETED in school?
1[ ]None or Grades 1-4 5[ ]High School Graduate
2[ ]Grades 5,6,7 6[ ]Technical, Trade, or Business School
3[ ]Grade 8 7[ ]College, University, Incomplete
4[ ]High School Incomplete 8[ ]College, University, Graduate

(65) 47. And what is your age, please?

(66) 48. What is your religious preference--Protestant, Roman Catholic, or Jewish?
1[ ]Protestant 2[ ]Roman Catholic 3[ ]Jewish
4[ ]None
(67) 49. (SHOW INCOME CHART) Would you please give me the letter of the group which best represents the total annual income, before taxes, of all of the members of your immediate family living in your household?

1[ ]A 2[ ]B 3[ ]C 4[ ]D 5[ ]E 6[ ]F 7[ ]G 8[ ]H

NOTE: If respondent cannot or will not answer Question 49 (67), please estimate the group and check the ESTIMATE BOX to signify that it is your estimate.

The answer is: 1[ ]Response 2[ ]Estimate

(68) 50. Check whether:

1[ ]White Man 3[ ]Negro Man 5[ ]Other Man
2[ ]White Woman 4[ ]Negro Woman 6[ ]Other Woman
INTERVIEWERS' MANUAL

You Are Appreciated!

In order to survey your school district economically, reliably, and quickly, you have volunteered approximately ten hours of your busy time to benefit your children and the community.

The Interviewers' Manual which you have just received has been devised so that the survey will be conducted in a professional manner. It will also help to train YOU in a short period of time.

It is realized that for many of you this will be your first experience in polling the public. Remember, it should be exciting and fun if you follow the directions in the Manual.

The Superintendent of Schools and the School Board appreciate your interest and the time you will devote to this project. The benefits reaped will improve the public's understanding of the school district and will help improve the education of all students in the school district.

If there are any further questions after reading the Manual and attending the Interviewers' briefing, do not
hesitate to call me at any time. My telephone number is: 123-4567.

Thank you,

Dudley Solomon
Survey Director
Interviewing Help

We encourage interviewers to try to line up another person upon whom they can call to handle assignments when they are unable to work themselves. This backstop is especially important to you when you have accepted an assignment, and unforeseen circumstances prevent you from completing it. It is important to us because we must have complete coverage of our areas. When an interviewer accepts an assignment and then finds he cannot do the work, it is often too late for us to assign someone else as a replacement.

1. We try to have two persons recruited in each sampling area to handle our work. If you are indisposed and do not have a helper, contact us, and we will have the other interviewer complete the work.

2. When you choose your helper, choose a dependable person about whose abilities you are confident. Consider his appearance and attitude toward the work as well as qualities you feel an interviewer must possess. When you have decided on a friend or neighbor, brief him as thoroughly as you can on our techniques.

Please contact us in advance if you know you will not be able to do the work. If you accept the work and find
you cannot complete it, turn it over to a reliable substitute interviewer.

**The Arrival of Your Assignment**

Even if you do not plan to do the work on the day your assignment is made, do check to see if the package has all the needed materials.

A typical assignment will contain the following items:

1. Questionnaires
2. Interviewer's Bulletin
3. Assignment and Report Form
4. Map
5. Handout Cards
6. Other Report Forms

Check your Assignment and Report Form to see how many interviews are to be made. The number of questionnaires included should check with this total. The Interviewer's Bulletin will tell you how many Handout Cards should have been included, if any.

An extra questionnaire will be included so you can make a practice interview before starting out for the actual interviews. By this means you can familiarize yourself with the words and phrasing of the questions. Never go out without having read the questionnaire thoroughly.
After carefully reading the Manual, it should be kept and used as a reference. We have carefully indexed it so that you can look up references easily.

The Identification Card is most useful when confronted with certain persons who want to be absolutely satisfied that they are being interviewed by a bonafide representative of the school district.

**Equipment Needed**

When buying a clipboard, ask for the legal size. This will give you a large board so that you will be prepared for the questionnaire on legal size paper that we might send.

We require the use of pencils for recording responses. A soft lead (#2) is preferable because of the dark writing that it provides. Do not use red or blue lead.

**Other Report Forms**

It is not necessary to return the Interviewer's Bulletin or the Handout Cards. These can be thrown away when you are through with them, unless, of course, we have asked that they be returned.

**The Questionnaire**

A questionnaire represents a great amount of time and planning. It is an instrument which will produce valuable data, and, in view of the high cost of opinion research,
the data obtained will be used for very important purposes. As such, it contains the thought and judgment of the research department.

Like any other instrument, machine, or technical piece of equipment which is used to obtain certain results, the questionnaire should be treated with care and used as directed. Later you will find a detailed discussion of how to use a questionnaire properly.

Errors in the Questionnaire

Occasionally, errors in the printing of the questionnaire have escaped our attention. If you recognize such an error on a questionnaire, proceed in the manner that you feel was intended.

For instance, on one questionnaire, the answer boxes for a certain question were left out. If such a case were to arise, you should record the answer that is given to the question. By no means should you ignore the question because it does not have answer boxes.

If you cannot understand what was intended, contact us before doing your interviewing.

The Interviewer's Bulletin

A Bulletin which describes how interviewing is to be completed is included with each assignment. This Bulletin will cover the four following points:
1. The objectives of the study.
2. The dates of the field work.
3. The sampling and interviewing procedures to be followed on the study.
4. The intent and method of handling questions on the questionnaire.

The Bulletin is very carefully prepared so that each assignment will be carried out correctly. Without careful study, the interviewer will never be able to do the job we expect.

After making your first interview, it is always a good practice to re-read your bulletin. A question that you have may be answered there, or you may find out that you have not followed procedure exactly. This will give you the opportunity to make corrections.

In some instances, answers will be given in the Bulletin for some of the questions. Needless to say, a person who is to be interviewed should not be allowed to read the Bulletin.

Returning the Assignment

When returning your materials, always include the following three items:

1. All questionnaires - both used and unused.
3. Assignment and Report Form.
Interviewing Deadline

In each Interviewer's Bulletin which accompanies an assignment to you, we will prominently display the deadline date (the day when we want you to have finished your interviewing).

This is a most important date. Unless it is honored, we will be unable to meet the deadlines that we have made for processing the data and delivering reports.

Schedule the time when you will be able to do your interviewing sufficiently before the deadline so that you will not be rushed. If you find that some emergency is barring you from completing the assignment on time, contact us to see if an extension of time can be arranged.

The Outline of the Interviewing Area

The outline of the interviewing area will usually be marked in red and will be placed on such discernible features as streets and roads. Less frequently it will be placed on features such as city or township limits.

The boundaries of the interviewing area are carefully drawn and should be considered inviolable when you are interviewing. Always stay on the inside of these boundaries. If the boundary is a street, stay on the side of the street that is inside the outlined area.

If you find respondents complain because someone has recently been at their house for the same purpose as you are
calling, try to find out if this other person was a school representative. If so, it may be that he has not followed map directions correctly. If you tell us, we will try to clear up the matter.

**The Starting Point**

The starting point is a red cross at a distinguishable corner or intersection of the map area to be used for an interviewing assignment. This is to be used as the point at which you should begin your interviewing.

**Starting Point and Contact Procedure**

1. After arriving at the starting point you should start off in a direction that will take you clockwise around the interviewing area.

2. Always skip the first household. This is done because the first house is usually a corner house which is apt to be bigger and more expensive than its neighbor. If you were always to start with the first house, we would be introducing a systematic bias in the sample, giving wealthier people a greater chance of being interviewed.

3. Do not make an exception of step two even if the first structure is an apartment or multi-household building. Skip the first apartment or
part of the apartment house which comes after the starting point.

4. Do not make an exception to step two, even if there are no houses on the first side of the block or the first road on your interviewing area. Do not make an interview until you reach the second household after the starting point.

5. After skipping the first household, you should contact each household as it comes. If you do not follow this procedure, and, instead choose certain households and skip others when interviewing, you will no longer be sampling in a correct manner. It will no longer be a systematic or scientific sample. The work you will be sending us will be simply a reflection of your choice of people, and not a sample of the people on that block.

6. Therefore, be systematically thorough in your contacts. Knock on the door of each house or apartment that you come to. Make sure that you are not missing any households which may be on the rear of the lot, over a garage, or which have an entrance in some inconspicuous place. Also inquire about cellar residences and residences above and behind commercial
properties. A wise question to ask after each interview is finished is, "Do any other families live on these premises?"

7. Make only one interview in a household. However, if there is more than one household on the premises, it is perfectly all right to make one interview in each of these households.

8. If you are unable to get one half of your interviews in the area between the first and second starting points, obtain the needed interviews, as well as the second half of the interviews, in the area following the second starting point.

9. If you are unable to get the second half of your interviews from the area following the second starting point, return to the uncontacted households following the first starting point.

10. If you have contacted your entire area and still are unable to complete your assignment, return to the first household following each starting point to complete the assignment.

11. If you are still unable to obtain the assigned number of interviews, return to the area at a time when people who were not home when you first called are apt to be at home.
12. Do not leave the area assigned for a survey and obtain interviews outside of those assigned boundaries, unless we have given permission— even if it is for only one interview.

Multiple Block Areas in Rural and Urban Situations

The simplest map area will be of one block—bounded on four sides by streets which has starting points in two corners—probably diagonally opposite each other.

However, we usually cannot depend on a small area like this to have a large enough population to support an assignment. In urban situations we must, therefore, use several adjacent blocks and consider this as the area in which the interviewing is to be conducted. In rural situations, we usually assign a township segment which has many roads running through it often in a helter skelter fashion.

The examples on the following two pages are maps of such multiple block areas. One is of a rural area, the other is of an urban area.

In these examples you will notice that we have numbered each block. This is for illustrative reasons. These markings will never be found on maps that we send to you for assignments.
Many times an interviewer will be assigned an area of this type, and he will ask us how to cover the area. Should he do it block by block, or should he go around the boundaries and then do the inside streets?

The following points about procedure should answer these and other questions.

1. Beginning from starting point, you will proceed around Block 1 until you arrive back at the corner from which you started.

2. You should then proceed to the same corner of Block 2 as the one from which you started on Block 1. Proceed then around Block 2 until you have completely covered it. (You do not have to skip the first house on Block 2 as you did on Block 1.)

3. You should then proceed to Block 3 and cover it in the same manner you did Block 2.

4. Alleys and Dead End Streets. Any street which does not go through to another street, but on which potential respondents live, should be interviewed by going down one side and then back on the other side. You should then come out at the place on the street where you left off.

5. The map is to be returned with all assignments.
Who is Eligible to be Interviewed?

The Interviewer's Bulletin will always specify who is to be interviewed for each study. Some general rules to be followed are:

1. **Age**—Unless otherwise stated in the Interviewer's Bulletin, you should only interview adults, i.e., persons twenty-one years of age and older.

2. **Sex**—We will outline how many interviews should be made with women and how many should be made with men.

3. **Residence and Citizenship**—Any permanent resident of the United States is eligible to be interviewed. It is not necessary that he be a citizen of this country to be interviewed.

**Selection by Age and Sex**

In many households when you make your call, you will find that more than one eligible person over the age of twenty-one is at home. Under these circumstances which person should you choose to be interviewed?

In households where both a man and a woman are at home when you call, you should first attempt to make the interview with the man. If more than one man is at home, ask to interview the **youngest** man over the age of twenty-one.
In households where only a woman is at home when you call, you, of course, will interview the woman. But if more than two eligible women are at home, ask to interview the oldest woman over the age of twenty-one.

Of course, toward the end of a normal assignment, you will find that you have filled up either your male or female quota as assigned in the bulletin and be forced to make your remaining interviews with the other sex only. If you are looking for men, continue in each household that you contact, to ask for the youngest man at home, and if you are looking for women only, continue in each household to ask for the oldest woman at home.

By following this procedure, as strange as it might seem, we should obtain a normal distribution of ages in each of our surveys.

Disabilities and Handicaps

In some cases you will encounter persons who have handicaps or disabilities that impair the otherwise normal ease of interviewing. You should follow the general rule of proceeding with an interview only if it can be conducted with reasonable facility. Determining "reasonable facility" is up to you. You may encounter some of the following situations:
1. **Poor English Comprehension and Speech**—Do not interview anyone who cannot understand or speak English. (See note under Questionnaire section.)

2. **Drunkenness**—Persons who are under the influence of alcohol should be avoided. However, not everyone who has had a drink is drunk nor is he unable to be interviewed.

3. **Deafness, Dumbness, Etc.**—You may encounter persons who have severe physical handicaps. These persons should be interviewed if communication is possible. In the case of blindness, you may read the handout cards and describe any special devices.

4. **Mental Disorder and Senility**—Anyone who exhibits symptoms of severe mental disorder and is regarded as mentally inept by his family, should be skipped. However, do not confuse a mental disorder with eccentricity.

**Representative Respondents**

Occasionally an interviewer will say, after completing an assignment, that the area in which he interviewed did not contain people who were representative, in terms of race, economic status, age, education, etc., of that part of the country. An interviewer once wrote, "Area was composed
of all old retired folks. I made half my interviews there, then completed assignment in housing development where I got interviews with 'young marrieds.' Because the interviewer had not followed directions, we had to void this assignment entirely.

A predictable occurrence, if you interview in an area where old people abound, is that these interviews will be balanced by those another interviewer makes in an area where younger people are more frequently encountered; that if you interview in an all Negro area, your interviews will be balanced by those interviews made by another interviewer in a predominantly white area; etc. The local sample should consistently reflect, in the proper proportion, population characteristics found in the national population.

Don't Know Answers

Contrary to what most new interviewers believe, "Don't Know" answers are valuable. As interviewers you, of course, should not encourage them. You should never accept a "Don't Know" answer without being absolutely sure that it represents the respondent's true feeling and not just a dodge by a timid soul. "Don't Know" answers can be as significant and informative as "Yes" or "No" answers. For that reason, never feel incompetent or that you have wasted your time when you record an honest "Don't Know."
Occasionally, interviewers say that they were sent to an area where many of the people were poorly educated and consequently unable to answer in a positive manner many questions asked of them. Many respondents have had to rely on the "Don't Know" answer.

The answer to a request of this kind is that our samples are of the local population of the community. They are not samples of the informed or the educated, and because the uninformed and poorly educated form a segment of the local population, these people must be contacted if we are to obtain a sample which is representative of the total community population.

Not at Home, Refusals, and Breakoff

A segment of all potential respondents will never be interviewed for three reasons. One reason is that they will not be at home when you call; another is that they will refuse to cooperate with you when you do call; and the third is that some persons will refuse to continue an interview after they have begun, i.e., a breakoff.

Not at Home

As far as "not at homes" are concerned, one thing we can do to reduce the number that fall into this category is to regulate the hours that we use for interviewing.
Interview only after 4:00 p.m. on weekdays - Monday through Friday - and any time on Saturdays and Sundays. This rule is an absolute one unless we specify that you may deviate from it in the Interviewer's Bulletin. If we follow this rule, we can expect to make a contact when people are most likely to be at home.

Refusal

Refusals run in a direct ratio to the degree of timidity in the interviewers approach to the respondent. The experienced interviewer who expects cooperation will get it. The uneasy first-time interviewer who shows his discomfort and asks for cooperation will often not get it. (More will be said later on this problem.)

Breakoff

Occasionally an interview cannot be completed because the respondent cannot or will not continue after agreeing to start the interview. This is called a "breakoff." An interview that is not completed is of no value to us. Therefore, if you do not have an extra questionnaire, erase what you have written on the "breakoff" questionnaire and make another interview to replace the incomplete one.
Apartment Houses or Multi-Family Dwellings

In an apartment house, you should systematically contact apartments just as you would private households on a street of one-family dwellings. Each apartment should be considered as one household. Therefore, you may interview in as many different apartments in any one apartment building as you need to fulfill your assignment requirements, assuming that there are that many apartments in the building.

How to Cover Apartment or Multi-Family Dwellings

An apartment building is a collection of households. When contacting one apartment after another in order, follow these procedures:

1. **Always work from the top floor down to the bottom floor.** Thus, if there is an apartment building with one apartment on each of three floors, the first one to contact would be the one on the top floor, the next one to contact would be the one on the second floor, and so on.

2. **Always work from the rear of the building to the front.** Thus, if there is an apartment building with two apartments on each of three floors, the top floor rear would be the first one to contact, the top floor front the next one to contact, the second floor rear the next, and so on.
3. Always work from right to left as you face the front of the building. Thus, if there is an apartment building with four apartments on each of the three floors, the top right rear apartment would be the first one to contact, the top left rear the next one to contact, the top right front next, and so on.

4. If there should be an apartment building right at your starting point, DO NOT SKIP the whole building as your first household. You should enter the building, and, following the above procedure, contact every apartment after skipping the first one.

5. In apartment houses which have locked doors, ring the bell for an apartment on the top floor. When the buzzer indicates that the latch is loosened, walk in and go directly to the apartment which has opened the door for you. Stay in the building until you have contacted each apartment. However, explain to each potential respondent how you were able to enter the building so that he does not think that you have "broken in." In some apartment houses or multiple dwellings of this kind, you will encounter inter-communications systems. You will be
expected to state your business over the system while still in the foyer. If you are rejected by one party, buzz another until you get in.

Other Living Arrangements

1. Motels and Hotels. Any persons who live permanently in a motel or hotel are eligible to be interviewed. Consider one motel unit or one apartment within a hotel as a household and only one person should be interviewed in each. Persons living in motels or hotels for short periods of time are not eligible.

2. Government Reservations and Institutions Personnel. Those who work and live on government property other than on military reservations are eligible to be interviewed.

3. Military Personnel. Military Personnel who live on military reservations are ineligible for interviews. Military personnel who live off base are eligible, except for members of the armed forces who have temporarily returned to their homes on leave.

4. Nursing and Convalescent Homes, Hospitals, and College Dormitories. All inmates or students in such buildings are ineligible for interviews.
Permanent administrative personnel who live on the premises are eligible to be interviewed.

5. **Boarding Houses.** A boarding house, whether composed of related or unrelated persons, should be considered as one household. Therefore, only one person should be considered eligible to be interviewed. This person can as well be a boarder as the proprietor.

**Telephone and Business Interviews**

All interviews should be face-to-face interviews conducted in the homes of the respondents, or at places indicated by the Interviewer's Bulletin, unless instructions to make telephone interviews are given in the Interviewer's Bulletin.

It should be understood that persons to be interviewed should be interviewed at their homes. No interviews, then, should take place in stores, offices, or other places of business and no persons should be interviewed who are not permanent residents of the households in which you are interviewing.

**Preparing to Interview**

1. If you have decided to interview, postpone those "half a dozen other things" that also need to be done until you are finished with the interviews.
Do not try to do too many things at one time. Interviewing must be treated seriously and given all your attention.

2. Do not take your family or job troubles with you to the interviewing area. Leave these at home until you can talk to your family and friends about them.

3. Check your materials. Do you have all of them? Are there enough copies of the questionnaire? Are all the handout cards included? Is the map correct? Do you have enough pencils? Do you have your clipboard?

4. Make a trial interview with a member of your family. Look up difficult words to see how they are properly pronounced.

5. Check your dress and appearance for neatness, cleanliness, and unobtrusiveness.

6. Make an estimate of the time needed to complete your assignment. Then select the time that you will go out. Pick a time that you will be able to complete the work using only one trip to the area. If the assignment is longer than usual, pick a time when a large amount of work can be accomplished. Many assignments cannot be worked on before 4:00 P.M., because we want to give
everyone a chance to be interviewed, including those people who work during the day. However, on Saturdays and Sundays when most people are apt to be at home at any time, you may interview throughout the day.

The Approach - First Impression

Most people will have gained an impression of you before you have had an opportunity to say anything to them. They will have done this on the basis of your demeanor and your dress, among other things. They may also have done it on such things as your looks, the way you walk, your car, your hands, etc., but these are factors over which you have little control. We especially point out the impression of demeanor and dress because they are factors which partially govern your acceptance or rejection by people, and over which you can have much control.

You have obligations, then, to make these things as acceptable as possible.

Demeanor

1. A pleasant smile on your face; an interview is fun.

2. Keep the clipboard down until you need it.

3. Carry as few materials as possible; avoid the salesman appearance.
4. Display no hesitancy; move in a decisive manner.
5. Stand up straight; give the impression of forthrightness.

Dress
1. Neatness and cleanliness.
2. Unobtrusiveness in clothes; avoid extremes of formality and sportiness in dress.
3. Suits on men and women are always in order.
   Ties are invariably used by men.

Keep your area in mind when dressing. Dress in a practical manner that will neither invite ridicule nor overwhelm the respondent. If the interviewing area is a "smart" one, you might dress in strictly business clothes. If the area is a cold water flat neighborhood, women might find it easier to wear flat shoes. If you are on a rural assignment, do not hesitate to wear older suits or more casual, but neat, clothes.

The Introduction

All interviewers should follow these rules. They will begin the interview smoothly and with the least amount of confusion.

1. Most interviewers find it normal and helpful to say: "Hello, my name is John Smith...". To give your name in a greeting of this type should
communicate three things: your friendliness, openness, and informality.

2. Immediately after you have introduced yourself, you should introduce the reason for your visit. On every questionnaire that we send to you, you will find a printed introduction. A typical example of an introduction is this one taken from a recent study about education: "I'm from the local school district. We're doing an educational survey, and we are interested in finding out what people think and do about a number of things related to education." We recommend that you always use these introductions. However, to continue the normal and friendly introductory statement that you have begun, you should not read it. Memorize it so that you can speak it in a normal conversational tone.

3. Remember that many people enjoy being interviewed. It puts them in the position of being listened to as well as giving the impression, (as indeed it is for our purposes), that everything they say is very important. In America the schools and homes have, over the years, been rearing children to express themselves freely.
growing up, these children have been told in the family, in their schooling, and by elected officials that their views are important. In addition, they have seen average people like themselves on television expressing their viewpoints. It is little wonder that public opinion interviewing is easy and natural in this country.

4. You should never let the respondent get the impression that the interview is in any way a test of his knowledge or intelligence. Every answer is "right" in a public opinion survey.

5. Avoid discussion at the beginning of the interview. Defer all explanations of your purpose until you have finished the questions. Use the questions as a method of explaining your purposes.

General Rules for Using a Questionnaire

Read all questions exactly as they are worded.

1. Do not change any words or phrases.
2. Do not skip any words or phrases.
3. Do not add any words or phrases.
4. Do not explain any words or phrases in your own words.

In effect, each word of the questionnaire has been created to serve a certain purpose and then tested to see
that it is serving that purpose. Changing any word or phrase on a questionnaire can alter significantly the meaning of a question and therefore can completely destroy the purpose and usefulness of that question.

Regardless of whether or not you feel there are defects in the question, read it exactly as it is written and then carefully record the answer you receive.

For the results of a survey to be valid, the questionnaire must be standardized. That is, the same questions must be asked everywhere. It would be useless to read public opinion data if the questions eliciting the data were not asked the same way in all places.

In some interviewing areas, persons who do not speak the English language will be encountered. These persons should be skipped if they cannot be made to understand the questions as written. Do not try to explain the questions in simple English or to translate the questions into the person's native tongue.

Despite the fact that we try to use words that are understood everywhere, there will always be a few persons who will not understand a question. In these situations, always reread the question slowly and carefully. It may be that the person did not understand you the first time, but will be able to if you read it again. If the person still cannot grasp the meaning of the question, make a note to
this effect on the questionnaire and go on to the next ques-
tion.

Do Not Skip Any Questions

1. No matter how inapplicable certain questions may seem to you, they should be read. If it turns out that the respondent cannot answer the question because he, too, finds it inapplicable, make a note to this effect on the questionnaire.

2. Occasionally interviewers through faulty preparation and quick interviewing do not ask questions that should be asked. This, of course, results in a loss of information that can seriously bias the survey data. A thorough study of the questionnaire before you start interviewing will help you avoid this pitfall.

3. If a person refuses to answer a certain question, always write under the question the word "refusal." We will then understand why no answer has been recorded.

Do Not Change the Order of the Questions

1. The Dramatic Nature of the Questionnaire. A questionnaire is usually arranged in such a manner that it begins easily, builds to a climax, and ends naturally. Questions at the outset are
designed to be easy to answer and to arouse the respondent's interest. The respondent should be put at ease by answering these, and at the same time his interest and attention should be built for what is to come. The middle of the questionnaire will cover the heavy or serious topics. Quite often a light question will be introduced in this section as a change of pace. The conclusion of the questionnaire will contain the vital information series of questions. At the conclusion of an interview of this kind, the respondent should feel that he has performed a useful service. By helping you, they will have contributed to the public's knowledge of vital issues in the public schools, and their opinions will aid in making their school district aware of and responsive to the community's needs.

2. **Strategic Placement of Questions.** Very often, questions are placed at a particular place early on the questionnaire because a question later in the interview will give or at least influence the answers to this question.

3. **"First Things First".** The final reason why the order of questions should not be changed is that when many questions on the same subject are
presented, they are placed in a natural progression. When questions are taken out of their natural order, repetition can be introduced and the respondent will become disinterested in continuing.

Do Not Let the Respondent Read or Fill Out the Questionnaire

Politely, but firmly, discourage anyone from filling out the questionnaire since such a questionnaire will have to be discarded. Questionnaires contain many symbols and answer boxes placed there for interviewers' purposes—the most important of these are the "Don't Know," "Can't Remember," and the "No Opinion" answer boxes. If respondents were to know that an answer box is provided for this alternative on the questionnaire, it would become a natural "out" for the timid to say "Don't Know" more frequently than they do. It would counteract all your efforts to get respondents to answer in positive terms. For this reason, it is well to sit or stand opposite the respondent with the questionnaire or clipboard pulled up, or covered so that the respondent cannot clearly see any particular part of the questionnaire. (In the same connection, it is always well to act as if a "Don't Know" answer is unacceptable for those persons who may use it as a crutch to get through the Interview.) The
"Don't Know" answer, of course, is a perfectly acceptable one in cases where the respondent clearly has no opinion, cannot take sides, or does not know the answer.

Read a Question as Normally as Possible
Do not place undue emphasis on any questions and do not add inflections that may change the meaning of questions. Read the questions in a normal tone of voice. Most questionnaires contain questions on topics that come up in normal conversations. If you read in a monotone or go to the other extreme of being pontifical, you will certainly not give an impression that will make the respondent want to continue.

Recording the Response - Problems in Communication
Herein lies a constant problem in the communication of answers given in interviews. When recording answers, the interviewer often expects too much understanding on the part of his readers, and he forgets to relate the small and important things which seem obvious but are absolutely necessary to others for complete comprehension.

Because we believe that this is a problem that can beset you in your interviewing, we have prepared several points which you should consult occasionally so that the
responses in your questionnaire will be clear and meaningful to anyone who cares to read them.

1. The first consideration to remember is that a response must be understood by everyone who reads it. Its meaning cannot be limited to those people who were there during the interview. Remember, when recording answers, that other people must read and understand them.

2. A second and more specific consideration is to think of each question on a questionnaire as a separate entity. Its answer likewise must be a separate entity. An answer should be able to stand by itself. It should not have to depend for meaning on something as nebulous as a previous answer on the questionnaire.

3. After having granted an interview, it will be humiliating to some respondents if they do not see you record their answers with care. In fact, your recording of answers—the care you take—often sets the tone of the interview. If you regard it as a serious matter, your respondent will also take his task more seriously. In addition, it is always wise to record as the interview is taking place. If you try to depend on your memory and record answers after the
interview is over, you will find that you have forgotten significant details. In addition, an analysis of this type of reporting will reveal that your ideas as well as the respondent's are contained in the answers.

4. Often an answer which has been carefully recorded turns out not to be an answer at all, but simply a lot of irrelevant talk. The respondent has talked around the subject without actually answering the question. Make it a rule to ask yourself, "Is he really answering the question?"

5. Specific answers are always desirable. Always write down the little reasons why a person may feel the way he does, or why he is going to vote the way he says he will respond. Never try to judge what you believe are the big and important things and then exclude the rest. Record everything that is said, or as much as humanly possible for you to record.

6. WRITE AS PLAINLY AS POSSIBLE.

7. If you feel we may have difficulty understanding an answer, write an explanatory note in the column of the questionnaire.
8. If a respondent refuses to answer a certain question, write the word "Refusal" under this question. Do not leave the space or answer boxes blank. You may also write a note explaining the refusal.

9. In checking answer boxes, it is much better to mark an (X) instead of a checkmark. The checkmark (√) is often confusing because it may extend into another answer box.

**Impartiality**

Your job as an interviewer is to obtain a true picture or measurement of public opinion. To insure that this measurement is true, you must maintain an attitude of impartiality and tolerance both before and during the interview.

Impartiality demands that you not intrude your convictions about questionnaire topics either verbally or in a less obvious manner. Your remarks should be limited to the strictly neutral probes necessary to elicit further information from the respondent. Gestures and facial expressions should be controlled lest they expose your reaction to the respondent's remarks. facetious or unnecessary talk early in the interview may influence answers to questions at later points in the interview.
Some interviewers may feel that by nodding their head and murmuring "Yes" or "Uh-huh" occasionally that they are encouraging the respondent to "speak his mind." This may be true, but at the same time this kind or reinforcement may be encouraging only a certain type of reply and other opinions are perhaps being held back because the respondent does not feel that the interviewer wants to hear this information.

The best encouragement or reinforcement for the respondent is a business-like attitude combined with an obvious effort on your part to carefully record all answers. Save your pleasantries, small talk, observations, etc., until the end of the interview.

Open-End and Close-End Questions

The distinction between a "close-end" and "open-end" question rests in the fact that for the close-end question all possible answers can be predicted and therefore answer boxes can be provided. In the case of the open-end question, the number of possible answers is infinite and therefore space must be provided below such a question for the interviewer to record the verbatim answer.

An example of the "close-end" question is: "Would you like to have a child or yours take up teaching in the public schools as a career?"

[ ]Yes [ ]No [ ]No Opinion
You will note that "Yes," "No," and "No Opinion" are the only possible answers to this question. For that reason, we provided answer boxes for those answers. You will find this to be a general rule with the "close-end" question.

On the other hand, here is an example of an "open-end" question. "What do you think are the biggest problems with which the public schools in this community must deal?"

As you undoubtedly can imagine, a great variety of answers are possible for a question of this kind. For that reason, it is impossible to prepare in advance any all-inclusive set of answer boxes and, therefore, space is provided after the question for you to record the answer.

Interviewing Difficulties With the Open-End Questions

Now, let us turn to some actual answers for "open-end" questions. First of all, let's look at some "good" answers. By "good", we refer to those answers which meet the intention of the question in a specific and meaningful way.

"What do you think are the biggest problems with which the public schools in this community must deal?"

a. Institute classes for students and parents in order to cope with the drug problem.

b. Providing adequate educational facilities for this rapidly growing community.
c. Adequate finances to carry on a good educational program should be provided by the Federal government.

Now, let's turn to some difficulties stemming from the "open-end" question. Many questions are answered in a superficial or inadequate manner. Let's look at some examples of this difficulty.

"What do you think are the biggest problems with which the public schools in this community must deal?"

a. "Poor schools"
b. "Taxes too high"
c. "Not enough information"

When people answer "poor schools," this does not tell us how or why they are poor. Specifically what do they mean? "Taxes too high." Are they referring to local, state, or federal taxes? School taxes or other types of taxes? "Not enough information," are they referring to curriculum, local schools, teachers, or what? Answers such as these do not really help us discover the needs of the public. They should have been followed by a further probe as illustrated in the next section.

Another difficulty stems from the way in which an answer to an "open-end" question has been recorded. Although we know you cannot hope to record every word of the respondent, there is a danger in abbreviating.
If you have found that the answer you have recorded does not specifically come to the point, repeat your answer to the respondent in the manner of asking what? how? or why do you make this statement? Again, this is probing, but we need the specific answer from the public.

**Probing**

When answering a question, many people will tend to give answers which are extremely general, vague, and open to almost any type of interpretation. As an interviewer, the most important skill you can develop is to avoid these answers—not to accept the vague, the irrelevant, or the ambiguous.

The "Probe" is a technique which should be used as a method to "draw out" your respondents, first by convincing them that you are serious about your interest in their opinions, and secondly by showing them that you want as much information as they can give you. We usually indicate on the questionnaire or in the bulletin which of the questions require probing.

A probe is a question used by the interviewer to gain further information. Good probing questions are:

- What do you mean by that?
- Are there any other reasons why you feel that way?
- Could you give me an example of what you mean?
- Could you go into that a bit more?
In the illustrations below you will note that you indicate probing by marking a "P" with a circle around it. This will prove to us that you have tried to obtain as complete and meaningful an answer as you felt possible.

Illustration 1 (Poor Interviewing)
"What do you think is the MOST important problem facing the country today?" Financial

In the first illustration we show a "one-word" answer with no evidence that any probing has occurred. The answer, as you see, is so "sketchy" that we cannot possibly determine what the respondent meant.

Illustration 2 (Good Interviewing)
"What do you think is the MOST important problem facing the country today?" Financial, The national spending

Illustration 3 (Excellent Interviewing)
"What do you think is the MOST important problem facing the country today?" Financial, Inflation, It's making the cost of living go up where I can't afford things my family needs.

In Illustrations 2 and 3 you will notice the improvement in the information given when the interviewer was not satisfied with a "one-word" answer. You will notice that these two respondents initially also gave the same answer, "Financial," that appears in Illustration 1, but as the
probe marks indicate, the interviewer subsequently received complete and specific answers.

The important fact to remember is to lead the respondent away from the general to the specific. At the same time, every effort must be made not to influence the answer in any way. All of the "probe" questions must be absolutely neutral.

The second set of illustrations show how proper probing might produce different and even opposite meanings.

Illustration 1
"What do you think is the MOST important problem facing this country today?" Integration

Illustration 2
"What do you think is the MOST important problem facing this country today?" Integration The government has no right to interfere. Southern States should be allowed to make own regulations.

Illustration 3
"What do you think is the MOST important problem facing this country today?" Integration It is giving up a black eye in the world. We are all equals and have to treat everyone as an equal.

It becomes quite evident now that the "one-word" answer does not reveal to us the exact meaning of the respondent's attitude toward integration. Only further probing can prove where he stands on an important issue.
Vital Information About Respondents

In addition to obtaining people's opinions, it is essential for cross-sectional purposes to have certain vital information about each person interviewed. You will find questions at the end of the questionnaire where we want you to record the following information.

Education

The following question is usually used to ascertain information about education: What was the last grade or class you COMPLETED in school?

( ) None or grades 1-4
( ) Grades 5, 6, 7
( ) Grade 8
( ) High school, incomplete (Grades 9-11)
( ) High school, complete (Grade 12)
( ) College, university, incomplete (Less than four years)
( ) College, university, graduated (Four years)

a. We want you to record the last grade that the respondent has attended in school. If he has gone to college, record the full name of the college or colleges attended.
b. "Technical, trade, or business school" should be checked if a person, after having been graduated from high school, attended a business college, technical institute, secretarial school, such as Drake's Business School, Dade County Technical Institute, Barber College, etc. If a person has attended a nursing school that does not grant a college degree, this category should be checked. This will include most nurses, since the majority do not go to a college for their nursing education.

c. If a person has not been graduated from high school but has attended a technical, trade, or business school, the last grade he attended before entering technical, trade, or business school should be checked.

d. "College, incomplete" should be checked for people who have been graduated from a junior or two-year college or who have not finished the regular four-year college course of study.

e. "College, graduated" should be checked only if a person has received a degree from a four-year college.
The Head of the Household

Who is the head of the household? In most households where a man and wife live either alone or with children, the man should be considered the head of the household. This designation is dependent upon the following considerations:

a. The Sex of the Respondent. Traditionally, the head of the household has been male.

b. Home Owner or Renter. Usually the house or apartment is owned or rented by the head of the household.

c. Means of Support. The head of the household is usually the Chief Wage-Earner, that is, he provides the primary means of support for the household.

d. Regarded as Such. The head of the household is that person in the household usually regarded as the head of the household by the other members of the household.

However, not every household is composed of a husband and wife. There are other living situations which involve the unmarried, the widowed, etc. To enable you to see who usually is considered the head of the household in untypical as well as typical households, we have prepared examples. An asterisk is placed by the head of household.
Household No. 1
*John Smith - Husband, Father, Home Owner
Mary Smith - Wife, Mother
Jill Smith - Twelve year old daughter
Jane Smith - Nine year old daughter
Bill Smith - Six year old son

Household No. 2
*John Jones - Husband, Home Renter
Mary Jones - Wife

Household No. 3
*Mary Brown - Widow, Mother, Home Owner
Cindy Brown - Twenty-two year old daughter
Joel Brown - Twenty-one year old son
Note: Although Mary Brown is here designated as a widow, she would still be the head of the household if she were divorced or separated.

Household No. 4
*John White - Husband, Home Owner
Mary White - Wife
William White - John White's retired father
Household No. 5

*Barbara Lake - Roommate
*Judy Green - Roommate
*Carol Good - Roommate

Note: These three girls share an apartment and living costs. Whichever one is interviewed should be designated as head of household.

Anyone living by himself, of course, is considered the head of the household. Any wife supporting her husband because he is an invalid is head of the household. Husbands who are being supported by wives while they go to school should, nonetheless, be considered heads of households, as should husbands of working wives who are in the armed services.

Occupation

We will want you to obtain the occupation of the respondent. The following question is usually used to ascertain information about occupation.

"Could you tell me the kind of business or industry the CHIEF WAGE EARNER (Head of Household) in your immediate family works in and the kind of work he does there?

Kind of Business __________________________________________
Kind of Work __________________________________________
**Recording the Occupation**

The occupation question is designed to obtain accurate occupational information. The first part of the question asks for the **Kind of Business** for which the head of the household works.

This means the kind, not the name of the business. The businesses described below are bad examples followed by good examples of the kind of information we want you to obtain.

<table>
<thead>
<tr>
<th>Kind of Business</th>
<th>Bad Example</th>
<th>Good Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chevrolet Cars</td>
<td>1. Automobile Assembly Plant</td>
<td></td>
</tr>
<tr>
<td>2. Acme Stores</td>
<td>2. Food Market</td>
<td></td>
</tr>
<tr>
<td>3. Jones and Smith, Inc.</td>
<td>3. Building Contracting Firm</td>
<td></td>
</tr>
<tr>
<td>4. Johnson and Johnson</td>
<td>4. Baby Powder Manufacturer</td>
<td></td>
</tr>
<tr>
<td>7. Hudson Company</td>
<td>7. Paper Cup Division of Paper Company</td>
<td></td>
</tr>
</tbody>
</table>
Secondly, the question asks for the kind of work that the head of the household performs. Many people have difficulties in describing their work. Consequently, they may rely on job titles which are meaningless to us. Thus, a probe, such as: "Can you describe the kind of work you usually do and how you do it?" is often necessary.

The examples recorded below represent poorly recorded and well recorded answers to this question.

<table>
<thead>
<tr>
<th>Kind of Work</th>
<th>Bad Example</th>
<th>Good Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assembly line</td>
<td>I inspect the finished cars' electrical systems.</td>
<td></td>
</tr>
<tr>
<td>2. Meat department</td>
<td>I am the person in charge of the &quot;walk in&quot; ice box and freezer.</td>
<td></td>
</tr>
<tr>
<td>3. Laborer</td>
<td>I am a brick mason.</td>
<td></td>
</tr>
<tr>
<td>4. Officer</td>
<td>I am vice president in charge of public relations.</td>
<td></td>
</tr>
<tr>
<td>5. Businessman</td>
<td>I am a stockbroker.</td>
<td></td>
</tr>
<tr>
<td>6. Executive</td>
<td>I am an industrial engineer.</td>
<td></td>
</tr>
<tr>
<td>7. Scientist</td>
<td>I am an electrical engineer.</td>
<td></td>
</tr>
<tr>
<td>8. Farmer</td>
<td>Farm manager (but not owner).</td>
<td></td>
</tr>
<tr>
<td>9. Civil servant</td>
<td>Attendant in mental hospital.</td>
<td></td>
</tr>
</tbody>
</table>
Occasionally you will encounter situations where the head of the household is unemployed or retired. In such cases, record the occupation of the head of the household before he stopped working, for example, unemployed carpenter, retired dentist, etc.

If you encounter a household where a widow is living alone and she is unemployed, record "unemployed widow." In addition, try to obtain the deceased husband's occupation.

**Age**

Most people will tell you their age without hesitation. In the event that a person refuses to tell you, estimate it. Indicate estimates by the letter "E" as follows: 65-E. If the respondent should give you a "coy" answer such as "I'm over twenty-one," don't write this in - make the best estimate of the respondent's actual age that you can.

**Sex and Race**

At the conclusion of the interview you should indicate the sex of the respondent and his race.

You will find the following categories provided for identification of sex and race:

( ) White man    ( ) Negro man    ( ) Other non-white man
( ) White woman  ( ) Negro woman  ( ) Other non-white woman
In the "white" categories you will place all persons who appear to be white. You should be sure to classify Puerto Ricans and Mexicans in this classification. In the "Negro" categories you should place all respondents who appear to you to be Negroes. In the "other non-white" categories you should place all respondents who are of Asian descent, American Indians, and mixtures of these other races.

You should make your classification on the basis of your observation. Do not ask a person his race.
APPENDIX C
For illustration purposes all fifteen areas are shown as being of equal size. The three subareas within the fifteen area boundaries represent all forty-five voting precincts of Arapahoe County. This can also be termed a modified "grid" design.
BIBLIOGRAPHY
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