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Problem School districts need information on how to better communicate with voters because budgets are being defeated. Budgets are growing larger as schools require an increasing level of financial support to respond to societal changes.

This research focused primarily on the published school budget because in the state of Oregon the present basis for communicating with voters is primarily through the school budget.

The study attempts to determine:

- (1) how the present and modified budget format were used by undecided voters.
- (2) if it was possible to identify the undecided voter by common characteristics, and attitudes toward education and school expenditures.

(3) if the typical undecided voter possesses a common value structure which will provide school boards with clues for improving communication procedures.

Methodology Two Likert type attitude scales were generated and administered along with the Rokeach Value Scale to 358 subjects who were identified as potentially undecided (information seeking) voters by previously published research.

The attitude scales were designed to identify those voters who were undecided because of conflicting attitudes concerning the need to improve schools and the need to avoid high taxes. Research has indicated that people holding conflicting attitudes will be highly receptive to information which can be used to resolve this conflict (dissonance).

The 28 subjects with conflicting attitudes were identified by the initial administration of the two attitude scales and three weeks or more later were interviewed, given two different budget summary formats, asked to answer questions on the content of the budget and take the attitude tests a second time.

Findings (1) The more graphic budget format did not provide significantly more intelligible data on the school budget. (2) Information communicated by the traditional budget format and a graphic variation of that format did not change the attitudes of the undecided voters. (3) The rankings of selected values were not correlated with the

attitudes of subjects. (4) The undecided voters were found to possess a number of common characteristics. The undecided voter has a positive attitude toward the schools, is more often female than male, is older than the average voter, has fewer children in school and uses the newspaper as a primary source of school information. (5) In cases where the differences between the attitudes were reduced, this reduction did not create a more positive attitude toward education or school expenditures.

Conclusions The present budget format is not an effective communications device. Undecided voters attitudes toward education were more positive than those of the general population used in the study. Data may be better transmitted by a partially graphic budget format, although the study showed that the data is not a significant factor in the voter's decision on the school budget. It was found that the undecided subjects were polarized in terms of their values structure. One group put a high value on freedom and equality. For the other group, the values had little significance.

Implications School districts need to:

- (1) move toward program budgeting in order to answer the taxpayer's questions about cost effectiveness.
- (2) provide voters with answers regarding the effectiveness of the district's programs.

Cognitive Dissonance and Voter Behavior
Toward School Budgets

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COGNITIVE DISSONANCE AND VOTER BEHAVIOR TOWARD SCHOOL BUDGETS

I. OBTAINING FINANCIAL RESOURCES FOR EDUCATION

Measuring the Effectiveness of a Budget

The problem of this study was threefold. First, it was an attempt to discover the effectiveness of the present, prescribed school budget summary format in communicating information to and affecting attitudes of undecided voters. It was an attempt to answer such questions as:

Is the traditional budget summary a salient decision making factor for a significant segment of undecided voters?

Would the present breakdowns of proposed expenditures become more intelligible to a significant segment of undecided voters if they were presented and compared in graphic form?

If a voter felt more confident of his ability to understand and interpret a published budget summary, would he have a more positive attitude toward supporting his schools?

What are the fundamental value questions which should be answered for a significant segment of undecided voters and can they be determined by the manner in which budget information is presented?

These have become important questions for school boards and administrators for two reasons:

(1) The growing tendency of Oregon voters to reject all proposals for increasing, or often even maintaining, per pupil expenditures.

(2) The fact that in Oregon, outside of the actual statement on the ballot, the budget summary is the only piece of information about local school district financial policies required by law to be presented to the public. ORS 294.421 states that the publication of the school budget summary shall take place "to enable the public, taxpayers, and investors to be apprised of the financial policies and administration of the municipal corporation in which they are interested."

During 1971 voters rejected 22% of the school tax levies proposed in Oregon and only 25% of the registered voters in the state participated in the elections. During the same period less than one half of the school construction bond elections held in Oregon received voter approval. Serial levies for the financing of school construction also suffered the same fate.

As a result of these defeats at the polls much effort is currently being directed toward the development of new techniques for observing, analyzing, and predicting voter behavior, in order to help school districts do a better job of influencing local public opinion and persuading local voters to pay the costs of high quality educational programs.

Perhaps one of the most massive and well-organized efforts in the Pacific Northwest was launched during the past year in the State of Washington by the Special Committee on Revitalizing Elections (SCORE). It was backed by the Washington Superintendent of Public

Instruction, and other groups both directly and indirectly connected with education in that state.

One of the six objectives of SCORE was "gathering and analyzing existing public opinion survey and voter behavior research information," ultimately packaged in the form of a booklet, "Public Opinion, Voter Behavior and School Support," by C. Montgomery Johnson (Johnson, 1971: pgs. 3, 52, 55).

Johnson states that numerous local district survey findings allow several general conclusions to be drawn:

No matter how well informed a person actually is, if he feels informed, the odds are better that he will support the district schools.

Persons who believe they have easy access to information tend to be more enthusiastic about supporting their schools.

When upward of 50% of the persons interviewed in a school district survey feel they are only informed "about average," the district is going to have troubles gaining sufficient voter support for its special levy propositions.

Since the public opinion surveys conducted within local school districts in the state consistently show that most persons gain most information about their school through the local newspapers, it is obvious that heavy reliance must be placed upon the newspapers to affect election day turnout. What is not so obvious is the effect that newspapers have on different subscribers.

It therefore seems obvious that local school boards, and administrators need to know more about the validity of their most basic instrument for presenting information to the press, and through the press to the voters.

The type of information required, and the manner in which it must be presented in the published Oregon Budget Summary, is typical of traditional accounting reports -- well organized and logical by accounting standards. In Oregon the income and expenditures in a school budget are normally detailed in accordance with standardized procedures recommended by the United States Department of Health, Education and Welfare to the State Departments' of Education.

Little research has been done in the area of testing whether reporting methods originally designed by accountants for those interested in school district bonds as a financial investment, are adequate when carried over into the field of public relations and used to persuade voters interested in how their taxes will be used to educate children.

The wisdom of this has been challenged, however, by Brown (1968), who evaluated some current and proposed external reporting procedures of accountants and found them inadequate, and by Bloomberg and Sunshine (1963: pg. 92), who found that voters would like to have a school budget divided into four distinct segments with a descending order of significance:

- (1) Expenditures directly related to the teaching of children.
- (2) Expenditures for support services used in the teaching of children.

- (3) Expenditures for new programs and new staff.
- (4) Expenditures for community service programs.

Identifying the Undecided Voter

In order to address the problem of budget format and its effect on voter behavior, it was first necessary to identify those voters least likely to have consistently strong prejudices for or against either their public schools or the amount of their taxes. The search for such persons was predicated on the assumption that voters at the extreme positive or negative ends of such an attitude continuum would not be impressed by information presented in a budget, or anywhere else, unless it reinforced their attitudes.

Current studies which have been reviewed and synthesized by Johnson (1971: pgs. 8, 9) indicate that:

there are many aspects of voter behavior which are predictable. For example, it has been found that:

The best single indicator of how a person will vote in a levy election is his vote in the preceding election . . .

Farmers tend to be the most satisfied with schools as they are, and consistently produce the highest percent of negative attitudes toward change and toward support of levies of any working group . . .

Only retired persons as a group are found ordinarily to produce a higher percent negative vote on school propositions than farmers as a group . . .

Women are much more inclined to want information about schools than men, are more likely than men to think that schools need additional financial support, have stronger feelings toward specific school activities than men, are more persuasible than men, and consistently vote more favorably than men on school measures in local special elections . . .

Those people whom school supporters and educators must seek out in each community are those "traditional, socially responsible personalities" whose characteristics include tendencies to work for the team rather than for self and insist that people should vote and should participate in community activities.

The additional question this study sought to answer, therefore, was: Could a segment of the open minded voting population be defined and described in terms of attitudes, values and other demographic characteristics?

The problem needed solving not only for the purpose of identifying a population who could be used to test budget effectiveness but in addition, identifying a segment of the voting population most open to persuasion.

Analyzing the Factors Which Might Affect the Undecided Subjects' Decisions on a Budget

There are a number of theories related to voter behavior in the fields of politics, psychology, and communication. These theories are now being used by a small number of individuals planning educational monetary proposals which are to be submitted for public review.

These individual theories are beginning to emerge as significant factors in administrative behavior, however, practitioners in the field are searching for a theory with the capability of generalizing voter behavior under a wide variety of conditions.

Toward this end the study will analyze a number of factors other than budget effectiveness and defining the undecided voter. These additional factors and the two primary factors were considered in relationship to existing theories to determine significant relationships that may have been uncovered as a result of this study. These factors are:

- (1) The age of the subjects.
- (2) The number of children at home and going to school compared to the total family size of the subjects.
- (3) The values of the subjects.
- (4) The attitudes of the subjects.
- (5) The level of participation in budget elections in the past.
- (6) The sex of the subjects.
- (7) The experience of the subjects in public or private schools.

Problem Statements

A summarization of the problems to be studied is detailed in the following statements.

1. Is it possible to identify the salient decision making factors used by voters possessing cognitive dissonance concerning school financial issues and educational programs?
2. Does the dissonant voter's possession of incompatible attitudes toward education and financing of educational programs indicate a significant pressure to initiate information seeking behavior?
3. When alterations are made in the published Oregon Budget Summary format, will the altered format measurably aid in the creation of a more favorable attitude toward education and the financing of education programs in subjects possessing a high level of cognitive dissonance on the two topics?
4. Will alterations in the published portions of the Oregon school budget summary format provide more intelligible financial data for subjects possessing cognitive dissonance?
5. If a voter possessing high levels of dissonance is provided with a higher level of intelligible information will the higher level of information create a reduced level of attitude inconsistency?

Hypotheses

1. Data presented in a partially graphic budget summary will communicate more effectively than data presented in an entirely numerical budget summary.
2. A partially graphic budget summary will significantly reduce dissonance and do it more effectively than an entirely numerical budget summary.
3. Individuals exposed to the same information who possess a high equality value ranking will achieve greater dissonance reduction than those individuals who rank the equality value low.

4. There is a significant difference between males and females in the amount of information required to reduce the level of incompatibility between the two attitudes. The two attitudes are attitude toward education and attitude toward providing money for schools.

5. The reduction in the level of the incompatibility will provide a more positive attitude toward providing money for schools.

6. A more positive attitude toward education will be achieved when the magnitude of the dissonance is reduced.

Null Hypotheses

1. There is no significant difference in the amount of information communicated by an entirely numerical budget form as opposed to a partially graphic budget form.

2. There is no significant difference in the amount of dissonance reduction as a result of exposure to either a partially graphic or an entirely numerical budget summary form.

3. Individuals exposed to the same information with high freedom and equality terminal values will not significantly reduce the level of dissonance more than those who rank equality low as a terminal value.

4. There is no significant difference between males and females in the amount of information required to reduce dissonance.

5. A significantly more positive attitude toward providing money for educational expenditures is not produced through a reduction in dissonance.

6. A significantly more positive attitude toward education is not produced through a reduction in dissonance.

II. THREE MAJOR COMPONENTS OF THE RESEARCH PROGRAM

Effectiveness of the School Budget Summary

Budget Effectiveness as Viewed by the Voter

Bloomberg and Sunshine (1963: pg. 92) indicate that "when people consider paying more taxes, the shift in their budgetary frame of reference reflects an imagery of the 'package of functions' for which money may be spent." Therefore, it seems only prudent to identify these packages of functions as separate entities for voting purposes so that voters can pinpoint their areas of concern. This has been done with the State of Oregon's newly proposed budget format, but not with the voting procedure, though there has been some talk of such a procedure being tried in Oregon at some time in the near future.

Financial Reports as a Feedback Device

D. M. Cook (1968), in an attempt to determine the impact of accounting data utilized as feedback, simulated a business operation for twelve quarters with students as subjects. Three groups were utilized. The first group received financial reports at the end of each quarter, the second received reports at the end of each fourth quarter and the third group received no report until the end of the simulation project.

It was determined in the simulation that the attitude of the participants, as measured by their interest and satisfaction, was directly related to the frequency with which performance reports were provided.

The above is significant to the degree to which the voter feels himself to be a relevant partner in educational operations and to the degree to which he views the published budget summary as a form of financial reporting.

Goal of Financial Reporting

One of the most precise statements regarding the external reporting of financial data has been made by Bedford (1968: pgs. 578-579). "Thus, to be effective, accounting reports must both transmit appropriate information and present the information in such a way that readers understand it." Among the several ideas which Bedford feels should be put over in public reporting is "recording in symbolic form, in any way possible, these significant activities."

Ecton (1966), in attempting to develop a conceptual model which would conform to a criterion for external reporting, determined that the singular most important factor in the multiplicity of accounting theories is that each theory could be reconciled to all others. Therefore, if theorists considered and continuously evaluated the relation of professional performance to the need for financial information of those served by the profession of accounting, that criterion would be

fulfilled. The success of an accounting program is based upon the degree to which performance fulfills needs. Data used in the decision making process should be provided in standard formats which utilize methods of presentation that fulfill the voter's informational needs.

The major purpose for changing the presentation format of the budget summary is to show the relationships of the information elements of a budget in a more concrete form.

Flores (1959) found that graphs are generally used whenever numerical data needs to be presented in concise and clear form. In an analysis of 25 standard forms of graphs he found that in estimating totals, bar graphs were superior to line graphs and that segmented graphs were easier to interpret than group graphs. He also found the elements which originated at the bar line were decidedly easier to interpret than those which did not. A third conclusion was that the grouping of bar graphs was highly superior to segmented graphs for estimating quantities of two different portions in the same presentation.

These findings aided in the construction of the illustrated alternative budget summary format which utilizes bar graphs, segmented graphs and some of the traditional numerical data.

Present Budget Summary

The present budget format used in this study was distributed by the Oregon State Department of Education. It was published in 1970 as part of an example of a school district budget in a publication entitled "Effective Budget Building, a Guide for School Districts and Community Colleges." The material was taken from School Business Management Bulletin Number 69-1, dated November, 1969. It is an example of the budget which is published annually by most Oregon school districts in the local newspaper with the largest circulation. The published portion of the budget is made up of pages 472-1, 472-10, and 472-11, all of which were revised in October 1969. The first of three pages is entitled the Financial Summary which is a capsule review of the total budget. The second page is a budget revenue summary of the General Fund, which is the largest fund in most school districts. This page shows the sources of revenue utilized in providing the necessary operating capital. The third page is entitled Budget Summary - General Fund, and makes quite explicit the level of expenditure made by this fund in the past and anticipated expenditures in the future.

Altered Budget Summary

The new summary proposed by this study has essentially the same three pages of information, however, it has omitted certain

figures which it is felt are not relevant to most voters. The summary shows how much is being expended during the current fiscal year, and how much it is anticipated will be spent during the coming fiscal year.

With a percentage figure showing the anticipated increase in expenditures, it does not show for example, how much of the General Fund is within the 6% limitation as is illustrated by figures provided on lines 13, 15, 22 and 23 of the present format. These figures were not provided because it is felt that very few Oregon voters understand the 6% statutory limitation placed upon municipal budgets in Oregon.

Another figure not put into the new budget summary format is that shown on lines 11 and 20 of Form 472-1 in the present budget. The number is an estimation of the taxes which are to be levied but not collected during the current year. This figure is an estimation of an anticipated amount. It is a figure which must be taken into consideration by the local assessor when computing school taxes, but represents data which is of little concern to the voter. It is an estimate of the quantity of delinquent taxes. The total taxes to be levied were included in the new budget format as well as the old. The only difference between the two formats being that the total taxes for each fund are more specifically set forth in the new format than the old.

The sources of the General Fund dollar are illustrated in the new format through the use of the pie chart as illustrated in Appendix XI. The pie chart divides the tax or income dollar into percentages

and shows, by sources of income, the four major sources of income and other smaller sources of income that were grouped under the title of income from other sources. The four major sources of income are (1) cash on hand, (2) income from the local school district tax, (3) income from the state government, and (4) income from the federal government.

In the present budget there is an item entitled "district tax required to balance the budget" which was eliminated from the new budget format. The reason for its elimination was that this is strictly an accounting term. It was felt that the term had little meaning and by using the pie chart showing the distribution of tax dollars by source of income, the information could be traced directly across on the second line of the new budget format. Another reason for utilizing the pie charts and showing the distribution of the income dollar was that the quantities utilized in current school district budgeting are so large that many voters cannot adequately conceptualize the comparisons between the quantities. Only comparisons on a graph can adequately describe the distribution of the expenditure dollar. The division is consistent with the finding of Bloomberg and Sunshine.

The reason for dividing the format into four programs was an attempt to coincide with research findings concerned with voter perception of budgetary functions (Bloomberg and Sunshine, 1963: pg.92).

This research has shown that the voter visualizes the expenditures of funds in these four general areas and makes decisions based upon this information. The goal of the new budget format is to provide precise information to the voter in a manner consistent with his perception of school budgets.

In the new format this expenditure dollar is broken into four basic areas. They are (1) basic school operations, (2) auxiliary services, (3) new positions and programs and (4) community services. The basic program includes all services that are directly related to the instruction of school age children and those support services which are normally conceived of as being necessary to that function. This would include the instructional costs, administrative costs, operation and maintenance of facilities, fixed charges such as insurance costs, the debt service and principal which are required by law, payments to other school districts, and provision for an emergency fund in case of unforeseen financial needs.

The second area, that of auxiliary services, includes pupil attendance, health services, transportation, food service, capital outlay and transfers to other funds.

Area three, where there is no expenditure shown on the new budget, is that of new programs and positions. This is not shown because the study was unable to determine from data on the present

budget form those amounts of money which are to be spent on new programs and positions.

The fourth area is that of community services, which includes wages and other expenses for both student body and directly provided community services.

Finding Undecided Voters by Sampling Attitudes

Dissonance Theory and the Undecided Voter

Voters at the extreme positive or negative ends of the attitude continuum won't be affected by information presented in a budget (Sweigert, 1964). Therefore, it was necessary to identify those voters who generally do not make up their minds on school issues without considering information on both sides. Festinger (1964: pg. 26) identified a segment of these information seeking voters as individuals in a dissonant condition.

The model shown below illustrates a voter who is undecided (re: believes in improving education, but also wants to keep his taxes down) and the two ways in which the voter can resolve this conflict.

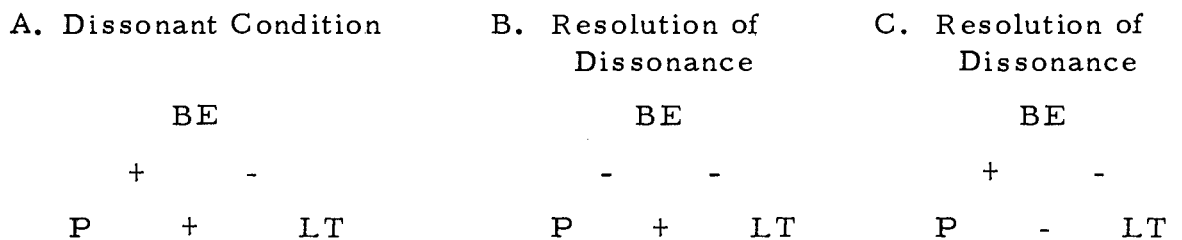


Figure 1. Models of Dissonance and Dissonance Resolution

In this model "P" represents the taxpayer, "BE" represents better education and "LT" represents lower taxes or a desire to keep taxes at a minimum level.

The three drawings are models of conditions where the following interrelationships exist. In "A" the dissonant condition exists in which the taxpayer supports a better educational program but also believes that taxes should not be increased. The condition is uncomfortable when the voter is told that taxes must be increased to maintain or increase the quality of education.

Condition "B" illustrates the taxpayer who has chosen to sacrifice a higher or equal quality of education for lower taxes.

Condition "C" illustrates the taxpayer who has chosen to pay higher taxes to increase or maintain the quality of education.

Undecided voters that are found to be in a dissonant condition as described in model "A" and have indicated in the past a strong tendency toward sacrificing the quality of education for lower taxes were used in this study. The undecided voter's reactions to the budget summary were investigated using their attitudes as the comparison device.

Selection of the Dissonance Subject

The design called for presenting a group of undecided voters with statements on two subjects that are frequently incompatible and

therefore create a state of tension. The undecided voter was to be presented with two forms of a single variable, the budget summary. The ability of each of the budget summaries to reduce the tension was to be measured. The design was also concerned with finding out the effectiveness of each form of the budget summary in the decision making process.

The measurement of attitude change required that the pre-treatment strength of attitudes had to be ascertained. However, prior to this the attitude scales which were to be used to identify the undecided voter had to be formulated.

Selection and Creation of Devices to Define the Target Population

The attitude of others toward education had been measured before and several scales were in existence that had identified this attitude quite well in the past. However, educational concerns of the past were recognized as not necessarily valid for the present. With the current validity in mind, a new Attitude Toward Education scale was deemed necessary for use in this study.

A second attitude scale was required to measure the subject's Attitude Toward School Expenditures. Several approaches to measurement of this attitude were available. It was determined that the primary emphasis should be on determining the subject's attitude toward

paying taxes to support the schools. This emphasis was chosen because the property taxes have been the primary source of revenue for Oregon schools.

Scaling Methodology

There are three statistically reliable and widely recognized methods in existence by which attitudes are normally measured and they are all paper and pencil, response type tests. The first and perhaps most common method is the Thurstone Scale. The response mode in this methodology is agree or disagree with the statement. A statement is assigned a weighted value by a group of judges and the strength of the response is based upon the mean of these weighted values. This method was rejected for use in this study as it provided little latitude for the expressions of the individual respondent.

The second method which could have been used was Osgood's Semantic Differential test. In this methodology the respondent places the attitude object at some point on a continuum between two polar adjectives. This method was rejected as it did not lend itself to statistical techniques concerned with item analysis.

The third and accepted method, the Likert Scaling Technique, uses statements about the attitude object. The statements are evaluated by the respondent with possible response categories of strongly agree, agree, undecided, disagree, and strongly disagree. If the

statement is a positive statement, the strongly agree category is given a score value of 4.00, agree 3.00, undecided 2.00, disagree 1.00, and strongly disagree 0.00. If the statement is negative the values assigned to the categories are reversed.

Since the Thurstone Technique of Equal Appearing Intervals was the original device for measuring attitudes, all other scaling techniques must be evaluated against this technique. In Thurstone's theory of Comparative Judgment (Edwards, 1957: pg. 21) he states that for each and every stimulus received by a human being, there is a process started which has a product. That product, when it is an attitude, is a strength of feeling that is normally distributed in a population. The strength of feeling is very low or very high in small percentages of the population. Most of the population has feelings which are neutral, not extreme. This research focuses upon feelings which are supportive of education and feelings which are non-supportive of school taxes.

In contrast to the Thurstone technique there is the methodology developed by Rensis Likert. In Likert's scaling concept the more favorable the individual's attitude toward the attitude object, the higher his score for the item.

There were five categories represented as reactions to a statement. These values have been previously stated. This method is called the Method of Summated Ratings, as the scores assigned to each

response are summed and averaged, and this score represents the degree of favorableness toward the attitude object.

The Likert methodology was evaluated by Edwards and Kenney (1946) and found to have reliability coefficients as high or higher than those obtained with the use of the Thurstone technique. The Likert form was selected for use in this study because of its high reliability and items in a Likert Scale are easier to validate than those in a Thurstone scale.

Comparability of Thurstone and Likert Scaling Techniques

In the original comparison carried out by Edwards, 25 items were simultaneously used in the construction of Likert and Thurstone scales in an effort to compare the reliability of the two scaling techniques. The Thurstone and Likert scales had a .72 coefficient of correlation, which when corrected for attenuation became .79 (Edwards and Kenney, 1946: pg. 167). The data indicate that the ordering of subjects on a psychological continuum of favorable to unfavorable attitudes would lead to scores that are virtually equivalent for the two scaling techniques. The inference is that though the Likert techniques can measure the entire psychological or attitude continuum, it cannot make any statement regarding the equality of the interval spacing.

The construction of the statement is a difficult problem using any of the attitude scaling techniques. The crucial issue, according to

Guttman, is the ability of a statement to measure a single attribute or attitude object. As has been noted above, he refers to this as the unidimensionality of an item (Guttman, 1944).

Likert Scale Creation

Several hundred items related to Attitude Toward Education and Attitude Toward School Expenditures were written for the two Likert scales. These items were then submitted to a number of criteria as specified by Edwards (1957: pg. 13-14) and set forth in Appendix I.

It was necessary to determine which of the 73 surviving statements, 35 on school expenditures and 38 on education, would best discriminate between individuals who possessed positive and negative attitudes toward education and school expenditures.

In an effort to determine the statement's ability to discriminate between the negative and the positive individual, the materials shown as Appendixes I, II, and III were distributed in several Willamette Valley communities through the League of Women Voters and Rotary Clubs. The League of Women voters accepted 55 questionnaires and the Rotary Clubs accepted 138. Of the 193 scales distributed, 114 were returned and used in the validation of the statements.

The creators and validators of the Likert Scaling Technique have stated that over 100 responses are required in order to determine the ability of each item to discriminate between the most positive and

most negative individuals (Edwards, 1957: pg. 153). Means scores were computed on each subject's responses to the two groups of attitude statements.

The highest 25% of the means scores on each item (most positive) of the 114 subjects on the two attitude dimensions were determined. The lowest 25% of the means scores on each item (most negative) of the subjects on the two attitude dimensions were also determined.

Comparisons were then made between the lowest and highest 25% means scores. The comparison was made by using the "t" test. When the "t" test score was 1.75 or greater on any statement, this indicated an adequate level of discrimination between the high and low attitude individuals. The results of the validation on each of the 73 items is shown as Appendices V and VI. Six of the 38 items related to attitude toward education had inadequate "t" values, and were rejected for inclusion in the final scale. Three of the 35 items on the attitude toward school expenditures were rejected because of inadequate "t" values. The remaining items were ranked by "t" value and the 22 items on each scale with the highest "t" values were selected for use in the final scales.

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\Sigma(X_H - \bar{X}_H)^2 + \Sigma(X_L - \bar{X}_L)^2}{n(n - 1)}}$$

Figure 2. "t" Test for Differences in the Means Scores (Edwards, 1957: pg. 153)

The items included in the two scales had excellent current validity as they are related to items of present interest to the general public on the topics of education and school expenditures.

Defining the Dissonant Voter

The belief that inconsistency is painful motivated Festinger to set forth the conditions of consonance (consistency) and dissonance (inconsistency) in cognitions in his "Theory of Cognitive Dissonance," first stated in 1957 (Festinger, 1964). His experiments have shown conclusively that in the rating of the attractiveness of alternatives, once the decision is made about how one feels, the attitudes move in a direction consistent with the decision.

The application of this concept leads to the conclusion that if a voter decides against a tax levy to support an educational budget but feels positively toward educational programs, his attitude toward education will become more negative in order to justify his decision which was originally made on the basis of money.

If a person holding inconsistent attitudes can be identified prior to making a decision on the school budget at the polls, perhaps a sense of familiarity with the budgeting procedures of the public schools will cause a voter to decide in favor of a tax levy to support an educational budget. Could the inconsistency be relieved in a manner that would create a more positive attitude toward education? Can the basic values which prompt the decision to resolve dissonance in favor of less taxes be identified?

Sources of Dissonance

McGuire (1966: pg. 7) stated that there are four major patterns which cause dissonance.

The first pattern is the result of the logical shortcomings of the human cognitive apparatus. For some subjects the logic of a budget summary may not be recognized.

A second pattern causes an individual to assume mutually inconsistent positions. In this study the inconsistent positions were spelled out in chapter one. Thus, the desire for a better educational program and an unwillingness to pay for the program makes the positions occupied by many members of the community inconsistent.

The third and most often encountered cause of inconsistency in our dynamic society is the environmental change that leaves a person with an ideational structure of a former period which is not consistent

with present day reality. In Oregon, the property taxpayer may have purchased his home or business at a time when the school taxes and valuations were low. With the increasing scarcity of land, inflation in real estate values and present high cost of construction, the selling value of property has measurably increased. The taxpayer who has not changed location recently is not willing to acknowledge these increases. He views increased valuations and subsequent school tax increases as unjustified.

A fourth and most researched cause of imbalance in the laboratory, is a condition where the subject is pressured to behave in an unnatural manner.

Milton Rokeach (1968a: pg. 85) has further specified that dissonance, which he calls "belief congruence," or "incongruence," does not occur until the two dissonant or incongruent components are joined into action in the decision process.

The implication is that awareness of inconsistency in the voter does not occur until the vote is cast or the subject is asked to express a point of view. When asked to complete the attitude measurement device the subject will become aware of his inconsistent cognitions. Effective attempts to alter the position of this attitude must therefore be carried out prior to the decision if Rokeach's theory is correct.

Resolution of Dissonance

Since the inconsistency causes dissonance, we should examine Festinger's three methods of reducing conflict by altering elements in the object to which the subjects are committed (Kiesler, 1968: pg. 197-198).

1. A change in the cognitive elements related to behavior will result in either a change in behavior or a denial of the behavior.

2. The individual may alter a cognitive element related to the environment (physical or psychological).

3. Cognitive elements may be added to one or both objects. This involves seeking out further information.

By altering the budget summary format it would seem that dissonance could be reduced in light of Festinger's second or third points. In this study the second method of reducing conflict was used in the altering of the budget summary format for one half of the subjects. The third method was also utilized in the interview process when the subjects were made aware of their inconsistent attitudes and in the interview the subjects were encouraged to speak freely on a number of topics related to education.

III. REVIEW OF THE LITERATURE: COMMUNICATIONS AND ATTITUDES

The first step in this study was to measure the intensity of voter attitudes about the usefulness of education and the intensity of voter attitudes toward paying school taxes. In order to do this it was necessary to design a valid measuring instrument -- an attitude scale which sought a reaction to a series of statements about school taxes and the usefulness of schooling or desirability of a quality program.

The concept of attitude measurement was introduced by L. L. Thurstone in 1929 with his Law of Comparative Judgment. In this law he states that "for a given Stimulus 'i' there is associated a most frequently aroused or modal discriminial process on a psychological continuum"(Edwards, 1957: pg. 27). Thurstone further states that "the distribution of all discriminial processes aroused by 'i' is normal about the modal discriminial process."

The discriminial process described by Thurstone might be called exercising judgment, making value statements, or expressing attitudinal constructs. This study was concerned with attitudes held by voters toward the schools and the payment of school taxes. Attitudes held by voters were measured by reactions to statements which could be placed in any of the above three categories.

Edwards (1957: pg. 11) points out that attitude scales are constructed primarily for the purpose of obtaining attitude scores for

individuals with respect to the degree of favorableness or unfavorableness they associate with the psychological object. Some objects are easily defined and separated from other attitude objects. This isolation of one attitude object from another is referred to an object's unidimensionality, or in attitude scaling this is the ability of a scale to measure one and only one distinct attitude.

Definition of Attitudes - Five Theoretical Dimensions

McGuire has defined the attitude concept as a series of actions or behaviors that make up an attitude and when lumped together are called an attitude universe. The source of attitudes has five theoretical dimensions which require decisions (Kiesler, 1969: pg. 3).

In attempting to determine the locus of attitudes concerned with schools and school taxes we have a choice between the Gestalt and Stimulus Response (SR) fields of psychology. In the SR theory there is an assumption of sensory dominance over behavior. The dominance in the case of school taxes, which this study defines as an inherently negative idea, would cause the voter to reject all school taxes until the voter finds physical pleasure or a favorable sensory response in paying the tax, which is highly improbable. If the theory of sensory dominance were accepted, there would be little reason to attempt to change a voter's attitude toward paying school taxes. Further, "behavior is perceived as a series of reactions, each of which is

determined by the immediately preceding events in the sensory systems" (Hebb, 1961: pg. 3).

The Gestaltists feel that the locus of attitudes should be defined in motivational, emotional, perceptual, and cognitive terms. It is this definition which would accept the complex set of cognitions of which an attitude domain is constructed. The Gestaltist accepts the varying levels of intensity in the emotional response to attitude statements. He views man as a complex being with ability to overcome sensory dominance. This study accepts the Gestaltist definition of attitudes as beyond sensory dominance.

The second theoretical consideration is concerned with determining whether an attitude is either a response or a readiness to respond.

McGuire (1969: pgs. 144-147) distinguished five positions on the continuum between the polar definitions of attitudes. The positivistic or response theory (SR) recognizes 'm' antecedents and 'n' consequences for each attitude. This would mean that there are definite antecedents to the creation of an attitude, and as a result of those antecedents there are a given number of responses. If there are certain antecedent conditions present in an individual's attitudes toward paying school taxes, this would mean that the responses are predetermined. This position recognizes no mediators and is consistent with the SR theory.

The second possible approach is call paradigmatic, where a single "A" antecedent is related to a single "R" consequence in a paradigmatic manner. This condition could be exemplified by the illustration that the higher property taxes go (the antecedent condition) the fewer yes votes a school budget will receive (the response). If this were accepted as this study's view of attitudes toward taxes, there would be little need to alter the budget summary. The alteration would have no significance. The other A's and R's are defined by the relationship to the paradigmatic A and R.

In the third construct, titled mediationalist, the attitude is viewed as the mediator of socially observable reality. The attitude toward school expenditures is the filter through which all information about school expenditures is screened. This information would be classified as the observable reality of behavior, which is the response.

The fourth theory is entitled class inclusionist. It is similar to number two in that it involves two mediators, except that the mediators are more flexible concepts.

The fifth, or interactionist approach, recognizes that the mediating attitude is determined not only by the level of each antecedent "A" in insolation but also by higher order effects involving interactions among the A's. This study accepts the interactionist approach as the most applicable to this work on voter attitudes toward paying school taxes.

This study also recognizes attitude as a readiness to respond to an election, as a system waiting to be put into operation when the need arises. In recognizing the attitude as a system held in readiness the study recognizes that the attitude must be dynamic in its operation because the antecedents to the decision made by the voter are constantly changing due to experience. In using the interactionist approach, responses will become continually more complex throughout one's existence with the accumulation of new experiences. In addition, the power of the responses will be controlled to some degree by the magnitude of the antecedent experiences, regardless of the mediating variables. In this study the exposure to the budget summary format will be the antecedent experience of significant magnitude.

The third theoretical discussion considers the degree to which attitudes are organized. Disagreement regarding the degree of organization revolves around two distinct issues. The first is whether an attitude is made up of components having a certain characteristic structure. If this study accepts the positions on questions one and two, it is forced to acknowledge that there is an attitude structure, but as to the number of attitude characteristics held in common, it seems most difficult to accept the position of common characteristics and still support the dynamic nature of attitudes.

The second issue is whether or not there is a characteristic structure within several different attitudes. From social judgment theory it can be presumed that humans tend to organize related stimuli, even in the absence of standards. With recognized standards there is less flexibility and less of a tendency to utilize the same structure in forming several attitudes. It might be said that with standards there is probably less of a tendency to utilize the same structure in forming several different attitudes. This study accepts the idea that there is a characteristic structure within attitudes.

In using several community groups from areas of known voter behavior toward school taxes, the study attempted to define the standards used in those areas for making decisions about school taxes and education. The standards were measured through the use of value scales and other data.

The fourth item of theoretical interest is the extent to which attitudes are acquired through experience. Individual experience is the least discussed idea in the literature and the least controversial. However, McGuire (1968) does open the heredity versus environment issue and points out that aggression, altruism and a number of other factors can be said to be derived from a predisposition for the stated attitude through genetic selection. As he pointed out, our society by rewarding certain forms of aggressive behavior, allows selective advantage and therefore perpetuates the attitude. Providing or altering

experiences is the predominant format of experimentation at this time and the one selected for use in this study as all present scaling techniques accept this position.

Item five in the theoretical debate attempts to determine whether the influence of attitude on behavior is either directional and/or dynamic. Virtually all theoreticians believe the effect of attitude on behavior is directive. This assumption is essential if scaling is to be carried out. Scaling presumes to measure a psychological or attitude object's direction and dynamic impact. If a behavior is not directive there is no selective attribute to measure. In the same way, scaling assumes that attitudes possess a dynamic quality. By accepting Thurstone's definitions of attitude as 'a priori' for attitude scaling, we must assume that attitudes as the prerequisite for directed behavior, are dynamic in the same way that behavior is accepted as a dynamic condition.

Attitudes in Balance

All balance theory exists upon the premise that human beings value consonance or balance more than dissonance or an unbalanced condition. To test this premise Burdick and Burnes (1958) used the Galvanic Skin Response (GSR) test to measure emotional reactions to imbalance as compared to balanced situations. They found greater

emotional reaction when the subjects disagreed with the experimenter (imbalance) than when they agree (balance).

Heider's (1958) theory of imbalance relates three factors to one another in either a positive or negative relationship. He labels them "P" the perceiver; "O" one attitude and "X" the second attitude. The perceiver or "P" in this study is the voter who makes a decision on the school budget.

In this study the voter held two distinct attitudes or feelings about possible action. The first attitude was related to how the voter felt about stated educational goals.

The second attitude dealt with voters' feelings about school taxes. Heider defines relationships between each of the elements in the triad as positive. If the voter supports education and supports a positive attitude toward the payment of school taxes or expenditures, there is a state of balance. If the voter supports education and has a negative feeling about paying school taxes or expenditures there is a condition of imbalance. An unbalanced condition also results when the voter accepts the most unlikely position of failing to support education and supporting a positive attitude toward school tax levies or expenditures.

Measuring Attitudes

Heider (1958: pg. 64) points out that an object itself (e.g. budget summary) has properties which enhance or restrict its perceptibility. However, this study is also concerned with the perceptibility of attitudes.

If an attitude can be made public, then change in a person's attitudes or beliefs can be measured. If the attitude is private, any statement concerning another person's attitude cannot be trusted. If the attitude is private, it will stay that way and whatever the subject might say in public has little effect on his private attitude. The study must accept the position that attitudes are public if attitude scaling is to have validity.

Criticism of Behavioral Theories

A common criticism of dissonance theory points out that it is virtually impossible to state in quantifiable terms the magnitude of the dissonant condition. Critics of the theory point out that in order to make precise measurements of attitudes the experimenter needs a detailed idea of the subject's cognitive map in both the pre- and post-experimental conditions.

A second criticism is that in order to accurately measure the dissonance reducing effect of the item of interest, it is necessary to block out all other avenues which could affect attitude change.

The third criticism stated that individual differences affect the results of dissonance reduction experiments. Several experiments have found that the amount of dissonance which a particular cognition generates is dependent in part on the cognitive world that the subject brings with him to the experiment.

Kiesler (1969: pg. 165), in an evaluation of the balance model, indicates that the model has been most successful in exploring relationships after the fact and has seldom been used to predict relationships. If the model is used to describe conditions after the fact it is not being used experimentally, but descriptively. This indicates that the model is used more frequently to describe than to predict. This seems to be a fault of the users of the model, not the model itself.

A further criticism is that specification of particular conditions under which dissonance occurs is not apparent. Accepting the fact that this is a model, specifying the conditions under which imbalance occurs would make it a more applicable and particular model. However, the more specific the model becomes, the less this model can be used in a wide variety of circumstances.

A second criticism is directed at the term "liking," as a definitive statement of relationship. Critics feel that it is imprecise and as a part of a predictive theory needs to be made more specific.

A third point made by Kiesler (1969) and McGuire notes that there are many convenient alternative modes for reducing the

magnitude of imbalance or inconsistency. Their point is that it is virtually impossible to predict with any accuracy the mode which will be selected by the subject. Rosenberg and Abelson as cited by Kiesler (1969) have hypothesized, as has been previously stated, that the individual will select the least laborious way of reducing imbalance. This study has taken as a goal the determination of whether information presented in the budget summary is a significant source of information for decision making.

Fourthly, in balance theory there is no provision for measurement of the magnitude of the unbalanced condition. This inability is the result of researchers being unable to define a zero point. In this study there is no need to measure the zero point. Rather the magnitude of change between the pre- and post-test scores is an adequate measurement of change.

As a fifth point, and possibly the most telling, a number of researchers have labeled the basic model as a poorly defined concept, open to misinterpretation. It is incumbent upon researchers using the model to very clearly define the conceptual structure under which they are carrying out the research.

The criticism states that little attention is paid to objects which have inherently positive or inherently negative relationships. The inherently negative relationships are of concern in this study as it is generally accepted that under no conditions will a voter feel positively

about turning over the money he has earned to the schools for their use. On the issue of paying school taxes, there are no positive dimensions, simply degrees of negativeness. However, even degrees of negativeness can be arranged along a continuum.

Kiesler's final statement is positive, however, in that he feels "the theory has stimulated a great deal of thinking about cognition and cognitive consistency"(Kiesler, 1969: pg. 168). He feels that in this sense the model has been and is important to the study of attitude change. The model is used in this study because the consistency of voter cognitions is being opened to question and it is a model suitable for use in this context.

Presentation of Communications

Katz (1966: pg. 52) found that the providing of knowledge relative to an object did not in and of itself alter attitudes. He found that only when there was a felt need, a problem, only then did the individual seek to understand the universe called his environment.

Katz felt that the more relevant feedback provided the individual, where he has a number of realistic choices, the more his rational faculties will be brought into operation and create a dissonant relationship. This will in turn cause the individual to seek information to fulfill a felt need.

Osgood (1957) indicates that the more extreme a subject's attitude toward an object, the less that attitude will change in magnitude. That is, if two voters each held negative attitudes toward paying school taxes and information was communicated to them with the idea of creating a more favorable attitude toward school taxes, the magnitude of change would be greatest for the voter with the least negative attitude. Kiesler (1969) points out however, that Osgood's predictions for attitude change have seldom been tested.

Sweigert (1964) found that the sum of the strengths of the two competing response tendencies determined the strength of the information-seeking response in a pre-decision situation. In this study the example would be illustrated by determining the strength of the positive attitude toward education and the negative strength of the attitude toward paying school taxes. The greater the sum of the magnitude of these two attitude domains, the greater the magnitude of the information seeking response in the pre-decision situation. This theorem was verified in Sweigert's research. However, he also found that as value positions became more extreme there was a curvilinear relationship to an avoidance tendency. This indicates that the greater the value deviance from the norm the less the information seeking response would make itself known.

Osgood and Tannenbaum (1955) formulated a theory that deals specifically with the problem of acceptance of communications. They

pointed out that attitude change is consistently greater toward the object or concept than it is towards the communicator. Rokeach and Rothman (1965) hypothesized that the more important the source is perceived to be, the greater the change in attitude about the object or communicator. Fish (1964) sought out the most believable source of public information about schools. His study determined that the local newspaper was the most important source. The printing of the budget in the local newspaper should make the published budget most believable.

Osgood and Tannenbaum also determined in their research that when two unequally polarized ideas interact the less extreme idea becomes more extreme. Rokeach (1968) believes that polarization does not occur until a decision is made. This reinforces the need for efforts to determine the relevant sources of information utilized in making decisions and the impact of these sources.

Brehm (1962) found that high dissonance subjects show significantly more conflict reduction than do low dissonance subjects. He also found that in attempts to reduce the conflict the chosen alternative becomes increasingly attractive while the rejected alternative becomes less appealing.

According to this theory, the more often a voter casts a negative ballot on school money measure the harder it will be to alter the behavioral pattern. If information that creates a more intelligible

budget can be presented prior to the decision the negative attitudes may have less impact.

Research by Shamo (1967) indicated that in a situation where the message is both written and spoken behavior is primarily influenced by the amount of information received and not the method of transmission. These data add strength to the significance of the altered budget summary. A more intelligible format should provide more information and have a greater potential for modifying behavior.

Kiesler (1969: pg. 205) stated that change in cognition during the "post decision process involves cognitive change not unlike that of attitude change; indeed, the effects of this process may legitimately be referred to as attitude change." It is this conclusion which allows the study to equate change in strength of attitudes, as measured by attitude scales, with reduction in dissonance, as described by positive and negative cognitions related to education and money for schools.

Harvey (1965) found that greater dissonance reduction occurred in more concrete circumstances than in abstract conditions. The use of an educational budget is an abstract process and at one of the highest levels of cognition, that of inference making as classified by Bloom (1956: pgs. 62-67). This would seem to indicate that if any form of indirect experience will change attitudes, that is reduce dissonance, a more explicit and intelligible budget summary should significantly reduce the voter's dissonances.

Abelson and Rosenberg (1960) concern themselves with the restoration of consistency. They felt that the more difficult it is for a person to use a particular method to restore consistency, the less likely he is to use it. Festinger (1957) also supports this position regarding dissonance reduction.

Although this statement may sound simplistic, it literally means that the voter must be provided with easy ways to reduce the inconsistency. In the study this easy way is provided by using a more intelligible budget format, an information source that is readily available to all voters through the public media.

Sources of Attitudes and Attitude Change

Festinger believes that attitudes toward an object are derived from three major sources. The first is direct experience with the object. Most voters have direct experience in the area of money for school by paying property taxes once a year and/or their payment of the state income tax.

The second source of attitudes is indirect experience with the object, as in the case of renters whose rent goes up when taxes are increased.

Festinger also believes that we possess personality traits which mitigate against an object (money for schools). This might be expressed as the voter who wants to save all of his earnings and not

pay school taxes because he possesses a miserly personality.

Under indirect experience, Festinger lists mass media as a source of cognitions that aid in the formulation of attitudes. The budget summary is published annually in the local paper and is theoretically a source of cognitions that are used in creating either positive or negative attitudes.

Sherif and Hovland (1961) indicate that there are a number of judgmental principles related to the organization of attitudes and the conditions under which attitudes change.

They explicitly state that attitude change is a two step process. First, one makes a judgment about the perceived position taken by the communicator. In this study the voter first makes a decision about the position advocated in the publication of the school budget summary. Secondly, attitude change takes place relative to the perceived position. In considering an attitude continuum that varies from extremely positive at one end to extremely negative at the other, we must be aware of the position held by the subject, the position advocated by the communication and the direction in which the attitude of the subject moves as a result of being exposed to the communication.

The first principle as paraphrased and expanded upon by Kiesler (1969) is that when human beings are confronted by a series of stimuli, they tend to order or arrange them on a psychological dimension, even in the absence of explicit standards. This ordering of stimuli

supports the assumption made by Thurstone about the normal distribution as a prerequisite for all attitude measurement as well as attitude organization. The voter will place the information provided by the summary at some point on the psychological dimension related to schools. In the study it is assumed from the foregoing data that individuals will rank the importance of the budget summary quite high in their efforts to make decisions about the schools and school taxes.

Secondly, when explicit standards are absent, orderings or judgments are less stable. This is particularly so for stimuli that are between the extremes of a dimension. A more intelligible budget summary should provide a higher quality of information which will in time lead to more explicit standards and greater stability in judgment in the middle range and judgments less open to counter arguments.

It should also be mentioned that personality traits and social factors influence judgments. These influences are particularly significant when stimuli are not part of a well ordered series. They also account for the large number of research projects carried out in extreme settings in order to achieve significance.

The extreme, or end stimuli serve as potent reference points in cases where no explicit standards are presented. This is the reason Likert (1935) recommends that in the 22 items suggested for the scale, four should be in the strongly disagree and four in the strongly agree

categories. The Rokeach Value Scale was used to determine extreme value rankings.

The fifth point states that the introduction of information at either end, beyond previous reference points causes dissonance. As mentioned before, there is the danger of history in a design which might contain such a contrast. The introduction of extreme ideas cannot be controlled except to suggest that the experiment not be conducted at a time when there is a great deal of publicity generated by extreme elements related to the topic.

Point six is that the respondent's stand is a strong reference point in judging. One of the reasons for the pre-test is to determine the reference point of the respondent and judge change on the basis of quantitative change between the pre- and post-test reference points.

The last point states that the degree of involvement has a strong effect on the attitude. Change is more difficult to attain with involved individuals. The degree of involvement can best be determined in an interview with the subject and the difficulty of creating the attitude change can be judged from the interview.

Laboratory measurement of attitude change is less significant than change measured in the field (Hovland and Weiss, 1950). If persuasion is to be effective, all research indicates that it must be done in small steps. The change in the budget summary format that

the study proposed is but one small step in an effort to change attitudes.

The problem of creating and measuring attitude change has been defined by Sherif (1965: pg. 170) as one of determining "the degree of discrepancy from communication and the felt necessity of coping with this discrepancy." The nature of the discrepant experience is dual in its content. The first is the position held by the individual (in this study the voter) and secondly, the position advocated by the communication.

Sherif recognizes that emotionally charged issues are rarely used to study attitude change in the laboratory setting. Further, people with moderate involvement are more open to change than those who hold extreme positions (Sherif, 1965). In this study the level of emotional involvement will be ascertained in the interview and an attempt will be made to compare it with the magnitude of the attitude change achieved during the course of the experiment.

Brehm and Cohen (1962) also found that in efforts to put pressure on people to perform counter attitudinal acts, the less pressure put on the person the more the resulting attitude change. Following this pattern, the more subtle the presentation of new or altered cognitive elements, the more effective these elements become in producing lasting attitude change. The present budget format was chosen, as

the most subtle and pervasive expression of financial goals presented prior to the decision at the ballot box and the only public information required by law.

Avoiding Information That May Change Attitudes

Brehm and Cohen (1962) concluded that individuals often seek out dissonance reducing information, but they do not necessarily avoid dissonance increasing information. On this issue Festinger (1964) feels that during the pre-decision period, when the person is in a state of conflict the information gathering and evaluation activities are carried out impartially and objectively. Whether or not subjects seek to avoid dissonance increasing information sources remains an unclear issue at this time. Most recent research by Freedman and Sears (1966) has not supported the avoidance hypothesis. However, it appears that if additional cognitive elements, as illustrated by the budget summary format are going to change attitudes, the time to present these additional items of information is in the pre-decision period. Festinger (1964) points out that in a pre-decision condition there are significantly more decision reversals than in the post-decision period.

Commitment as an Attitude Change Deterent

Following the theory that what is perceived is public and can be measured, Carl Hovland (1957) found that messages received before an individual made a public committal to a position were significantly more influential than those presented after a decision had been made. This study has placed primary efforts on messages presented prior to the decision point.

The classical experiment in attitude change was performed by Festinger and Carlsmith (1959) at Stanford University where subjects were paid to tell others that a dull task was enjoyable. Generally, the subjects who were paid one dollar described the task as more enjoyable than those who were paid twenty dollars. The counter attitudinal tasks which the subjects were asked to carry out were presentations of information inconsistent with privately held attitudes toward the task. This created a dissonant condition in the subject.

The highly paid person convinced himself that performance of the act was trivial compared to the payment. The lowly paid individual convinced himself that the task was not dull. It appears the payment was not great enough to cause a change in the attitude toward the task. This experiment led to the general theoretical notion that the less pressure or required commitment put upon the person to perform a task contrary to his attitudes, the greater the actual attitude change.

Attitude Change by Irrelevant Factors

Is a scale value change a public attitudinal change -- an attitude change which can be measured? Orne (1962: pg. 777-779) states that there are four irrelevant factors that might possibly cause change which is not true change in attitude.

First, an individual subject may learn more than the other subjects and try to present a set of responses that he feels might find favor with the testor. It is not felt that knowledge will be a major factor unless the interview or the research is perceived to be sponsored by a particularly relevant object, i. e. , a local school district.

Secondly, Orne found that subject-experimenter relationships are well defined roles with mutual role expectations. He felt that in an experiment it is not possible to simulate a random situation. It was his feeling that the experiment creates a structural environment which coerces subject cooperation.

Orne feels that subjects are often convinced that by consenting to serve the ends of the experimenter they enact the role of a "good subject." In assuming this role they attempt to predetermine the responses desired by the experimenter and validate his experimental hypothesis.

The third factor identified by Orne that can influence the results of an experiment in attitude change is the format of the measuring instrument.

A concern of all attitude scale formats is the tendency of subjects to select either an extremely favorable or unfavorable response mode. Peabody (1962) argues that extreme response bias makes scoring of attitude items valid only if they are scored dichotomously. The scoring system of five response categories used with a Likert scale cannot be interpreted as dichotomous but as a tendency in a given direction.

The fourth issue in measurement of attitude change is concerned with the internal and external validity of the research design. Shaw and Wright (1967) indicate that if a subject has been given an attitude device on one occasion, there may be a residual of influence on measurement at some subsequent period. They say that the consequences of these residuals will lead to low estimates of reliability. They also admit that there is no way of overcoming this difficulty except to make the length of time between the pre- and post-administrations long enough to minimize the effects of memory, but short enough to minimize the effects of other variables. They suggest time intervals ranging from two to six weeks for the test-retest cycle. In this study a three-week period or greater interval was attempted.

Another artifact of history that affects the internal validity of the device is the experience of the individual during the test-retest period. Since the attitude change variable is information, there is the

danger that attitude change was generated by some other circumstance than exposure to the budget summary format. Miller (1965) feels that involvement in an issue generates an extreme response.

IV. REVIEW OF THE LITERATURE: VALUES

The centrality of values as determiners of behavior has long been recognized but has seldom been studied, especially in field environments. Studies have been primarily concerned with creating situations where subjects were induced to engage in inconsistent behaviors. Values are variables that are consistently held in different orders by various groups of individuals.

Psychological References to Values

Values in the social-psychological domain have been defined as a "belief that a specific mode of conduct . . . is personally . . . preferable to alternative modes of existence" (Rokeach, 1968a: pg. 16).

Milton Rokeach feels that the idea of value is a more dynamic concept than attitude. Values held by individuals are the primary determiners of both attitudes and behaviors. In this sense, attitudes use values as the determiners of standards against which attitude change can be measured. The relative positions of values, attitudes, and behaviors as envisioned by Rokeach can best be illustrated as three concentric rings.

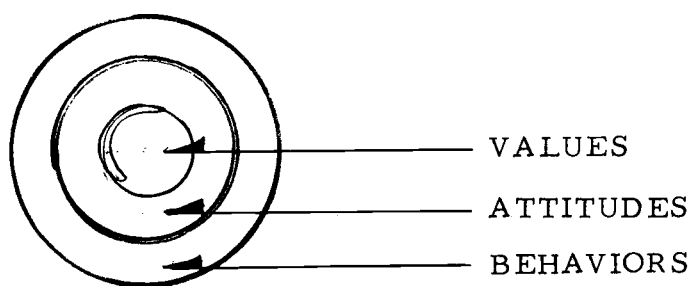


Figure 3. Relative Positions of Decision Determiners

Workers in the field have been able to define and measure attitudes more satisfactorily than they have been able to measure values. If an individual has had no experience with an object, asking the individual to react in terms of value produced no specific reactions (Rokeach, 1968). In asking those individuals who had no experience with an object to define their values in relationship to the object it was determined that statements made concerning these values were highly unreliable.

Since values are more central than attitudes and have an effect upon the individual's well being, it is only natural to assume that values are less open to change. Rokeach has proposed that once a value is internalized, "it becomes consciously or unconsciously a standard or criterion for guiding action. . . ." (Rokeach, 1968a: pg. 16).

Regardless of how open or closed values are to change, if they can be measured at any given time with some degree of accuracy, the knowledge of the value structure for a single individual or group of individuals is most helpful to the behavioral researcher.

Rokeach, in an effort to measure values, has broken them into two distinct groups: (1) values which control modes of conduct (instrumental values) and (2) values which determine an individual's desired end state of existence (terminal values).

Rokeach has suggested that there are three methods which can be used to determine inconsistencies in the components of the value systems and their openness to change.

The first and most frequently used method encourages the individual to engage in behavior inconsistent with his values and attitudes. The second allows the individual to be exposed to information from a credible source which is inconsistent with information already a part of his value and attitude system. The goal of the third method is to expose the persons to information about states of inconsistency already existing within his own value-attitude system. This study used the third method to determine inconsistency.

Political References to Values

Rokeach has experimented with the terminal values of "freedom" and "equality" and found that they possess political orientations. He found that subjects who generally rank both values high in their value system have a tendency toward a socialistic political philosophy. Those individuals who rank freedom low and equality high have a rather communistic political orientation. The third group ranks

freedom low and equality low. Their political philosophy is closest to that of the fascist. The fourth group ranks freedom high and equality low. The political philosophy of the group with these rankings is quite capitalistic. These relationships are diagrammed in the following figure.

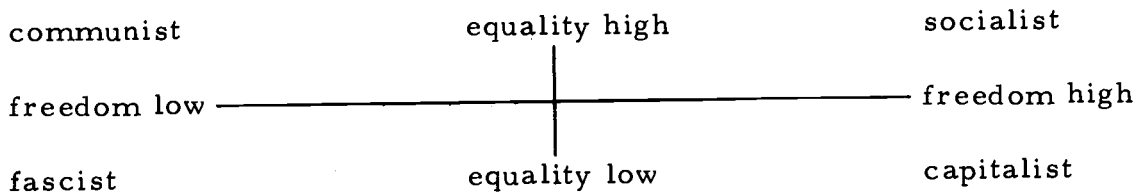


Figure 4. Rokeach Value Relationships

The Rokeach Value Scale of terminal and instrumental values was used with the entire sample in order to determine if the rankings of the values freedom and equality could be correlated with either of the attitudes.

In considering the reliability of the Rokeach Value Scale at this point, the test-retest reliabilities reported by Rokeach varied from .70 to .80. The item reliabilities varied from .57 to .70; not as strong as those normally associated with attitude scaling.

Sociological Reference to Values

Sociology is a second discipline in which values have received attention through empirical research. A recent study of values was

conducted under the supervision of Melvin L. Kohn (1969: pg. 35). Parents were asked to rank a group of values for their children. Parents were to select those values which they felt were most important for their own children who were equivalent in age.

Kohn concluded that working class parents found in conformity a way of life which is rewarding monetarily and a way of life which provides a security of status through job occupation. This conclusion was substantiated in three separate studies. Middle class parents valued self directing modes of behavior over conformity in all samplings at a statistically significant level. It appears that a schematic representation of the Rokeach and Kohn theories superimposed upon one another could be schematically represented in the following manner.

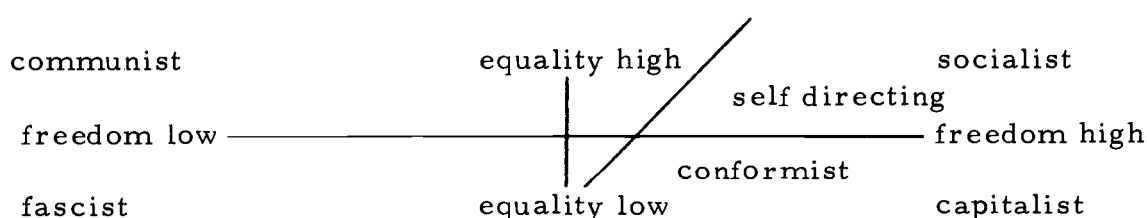


Figure 5. Rokeach and Kohn Theories Superimposed

Kohn (1969) found that within the same occupational grouping in the United States, black people valued conformity higher than did whites, Catholics valued confirmity over self directed activity when compared to mainline Protestant denominations. Rural residents

valued conformity higher than urban dwellers and first generation Americans from southern Europe valued conformity over those from northern Europe.

It would seem, theoretically speaking, that there would be more pressure to reduce dissonance in a rural community with a high Catholic church membership of relatively low income people than in almost any other kind of community since Kohn found these people to be the most conformity oriented and open to control.

The study did not attempt to measure dissonance reduction in the type of groups identified above though it surely holds possibilities for future studies of values and their impact upon the schools.

V. IMPLEMENTATION OF THE RESEARCH DESIGN

In the process of implementing the research design, attitude scales, budget formats, interviews and value scales were administered to subjects.

The following pages describe the activities which were aimed at determining significant factors which voters used in making decisions on school budgets. It was the goal of the study to determine whether these factors would in turn lead to the development of a theoretical model aimed at predicting how voters arrive at financial decisions affecting the schools.

In measuring the significant changes due to the experimental treatment Campbell and Stanley (1963) point out the "most widely used acceptable test is to compute for each group pre-test and post-test gain scores and compute a "t" between the experimental and control groups on these gain scores." The "t" test was a part of the design of this study (Campbell and Stanley, 1963: pg. 193).

In attempting to control the validity of the probability statement so as to create a right research design for this study, the following statement has significance. Possible underestimation of significance is greatest when there are only two experimental conditions and all available subjects are used. This means that all voters in the dissonant condition would have to be included in a sample, a prohibitive

requirement in the case of this project. This indicates that underestimation of significance will not be a problem. Conversely, the study is most concerned with overstatements of significance. It is for this reason that the Mann-Whitney "U" was chosen as a test statistic. This rank order non-parametric statistic measures only very significant alterations in the population frequency distribution.

Selecting the Groups with Potentially Dissonant Members

Organized groups who had actively opposed school or other municipal budgets were contacted in an effort to locate a population for study purposes. It was found that those who had an organized purpose for existing, beyond opposing the budgets, were few in number. The others were dormant between elections. It was found that groups which hold extreme opinions or promote them have a very loose body of members and want to keep it that way. In most cases they do not wish to have any individual except those in leadership positions identified (Pellegrin, 1965). For this reason it was not possible to locate any sizable sample of voters at the extreme negative end of the attitude continuum.

A majority of Oregon's citizens live in urban centers and the members of the four groups used in this study resided in areas that have been identified as urban areas by the Census Bureau of the United States Department of Commerce.

The three school districts in which a majority of the groups resided had an exceptionally large voter turnout in the Spring of 1971, approximately one year prior to the interviews. On the first tax levy election the turnout was 35%, 31%, and 53%.

In the Spring of 1972 these three districts had a somewhat smaller turnout than the previous year on the first election for the tax levy. The figures were 37% for two districts and 24% for the third district.

In the Spring of 1972 approximately 24% of Oregon's voters turned out to participate in the first attempt to pass a local tax levy for schools.

The data indicate that the voters residing in the three school districts from which the subjects were taken have a higher than normal level of interest in school tax matters.

The use of the members of the four groups was an attempt to locate dissonant voters. It was not an attempt to locate a cross section of Oregon voters, or even voters in these three urban areas. Groups of individuals which were thought to possibly possess this incompatibility and were asked to cooperate were the following:

1. Citizens residing in an exclusively senior citizen area. The population was over 55 years of age, having no children living at home and in an area with a persistent pattern of budget rejection prior to the time of the study.
2. Rotary Club members (in a small city) who were assumed to have substantial per capita incomes and investments in real estate. This was felt to be a significant factor as a major source of income for Oregon schools has been the property tax.

3. Members of the League of Women Voters and the American Association of University Women (in metropolitan centers). These women possessed high levels of education, were well informed in the area of school finance and not entirely supportive of the schools.
4. Junior Chamber of Commerce members (in a small city).
5. Chamber of Commerce members (in a small city outside of the urban center - group not included as there were no subjects with dissonance of attitudes).

Distribution of the Study Materials

It had not been predetermined that the above groups would provide the needed number of responses. It was anticipated that between 300 and 400 questionnaires would have to be distributed to attain an adequate response.

Each of the subjects responded to an invitation to participate in the project. These requests for participation were read at group meetings and are included as Appendix VII.

Individuals that agreed to participate were an estimated one out of four persons in attendance. Each was handed a stamped, self addressed envelope as they left the meeting. Each envelope was numbered and the meeting at which it was handed out was recorded.

The envelopes contained a copy of the Rokeach Value Survey and either Form 1 or Form 2 of the attitude survey. Form 1 asked the subjects to respond to 22 statements concerned with expenditures first

followed by 22 statements concerned with education. Form 2 reversed the order of presentation.

If the subjects did not wish to complete the two surveys, they were asked to return the surveys so that they might be used with another subject.

Of the 360 sets distributed, 16 were returned uncompleted. There was a total return of 158 completed questionnaires which provided 44% completed responses. Seventy one were Form 1 and 87 Form 2 attitude scales.

Of the 158 completed questionnaires, 41 subjects possessed a significant level of dissonance and this group included 24 females and 17 males.

Scoring the Attitude Scales

Following the scoring of the two attitude scales in the manner previously described, a comparison of the two means scores was made to determine whether the magnitude of the discrepancy between the means of the attitude scales was significant. The greater the discrepancy, the greater the level of theoretical dissonance. If a subject completing the two attitude scales had the same means score, it was concluded that the individual possessed perfectly consistent attitudes. An example would be when an individual achieved a 1.5 mean on the Attitude Toward Education scale, which is a relatively negative score

and a 1.5 mean on the Attitude Toward School Expenditures scale. No dissonance was apparent and a perfect consistency of attitudes was revealed and the individual would be of no further interest to this study.

The distribution of the means and the differences between the means on the two tests is shown as Appendix XVI. The scores above 0.00 are in the direction of dissonance or discrepancy, with which this study is concerned. That is, the Attitude Toward Education means score was higher in magnitude than the Attitude Toward School Expenditures. The highest level of discrepancy in the positive direction was 1.00. The frequency of scores was such that most scores were in the area of 0.00 or perfect consistency. This is in line with the central tendency which follows Thurstone's concept of normally distributed attitudes.

The distribution was slightly skewed so that there was not perfect consistency in attitudes but rather the Attitude Toward Education was slightly more favorable than the Attitude Toward School Expenditures.

The distribution of scores on the Attitude Toward Education attitude scale is shown on Appendix XVII. Column one shows the distribution of scores where the education attitude scores had a higher means than the expenditures attitude score, and column two shows a distribution of scores where the expenditures attitude score had a higher means than the education attitude score. The midpoint on a

four point Likert Scale is 2.0, however, from the frequency distribution it can be seen that the median score is approximately 2.70, rather than the theoretical 2.0. This seems to be true for both cases, where the education score is higher than the expenditures score, or where the expenditures score is higher than the education score.

As shown in Appendix XVIII the distribution of the scores on the expenditures scale is divided in the same manner. In column one the means scores are shown where the expenditures scores exceeded the education means scores. In column two the means tallied show conditions where the expenditures scores are exceeded in valence by the education means scores.

Significant Attitude Scale Scores

The responses to the attitude scales are normally distributed according to their place on the scale with the midpoint and/or mean for an adequately large sample falling at 2.0. The middle third of the distribution should have fallen between 1.73 and 2.27. This is equal to .43 standard deviations on each side of the hypothetical mean. The top third of the responses should have fallen between 2.27 and 4.00. The bottom third should have fallen between 0.0 and 1.73.

The total sample was divided into nine groups. These groups are identified below.

Group	Education	School Expenditures
I	2.27-4.00	2.27-4.00
II*	2.27-4.00	1.73-2.27
III*	2.27-4.00	0.00-1.73 * = dissonant groups
IV	1.73-2.27	2.27-4.00
V	1.73-2.27	1.73-2.27
VI*	1.73-2.27	0.00-1.73
VII	0.00-1.73	2.27-4.00
VIII	0.00-1.73	1.73-2.27
IX	0.00-1.73	0.00-1.73

Figure 6. Grouping of Attitude Scores

Groups two, three, and six had the highest levels of dissonance in the desired direction and were the groups used in the study. They indicated a high level of support for education and a low level of support for school expenditures.

Twenty-nine of the 41 significantly dissonant individuals contacted consented to the interview and one person did not keep the appointment. A total of 28 interviews were conducted: 9 with males and 19 with females. This was done approximately three weeks after the original attitude devices had been filled out.

Prior to the interview the subjects were subgrouped by sex, ratings of the values freedom and equality, as well as by attitude scores. This was done so that the subjects could be divided into two approximately equal groups for control purposes.

Interviewing the Subjects

The 28 subjects were asked a number of routine questions which were intended to put the subjects at ease and allow them to express their opinions on various topics regarding the schools. The answers to these questions were to be factors considered in the overall evaluation of the testing program. A copy of these questions is attached as Appendix VIII.

It was the study's intent to expose subjects to the information that there was an incompatibility in their attitudes toward education and the school expenditures. Following exposure to this information the budget summary was used to expose the subject to information which could be used to relieve the inconsistent state.

The subject was forced to take the experiment seriously. This method of presenting dissonant resolving data was used in the creation of the design to provide experimental realism.

The realism was attained through the use of the two attitude scales and exposure to the budget summary.

Following the informal questions, subjects were handed one of two budget summary formats. One format was an example of those presently used in Oregon. This format is shown as Appendix X. The altered budget format was given to the other half of the subjects. Appendix XI is an example of that format.

A number of questions were asked of the subjects regarding their ability to derive information from the budget format. These questions are shown in Appendix IX. The questions were constructed so that the subject could answer the first few questions from the first page of the budget summary. The following questions could be answered from the second page and like the first questions, were quite general in nature. The third page was more detailed and contained specific information about the expenditures. The questions on this page required some rather intensive searching on the part of the subjects. These questions were at the end of the test and required a much longer period of time to answer. The general pattern of the entire group of questions went from generalizations to specific kinds of responses, from simple kinds of answers that were most obvious to rather complex kinds of required responses. See Appendix IX.

At this point it was made clear to the subjects that they had a limited amount of time to look over the school budget and answer questions about the budget. They were encouraged to answer questions as rapidly and completely as possible. However, it was also made clear to them that it was not necessary to finish the complete test. It was anticipated that this statement would reduce the level of tension in the subject. They were asked to go on to the next question if a given question became too difficult to answer.

Following the administration of the questions, the subjects were asked to respond to the attitude test a second time. On this occasion the questions and responses were given orally. This attitude test, given at least three weeks after the first, was of the opposite form. That is, if the individual was given Form 1 in the pre-test condition, he was given Form 2 in the post-test. There was no time limit on this portion of the interview.

It was originally believed that the subject would complete the scale independently of the interviewer. Once the subjects began to talk, they were not about to stop talking and complete a paper and pencil task. This necessitated a revision in the interview design which consisted of selecting statements that seemed highly involving as determined from the previous portions of the interview for further oral questioning in depth. The remainder of the questions on the attitude scales were quickly administered with short phrase responses solicited.

All of the data had been collected at this stage in the design's implementation.

VI. TREATMENT OF THE DATA

Procedure for Determining the Effectiveness of the Budget

In determining whether or not one budget summary format was more effective than the other, the Sign test, which is the non-parametric counterpart of the "t" test was used. The null hypothesis stated that there was no significant difference between the scores attained by the two groups.

$$H_o : p = .5$$

$$H_a : p \neq .5$$

Various subgroups of the two groups who completed the test using the budget summary format were also used in the comparisons of format effectiveness.

Group comparisons were made using:

1. Males who used the present format with males who used the new format.
2. Females who used the present format with females who used the new format.
3. Individuals who placed the equality value high with those who placed the equality value low.
4. Males who valued equality highly. Those who used the present format had their test scores evaluated in comparison to the scores achieved by those who used the new format.

5. Females who valued equality highly. They had their present summary scores compared with those who used the new summary.

6. Males who valued equality lowly. They had the test scores evaluated, comparing those who used the new summary to those who used the present summary.

7. Females who valued equality lowly. They had the test scores evaluated, comparing the test score achieved by those who had used the new summary to those who used the present summary.

Procedures for Evaluating Attitude Change

The final step in the evaluation portion of the design was to determine if exposure to information had made any difference in the subject's attitudes over the pre-test condition. At this point the study also evaluated attitude change in a number of subgroups contained in the two primary groups. Attitudes related to school expenditures were evaluated as well as attitudes toward education.

Attitude Toward Education

Post-test survey sum scores were evaluated in the following groupings to determine if there was a significant difference between the magnitude of the pre-test and post-test scores at the .05 level.

1. The total group of subjects had their pre-test attitude scores evaluated to determine if there was a significant difference

in strength of the attitude score obtained after the information was presented in either of the two budget formats.

2. The group using the traditional summary format had their attitude change compared with the group who used the new summary format.

3. The attitude change of the females using the present summary was compared to the attitude change of the males.

4. The attitude change of the females who had used the new summary was compared to the attitude change of the males.

5. The group who had used the present budget summary and attained low equality scores was compared with the group who had high equality scores.

6. The group using the new summary and possessing low equality scores was compared with the group who had high equality scores.

7. Those males using the present summary and having high equality scores were compared with those males who used the new summary and had high equality value scores.

8. Females who had high equality placement and used the present summary had their scores on the attitude toward education compared to those females who used the new summary and had a high equality value position.

9. Males who had used the traditional summary and ranked equality low were compared with the males who used the new summary and also ranked equality low.

10. Females who had used the present summary and ranked equality low were compared with the females who used the new summary and also ranked equality low.

11. Those subjects who had used the traditional summary and had low equality rankings were compared with those who had used the new summary and ranked equality low.

12. Those subjects who had used the present summary and had high equality scores were compared with those who had used the new summary and ranked equality high.

Attitude Toward School Expenditures

The scores on the scales measuring a subject's Attitude Toward School Expenditures were evaluated in the following groupings to determine if there had been significant differences in the magnitude of the attitude change at the .05 level.

1. All subjects had their pre-test attitude scale scores compared to those attitude scale scores obtained after the information was presented in the two summary formats.

2. Those subjects who used the present summary format had their attitude change compared with the group who used the new summary format.

3. The females in the group who used the present summary had their attitude change compared with those females who used the new summary format.
4. The attitude change of the females who used the traditional summary format was compared with the males' attitudes.
5. The attitude change of the females who used the new summary format was compared with that of the males.
6. The males in the group who used the present summary had their attitude change compared with those males who used the new summary.
7. The group who used the traditional summary and had low equality value rankings were compared with those who had high equality rankings.
8. The group who used the new summary and had low equality scores were compared with those who had high equality scores.
9. Those males who used the present summary and had high equality rankings were compared with those who used the new summary.
10. The females who used the traditional summary and had high equality scores were compared with the females who used the new summary.
11. The males who used the present summary and had low equality ranking were compared with the males who used the new summary.

12. The females who used the traditional summary and had low equality rankings were compared with females who used the new summary.

13. The individuals who used the traditional summary and had high equality rankings were compared with those who used the new summary.

14. Those who used the present summary and had low equality rankings were compared with those who used the new summary.

Statistical Methods Used in Evaluating Attitude and Knowledge Change

Mann-Whitney "U": a non-parametric test for small groups of unequal size. The Mann-Whitney "U" is a rank order non-parametric test. The test is designed to measure differences created by the treatment in the post-test period where the two groups to be compared are of unequal size. The Mann-Whitney test is particularly designed for use with small groups. The tables in Mendenhall (1968:pg. 303) provide for sample sizes as small as 3 and as large as 10. The analyses in several cases used groups of 3 or 4 subjects.

Since it is a rank order test, very large values of "U" or very small values indicate significant differences.

Wilcoxon "T": a non-parametric test for small groups of paired data. The use of the Wilcoxon "T" test in portions of the de-

sign was done so that the relative differences in the rank sums of the paired data could be evaluated. The Wilcoxon test is again a non-parametric test and is used where the data can be paired. The relative difference in rank is calculated by determining the difference between the pre- and post-test scores for the same subjects. If a significant number of cases are neither positive or negative, then the attitudes are randomly altered and the treatment created no significant differences.

The statistical formula for the Wilcoxon "T" and the Mann-Whitney "U" are identical. The only difference is that the A and B in the "U" test represent the rank order sum for unequal size samples and the A and B in the "T" test represent rank order differences in the sums for paired data.

The study did not attempt to measure in precise terms the magnitude of the dissonant or consonant condition, but measured instead the change in magnitude.

$$H_o : A = B \quad \text{or} \quad H_a : A \neq B$$

$$U = n_1 n_2 + \frac{n_1 (n_1 + 1)}{2} - T_a$$

$$U = n_1 n_2 + \frac{n_2 (N_2 + 1)}{2} - T_b$$

Figure 7. The Mann-Whitney "U" Formula (Mendenhall, 1968:pg 303).

T_a and T_b are rank sums of samples "a" and "b". The smallest value of "U", determined as a result of applying the above two statistics were taken as the "U" statistic and applied to the applicable tables to determine the correct probability.

Linear Correlation. The Linear model was used with the entire population of subjects in order to determine if there was a significant relationship between the two variables as a result of the treatment.

The null hypothesis for the "U" and "T" tests is that there will be no difference in the rank order magnitude of the scores as a result of the treatment carried out in the study. The null hypothesis in case of linear correlation is that there is no significant level of correlation between the two factors being analyzed.

Sign Test: a non-parametric test for large populations. The Sign test is for large populations where the data is non-parametric. It is the non-parametric equivalent to the "t" test. The data can be either paired or not paired. The test is not as potent as the "t" because the Sign test utilizes only the positive or negative direction of the change and not the magnitude of change.

Procedure Used in Analysis of the Ranking of Values

An evaluation of the rankings of the equality and freedom dimensions was carried out by using a statistical formulation which provided

a test of linear correlation. The "x" dimension was the score on the pre-test Likert Scale which rated Attitude Toward School Expenditures. The "y" dimension was the rating position of first the freedom dimension and a second comparison was run using the ranking of the equality dimension.,

Since the sample size exceeded 25, the "z" statistic, which is normally associated with large samples was used in the study to determine the level of significance.

$$z = \frac{y - n/2}{1/2 \bar{n}}$$

Figure 8: "z" Probability Distribution Formula.

The rejection region used was at the .05 level and the Binomial Probability Tables were used.

VII. REPORTING THE RESULTS

Interpretation of the Attitude Scale Scores

The level of discrepancy between the two attitude tests is shown in Appendix XVI. The means level of discrepancy indicated is .24. Those scores which indicated negative quantity are cases where the discrepancy between the two means is in the direction of a more positive Attitude Toward School Expenditures than the Attitude Toward Education. The data show that the subjects as a group possessed a more positive Attitude Toward Education than they did toward School Expenditures.

The data are consistent with voter behavior at the polls which rejects school financial issues and is consistent with the theory of cognitive dissonance, that is, a difference between the attitude means scores indicate that the individual holding the attitudes is not consistent.

In the original statement of the problem it was anticipated that the dissonant subjects used in the testing program would have .50 or greater discrepancy in the scores. These data show that the expectation was unrealistic. Fewer than 10% of the subjects possessed means scores where the discrepancy between the two attitudes means was .50 or greater. The number of subjects with significant dissonance was statistically inadequate to carry out the study as originally

designed. The acceptable level of dissonance had to be reduced and the study finally accepted a dissonance level of .25 or greater as indicative of dissonance rather than the figure of .50 on a 4.00 continuum. This provided a group of 41 subjects out of a total available population of 146. The distribution of these individuals was 17 males and 24 females.

It is noted in all cases, that is with Appendices XVI, XVII, and XVIII the midpoint of the means scores exceeds 2.0, the theoretical midpoint. This could be the result of a test that has a preponderance of positive statements or the sample could be of a group that is more positive than the population in general.

Reporting the Value Rankings

The values scale previously discussed was constructed with the idea that values held by individuals can be made public through a response measurement device - in this case the Rokeach Value Scale. A copy of this scale is attached as Appendix XIV.

During the pre-test period the subjects were asked to express their attitudes toward Education and School Expenditures and were also asked to use the Rokeach Values Scale to rank the 18 terminal values and the 18 instrumental values used in this scaling technique. In scoring the values scale, the values equality and freedom were said to hold a low position if they were ranked 1 through 9 and high if they ranked 10 through 18.

The distribution of values showed that 16 individuals placed both freedom and equality high, 4 individuals placed freedom high and equality low, 8 individuals placed equality high and freedom low, and 13 individuals placed both freedom and equality low on their value rankings.

Data Collected Through Interviews

Table 1. Family Composition of Selected Dissonant Individuals.

<hr/>						
Size of Family						
Number of children in the family	0	1	2	3	4	5
Response frequency	4	5	11	5	2	1
Number of Children in School						
Number of children	0	1	2	3	4	5
Response frequency	21	4	0	3	0	0
<hr/>						

When asked "How do you feel the schools are doing?", the following answers were elicited.

Table 2. Quality of the Schools.

<u>Response</u>	<u>Number of Subjects</u>
Excellent	0
Good	13
Fair	11
Poor	2
Very Poorly	2
<hr/>	

Most individuals were satisfied with the school's performance but they were dissatisfied with the way the high schools were meeting the needs of the non-academic child. Individuals who indicated that they often voted no on school budgets further indicated that they almost always voted yes on community college budgets. Their response indicated that this was because the community college has become associated with vocational education. The two programs that seemed to have outstanding support by subjects in this study were vocational education programs and counseling programs.

When asked what caused the schools to do well or poorly and given the following alternatives, the answers were distributed as shown in the following table.

Table 3.. Indicators of School Quality.

<u>Quality Indicator</u>	<u>Number of Subjects</u>
Teachers	12
Money	0
Administration	3
Communication	0
Discipline	2
Other	4

The idea that teachers are the key to quality education was and still is present in this sample. The other factors seem to have little significant impact upon voter perception of school quality.

The fifth question had little significance as all individuals answered that education was useful as an institution teaching problem solving skills. No totally negative attitudes regarding education were found in any subject.

When asked if they voted the first time the school budget was presented in the spring of 1971, 23 (or 83%) indicated that they had, four had not voted and one could not remember. An interesting fact is that two of the selected mid-Willamette Valley communities had considerable difficulty passing their school budgets during the spring and summer of 1970. In the spring of 1971 these two districts passed their budgets on the first vote.

One community consisted of two distinct demographic groups. The first was a normal agricultural group with a very small number of commuters. The second group was made up of individuals over 55 years of age who live in an area identified as a senior citizens community. It is this second group that was included in the interview.

An analysis of census tract data for 1961-1962 by Farner (1966:pg. 90-95) indicates that two of the three geographical areas used in this study had significantly older population than the average census tract in Oregon. The one tract that was not older had a population which was very close to the average in the 65 plus age group. Under age 65 this same community had a somewhat younger population than the state average.

The age group distribution of the subjects is shown below. The inclusion of a senior citizens area biased the sample toward older citizens, however, per capita they had a greater incidence of cognitive dissonance than any other age group in the original sample.

Table 4.. Distribution of Subjects by Age Groups.

<u>Age</u>	<u>Number of Subjects</u>
18-25	1
25-35	7
35-45	3
45-60	4
60 +	13

In the interviews, subjects indicated that they objected to high property taxes and not because they were against schools. Several subjects indicated that they voted for the budget because they did not want to be labeled by the community at large as negative individuals.

The senior citizen's precinct had an extremely enviable voting turnout of 36% for the school election just prior to the interviews. One subject expressed the sentiment that the negative voting pattern by the senior citizens had actually unified the total community and made the schools a more healthy institution as they could not afford to allow parents to become passive observers in school budget affairs. There had to be a heavy community turnout to offset the negative votes of the senior citizens. The community at large had a 38% turnout of the registered voters on the first budget election in 1971.

When asked if they felt that schools made wise use of tax dollars, over one-half of the subjects indicated that they felt that schools did not make good use of funds. In validating the two attitude scales, the items related to satisfaction with school buildings differentiated best between supportive and non-supportive individuals on school money matters. This was verified during the interviews by subjects comments on the high cost and appearance of school plants.

A second source of negative comment was leveled at administrative failure to control expenses at the central office level. These subjects often felt that administrators, as professional educators were determined that their programs should be accepted without question.

There were many other individual comments in the 14 negative responses to the question of satisfaction with school expenditures. These responses were quite likely the result of the dissonance and in part probably seeking of justification for the position assumed.

When asked more specifically where the subjects felt that money was unwisely expended, they identified most often the interior of school buildings. Subjects understood the cost comparisons but reacted most negatively to carpeting in schools as a luxury item. The older subjects still associate carpeting with luxury expenditures and carpeting is not looked upon with favor during this period of tax increases.

Salaries were seldom mentioned as an ineffective use of money. Subjects indicated that they felt that teachers were not overpaid but that their salaries were adequate at this time.

There were 22 of the 28 subjects that felt property taxes were too high. Two felt that they were not high enough, and four believed that taxes were at the level where they should be during this period.

The two subjects who felt that the taxes should be higher had originally lived in the affluent suburbs of major urban centers, east of the Mississippi. They felt that property taxes were a bargain in Oregon.

When asked which tax they favored to produce the lost revenue which would result in a property tax reduction, the opinions were evenly divided between a sales and income tax.

All subjects were asked to estimate the amount of each tax dollar used by the schools. The mean estimate of the 27 estimates was \$.49 with the lowest estimate being \$.15 and the highest \$.90. The distribution of estimates, however, did not possess a strong central tendency. This can be illustrated by the fact that there were only six estimates that fell between \$.40 and \$.60 while 21 fell at the extreme ends. Few subjects had any idea what the figure really was in their community. It is evident that the subjects have not been aware of the financial needs of schools and the distribution of the tax dollar to meet these needs.

When asked if they read the school budgets, 21 of the 28 said that they did so and 11 of those 21 said that they felt the budget was understandable. A rather interesting outcome of the interviews with subjects was that some of the most knowledgeable subjects stated that they never read the published budget.

The most credible source of information transmission on school affairs continues to be the local newspaper. Not the published budget but the editorial comments, front-page reporting and occasional analysis of the school budget. Many subjects indicated that they verified their ideas about the budget through the use of informal conversations with other voters.

Since this study was conducted through organized groups it was found that many organized groups conduct seminars or devote meetings to analysis of local governmental budgets, including schools. This was a significant source of decision making information for the subjects interviewed.

Subjects were asked if they would send their child to a private school, providing they had adequate financial resources. This was done to test their commitment to public education. Only three of the 28 subjects indicated that they would do so. It appears that there is little support for a private school in the subjects at this time. There seems to be a sustained confidence in the public schools' ability to adapt to changing needs of our communities.

Sixteen of the 28 subjects interviewed had been in public schools during the past year. Their comments were more realistic and showed more confidence in young people. Whether these subjects were positive before they entered the schools or whether the exposure caused them to assume a more positive attitude is an unknown factor.

Presentation of the Two Budget Formats

The original reason for using the two formats had been to ask the subjects to read the budget and afterward, with it still in front of them to answer a set of written questions on the budget. This idea had to be dropped as it soon became evident that the task was too complex. The revised idea under which the study was carried out, had the subject looking at the budget format with the interviewer taking approximately one minute to explain the format. At this point the interviewer gave the subject a several minute period to study the budget. The subject was then asked questions which could be answered from the data presented in the budget. These questions are shown as Appendix IX.

The first page of the new summary seemed to be satisfactory except that each budget fund listed as to its requirements should be listed below in the "Total Taxes to be Levied." There were questions

about the two funds that needed no taxes but were not detailed in that position in the budget. The bar graphs and percentage statements were satisfactory.

Many older subjects mentioned that the print on the present budget as it has been published, was much too small for them to use and they were unhappy with the detailed summary format.

The second page of the new budget summary seemed satisfactory except that the pie charts seemed to make little difference in the intelligibility of the data. Several subjects were critical of using only lines to distinguish between the income areas.

The third page in the new budget summary received more negative comment than did the present budget summary. The columns were not headed with dates which made comparison difficult. The written headings on each section created reading obstacles. The pie charts were not used for comparison purposes.

Reporting the Results of Statistical Analyses

First Hypothesis

Introduction

As a result of the subjects being exposed to the new budget summary format, it was expected that their test scores on information contained in the budget would be higher.

Present Versus New Budget Format

n_1 = 13 subjects used the present budget summary format.

n_2 = 15 subjects used the new budget summary format.

U = 76.00 U' = 119.00 Critical Value of U = 54.

n_2 equals the smallest value of U .

The magnitude of the budget test scores of subjects who used the present Budget Summary format was not significantly different from those who used the new budget summary format. The smallest value of U was in the direction of the new budget summary, though not to a significant level.

Effect of Sex Differences in Budget Test Scores

Female Versus Female.

n_1 = 9 female subjects who used the present budget summary format.

n_2 = 10 female subjects who used the new budget summary format.

U = 28.00 U' = 62.00 Critical Value of U = 24 P = .0912.

n_2 equals the smallest value of U .

At the .05 level there was no significant difference between the two groups of female scores on the budget test. The exposure to the two different formats caused no significant differences. The smallest value of U was in the direction of the new budget summary, though not to a significant level.

Male Versus Male.

n_1 = 4 male subjects who used the present budget summary format.

n_2 = 5 male subjects who used the new budget summary format.

$U = 9.50$ $U' = 10.50$ $P = .548$.

n_2 equals the smallest value of U .

The magnitude of the males' test scores on the budget test where the subjects used the present budget summary format was not significantly different from those males that used the new budget summary format. The smallest value of U was in the direction of the new budget summary.

Value Rankings Effect on Budget Test Scores

Equality Low.

n_1 = 2 subjects who used the present budget summary format and ranked the value equality low.

n_2 = 5 subjects who used the new budget summary format and ranked the value equality low.

$U = 4.50$ $U' = 5.50$ $P = .571$.

n_2 equals the smallest value of U .

The magnitude of the budget test score of low equality subjects who used the present budget summary format was not significantly different from the magnitude of those subjects who used the new bud-

get summary format. The smallest value of U was in the direction of the new budget summary.

Equality High.

n_1 = 11 subjects that used the present budget summary format and ranked the value equality high.

n_2 = 10 subjects that used the new budget summary format and ranked the value equality high.

$U = 39.50$ $U' = 70.50$ Critical Value of $U = 26.00$.

n_2 equals the smallest value of U.

The magnitude of the budget test score of high equality subjects who used the present budget summary format was not significantly different from the magnitude of those subjects that used the new budget summary format. The smallest value of U was in the direction of the new budget summary.

Males Versus Females

Using the Old Budget Summary.

n_1 = 4 males that used the present budget summary format.

n_2 = 9 females that used the present budget summary format.

$U = 14.00$ $U' = 22.00$ Critical Value of $U = 4.00$ $P = .2070$.

n_2 equals the smallest value of U.

The magnitude of the budget test scores of male subjects using the present budget summary format was compared to the females budget test scores and not found to be significantly different. The smallest value of U was in the direction of the females, though not at a significant level.

Using the New Budget Summary.

n_1 = 5 males that used the new budget summary format.

n_2 = 10 females that used the new budget summary format.

$U = 12.50$ $U' = 37.50$ Critical Value of $U = 11.00$ $P = .0823$.

n_2 equals the smallest value of U.

The magnitude of the budget test scores of male subjects using the new budget summary format was compared to the females budget test score and found not to be significantly different. The smallest value of U was in the direction of the females, though not at a significant level.

Second Hypothesis

Introduction

It was felt that the level of incompatibility or dissonance between the two attitudes could be reduced more effectively by a partially graphic budget summary than through the present budget summary which is entirely numerical.

Effect of Exposure to Research Design on Magnitude of Dissonance.

N = 28

Smallest Rank Sum = 59.

Variable I = Amount of dissonance in the pre-test condition. This is the difference between the pre-test scores on Attitude Toward Education and Attitude Toward School Expenditures.

Variable II = Amount of dissonance in the post-test condition. This is the difference between the post-test scores on Attitude Toward Education and Attitude Toward School Expenditures.

The Critical Value of N = 28 on the Wilcoxon "T" test at the .05 level of 130.2. The "T" rank sums of 59 is significantly smaller.

The data indicate that subjects significantly reduced their dissonance and moved in a positive direction as a result of exposure to the new budget formats and interview situation. In this design there was no attempt made to distinguish between those using the current or new budget summaries.

Present Budget Summary Effect on Magnitude of Dissonance

N = 13

Smallest Rank Sum = 4

Variable I = Magnitude of Dissonance in the Pre-Test Condition.

This is the difference between the pre-test scores on the Attitude Toward Education and Attitude Toward School Expenditures scaled values.

Variable II = Magnitude of Dissonance in the Post-Test Condition.

This is the difference between the post-test scores on Attitude Toward Education and Attitude Toward School Expenditures.

The Critical Value of $N = 13$ on the Wilcoxon "T" test at the .05 level was 17. The "T" rank sum of 4 is significantly smaller.

The subjects had significantly less dissonance after being exposed to the current budget summary format and interview.

New Budget Summary Effect on Magnitude of Dissonance

$N = 15$

Smallest Rank Sum = 36

Variable I = Magnitude of Dissonance in the Pre-Test Condition.

This is the difference between the pre-test scores on Attitude Toward Education and Attitude Toward School Expenditures.

Variable II - Magnitude of Dissonance in the Post-Test Condition.

This is the difference between the post-test scores on Attitude Toward Education and Attitude Toward School Expenditures.

The Critical Value of $N = 115$ on the Wilcoxon "T" test at the .05 level is 25. The "T" smallest rank sum of 36 does not indicate that there is a significant difference between the rankings at the pre- and post-test levels.

The subjects did not have significantly less dissonance after using the new budget summary than they had before they used that

document. The new format and interview had no significant effect on the attitudes of subjects.

Budget Format Effect on Dissonance Reduction as Measured by the Mann-Whitney U Test of Significance

n_1 = 13 subjects that used the current budget summary format.

n_2 = 15 subjects that used the new budget summary format.

U = 85.50 U' = 109.50 Critical Value of U = 61.

n_1 equals the smallest value of U .

The magnitude of the dissonance reduction when analyzed by budget summary format showed that there was no significant difference between the magnitude of dissonance reduction after using the two formats.

Third Hypothesis

Introduction

There was research (Kohn, 1969) which led to the hypothesis that if subjects rank the value equality high and freedom high, the subjects would be more open to the receiving of information. It was also felt that the subjects would use the information in reducing the level of incompatibility or dissonance between the two attitudes.

Attitude Toward Education

Subjects Who Used the New Budget Summary.

n_1 = 10 subjects who used the new budget summary with high equality rankings.

n_2 = 5 subjects who used the new budget summary with low equality rankings.

$U = 17.00$ $U' = 33.00$ Critical Value of $U = 11$.

n_1 equals the smallest value of U .

The subjects with high equality value rankings possessed no significant differences at the .05 level in their attitudes toward education when compared to those subjects with low equality value rankings after both had used the new budget summary.

Subjects Who Used the Present Budget Summary.

n_1 = 11 subjects who used the present budget summary with high equality rankings.

n_2 = 2 subjects who used the present budget summary with low equality rankings.

$U = 4.00$ $U' = 18.00$ Critical Value of $U = 1$.

n_2 equals the smallest value of U .

The subjects with high equality value rankings possessed no significant differences at the .05 level in their attitudes toward education when compared to those subjects with low equality value

rankings after both had used the new budget summary.

Subjects Who Ranked Equality Low.

$n_1 = 2$ subjects who used the present budget summary with low equality rankings.

$n_2 = 5$ subjects who used the new budget summary with low equality rankings.

$U = 1.50$ $U' = 8.50$ Critical Value of $U = 1$ $P = .095$.

n_1 equals the smallest value of U .

At the .05 level there was no significant difference between those subjects who had used the present budget summary format and those who had used the new budget summary format on their attitude toward education when both groups ranked equality low. The smallest value of U was in the direction of those using the present budget summary.

Subjects Who Ranked Equality High.

$n_1 = 11$ subjects who used the present budget summary format and ranked equality highly.

$n_2 = 10$ subjects who used the new budget summary format and ranked equality highly.

$U = 49.00$ $U' = 61.00$ Critical Value of $U = 12$.

n_1 equals the smallest value of U .

There was no significant difference in the subjects' Attitude Toward Education where a comparison was made of subjects who ranked both freedom and equality values highly. The comparison was made of those who used the present budget summary format as opposed to those who used the new budget summary format. The smallest value of U was in the direction of those subjects that used the present budget summary. The level of significance was set at .05.

Attitude Toward School Expenditures

Subjects Who Used the Present Budget Summary.

n_1 = 11 subjects who used the present budget summary and ranked equality high.

n_2 = 2 subjects who used the present budget summary and ranked equality low.

$U = 5.50$ $U' = 16.50$ Critical Value of $U = 1$.

n_2 equals the smallest value of U.

The subjects who ranked the equality value high were compared to the subjects who ranked the equality value low. At the .05 level both groups possessed no significant differences in their attitude toward school expenditures after using the present budget summary format.

Subjects Who Ranked Equality Low and Used Different Formats.

n_1 = 11 subjects with low equality value who used the present budget

summary.

n_2 = 5 subjects with low equality value who used the new budget

summary.

$U = 1.50$ $U' = 8.50$ Critical Value of $U = 1$ $P = .095$.

n_1 equals the smallest value of U .

There was no significant difference at the .05 level in the subject's attitude toward school expenditures between those subjects who used the present budget summary format and those who used the new budget summary format.

Subjects Who Ranked Equality High and Used Different Formats.

n_1 = 11 subjects who used the present budget summary and ranked equality highly.

n_2 = 10 subjects who used the new budget summary and ranked equality highly.

$U = 52.50$ $U' = 61.00$ Critical Value of $U = 12$.

n_1 equals the smallest value of U .

There was no significant difference at the .05 level in the subjects' Attitude Toward School Expenditures. A comparison was made of those who ranked equality highly and also used the new budget summary.

Attitude Scale Score on Educational Expenditures Linearly, Compared to "Freedom" Value Position

In a comparison of the post-test Attitude Toward School Expenditures scale score with the ranking of the value "freedom" by the subjects, it was found that they were linearly correlated by a coefficient of -0.117 . This indicates that a person's attitude toward educational expenditures is not significantly affected by his ranking of "freedom" on a values ranking.

Scale Score on Attitude Toward School Expenditures Linearly Compared to "Equality" Rank Value Position

In a comparison of the post-test attitude score on educational expenditures with the ranking of the value quality by the subject, it was found that they were linearly correlated by a coefficient of -0.09 . This indicates that a person's Attitude Toward School Expenditures is not affected by his ranking of equality on a value ranking.

Fourth Hypothesis.

Introduction

In an effort to find ways of reducing the level of incompatibility between the two attitudes, the subjects were presented additional information on budgets and schools as part of the research design. This portion of the design attempted to determine if there was any

difference in the way the men and women altered their attitudes through the use of information presented in the present and new budget summaries.

Effect of the Budget Test in Reducing the Difference Between the Attitudes in Females - A Linear Comparison

X = The sum of the points achieved on the budget test by females.

Y = The magnitude of the reduction in dissonance between the pre- and post-test attitude scores.

N = 19.

A conclusion indicated by the data is that the score achieved on the budget test was not a predictor of the magnitude of dissonance reduction in the 19 females. The coefficient of correlation was $-.22$ which indicates an inverse linear relationship. This indicates that the higher the budget test score, the greater the difference between the attitude domains in the post-test condition. This seems to lead to the conclusion that in females the more information that they possess about a budget or schools, the greater their differences between Attitudes Toward Education and Attitude Toward School Expenditures.

Effect of the Budget Test in Reducing the Difference Between the Attitudes in Males - A Linear Comparison

X = The sum of the points on the budget test achieved by males.

Y = The magnitude of the dissonance reduction between the pre- and post-test attitude scores.

N = 9.

The conclusion indicated by the data is that the score achieved on the budget test was a good predictor of the magnitude of dissonance reduction in males. The coefficient of correlation of these two factors was .68. This indicates a strong linear relationship.

It also means that the higher the budget test score, the smaller the difference between the two attitude domains. The quantity of information possessed by the males has a strong tendency to diminish the magnitude of the difference between the two attitudes.

The conclusion must be tempered however with a caution regarding the sample size. Though the test is built for small sample sizes, a conclusion drawn from a sample size of nine must be stated with caution.

Fifth Hypothesis

Introduction

As a result of exposure to the budget summary formats and interviews the subjects' attitudes are expected to become less incompatible or dissonant and more positive toward educational expenditures.

Effect of Research Design on Attitudes Toward Educational Expenditures

$N = 28$ Smallest Rank Sum = 86 Critical Value at .05 = 130.2.

Variable I = pre-test Attitude Toward School Expenditures.

Variable II = post-test Attitude Toward School Expenditures.

The Critical Value for $N = 28$ on the Wilcoxon "T" test at the .05 level is 130.2. The smallest rank sum of 86 was achieved in this test, indicating that there was a significant change in attitude between the pre- and post-test conditions.

The data indicate that the subjects had a significantly more positive Attitude Toward School Expenditures after being exposed to a budget summary and interviewed than before the exposure to the additional information.

Magnitude of Dissonance Reduction Compared to Change in Scores on Attitude Toward Educational Expenditures - A Linear Comparison

X = Magnitude of dissonance reduction: the difference between the two attitude domains in the pre-test condition subtracted from the difference between the two attitude domains in the post-test condition.

Y = Relative change in Attitude Toward School Expenditures between the pre- and post-test conditions.

$N = 28$ Linear Coefficient of Correlation = -0.026.

The mean magnitude of dissonance reduction was 18.39 and the mean amount of positive increase in Attitude Toward School Expenditures was 25.03 with a standard deviation of 26.77 and 38.45 respectively.

The -.02 level of coefficient indicated that the magnitude of the dissonance reduction was no predictor of the subject's change in attitudes toward educational expenditures. The data indicate that a decrease in the magnitude of the dissonance did not mean that there would be a movement toward a more positive Attitude Toward School Expenditures. The level of correlation indicates that there was almost no connection between the two factors.

Effect of Budget Summary Format on Males' Attitude Toward School Expenditures

n_1 = 4 males that used the present budget summary format.

n_2 = 5 males that used the new budget summary format.

U = 6.00 U' = 14.00 P = .2063.

n_1 equals the smallest value of U .

At the .05 level there was no significant difference in the Attitude Toward School Expenditures of males who used the two budget summary formats.

Effect of Budget Summary Format on Females' Attitude Toward School Expenditures

n_1 = 9 females that used the present budget format.

n_2 = 10 females that used the new budget format.

$U = 40.5$ $U' = 49.5$ $P = .3598$.

n_1 equals the smallest value of U .

There was no significant difference at the .05 level in the Attitude Toward School Expenditures between those females who used the present budget summary format and those who used the new budget summary format.

Effect of Sex on Attitude Toward School Expenditures

Males Versus Females Using the Present Budget Format.

n_1 = 4 males that used the present budget format.

n_2 = 9 females that used the present budget format.

$U = 12.50$ $P = .2517$ $U' = 23.50$.

n_2 equals the smallest value of U .

The sex of the subjects made no significant difference at the .05 level in the magnitude of the Attitude Toward School Expenditures when both the males and females had used the present budget format.

Males Versus Females Using the New Budget Format.

n_1 = 5 males that used the new budget summary format.

n_2 = 10 females that used the new budget summary format.

$U = 16.50$ $U' = 33.50$ Critical Value of $U = 8$.

n_2 equals the smallest value of U .

In the post-test condition the women did not have a significantly more positive score than did the men on their Attitude Toward School Expenditures.

Effect of Budget Summary Format on Attitude Toward School Expenditures

n_1 = 13 subjects that used the present budget summary format.

n_2 = 15 subjects that used the new budget summary format.

$U = 82.50$ $U' = 112.50$ Critical Value of $U = 54$.

n_1 equals the smallest value of U .

The data indicate no significant differences at the .05 level in Attitudes Toward School Expenditures between the groups who used the two budget format.

Sixth Hypothesis

Introduction

As a result of exposure to the budget summary formats and interviews the subjects' attitudes are expected to become less incompatible or dissonant and more positive toward education.

Effect of Research Design on Attitudes Toward Education

$N = 28$ Smallest Rank Sum = 97 Critical Value at .05 = 130.2.

Variable I = Pre-test Attitude Toward Education.

Variable II = Post-test Attitude Toward Education.

The Critical Value for $N = 28$ on the Wilcoxon "T" test at the .05 level is 130.2. The smallest rank sum of 97 is significantly lower and in a negative direction.

The data indicate the subjects' had a significantly more negative Attitude Toward Education after being exposed to the research design than they did before they were exposed to the design.

Magnitude of Dissonance Reduction Compared to Change in Scores on Attitude Toward Education

X = Magnitude of dissonance reduction.

Y = Relative change in Attitude Toward Education.

The mean amount of dissonance reduction was 18.39 while the Attitude Toward Education moved a mean magnitude of 17.68 points in a negative direction. The coefficient of correlation was .26 which indicates there was some relationship between the two factors.

This indicates that as the magnitude of the dissonance reduction becomes greater, the magnitude of the positive increase in attitudes advanced proportionately in a small number of cases. The level of correlation is not high and this cannot be labeled a significant pattern.

Effect of Sex on Attitude Toward Education

Males Versus Females Using the Present Budget Format.

n_1 = 4 males who used the present budget format.

n_2 = 9 females who used the present budget format.

$U = 12.50$ $U' = 23.50$ $P = .2517$.

n_2 equals the smallest value of U .

The sex of the subjects made no significant difference in the magnitude of the subjects' Attitude Toward Education at the .05 level.

Males Versus Females Using the New Budget Format.

n_1 = 5 male subjects who used the new budget summary format.

n_2 = 10 female subjects who used the new budget summary format.

$U = 24.00$ $U' = 26.00$ $P = .47$.

n_2 equals the smallest value of U .

It was concluded that the males and females were not significantly affected in their Attitude Toward Education by budget format in any significant way.

Effect of Budget Summary Format on Females Attitude Toward Education

n_1 = 9 females who used the present budget summary format.

n_2 = 10 females who used the new budget summary format.

$U = 32.5$ $U' = 57.5$ $P = .1781$.

n_1 equals the smallest value of U .

At the .05 level there was no significant difference in the Attitude Toward Education between those females who used the present budget summary and those who used the new budget summary format.

Effect of Budget Format on Attitude Toward Education

n_1 = 13 subjects who used the present budget summary format.

n_2 = 15 subjects who used the new budget summary format.

$U = 74$ $U' = 121$ Critical Value of $U = 54$.

n_1 equals the smallest value of U .

There was no significant difference in the subjects' Attitude Toward Education between the groups who used the two budget formats. The level of significance was .05. The format in which the budget was presented during the study does not affect the subjects' Attitude Toward Education.

Effect of Budget Summary Format on Males Attitudes Toward Education

n_1 = 4 males that used the present budget summary format.

n_2 = 5 males that used the new budget summary format.

$$U = 7.00 \quad U' = 13.00 \quad P = .2778.$$

n_1 equals the smallest value of U .

There was no significant difference at the .05 level in the males Attitude Toward Education between those who used the present budget summary and those who used the new budget summary format.

VIII. A REPORT: FINDINGS, CONCLUSIONS AND IMPLICATIONS

Review of the Objectives of the Study

The objective was to identify decision making factors which were used in the development of a theory that could be used to predict voter behavior on school financial issues.

1. Is it possible to identify the salient decision making factors used by voters possessing cognitive dissonance concerning school financial issues?

2. Does the dissonant voter's possession of incompatible attitudes toward education and the financing of educational programs indicate a significant pressure to initiate information seeking behavior?

3. When alterations are made in the published Oregon Budget Summary format, will the altered format measurably aid in the creation of a more favorable attitude toward education and the financing of educational programs in subjects possessing a high level of cognitive dissonance?

4. Will alterations in the published portions of the Oregon school Budget Summary format provide more intelligible financial data for subjects possessing cognitive dissonance?

5. If a voter possessing high levels of dissonance is provided with a higher level of intelligible information will the higher level of

information create a reduced level of attitude incompatibility?

The hypotheses which were considered in the implementation of the research design are stated below.

1. Data presented in a partially graphic budget summary form will communicate more effectively than data presented in an entirely numerical budget summary format.

2. Dissonance can be reduced more effectively through use of a partially graphic budget summary format than through an entirely numerical budget summary format.

3. Individuals exposed to the same information, with a high equality ranking as a terminal value will achieve greater dissonance reduction than those individuals who rank equality low as a terminal value.

4. There is a significant difference between males and females in the amount of information required to reduce dissonance.

5. The reduction of dissonance will create a more positive Attitude Toward School Expenditures.

6. A more positive Attitude Toward Education is achieved when dissonance is reduced.

Findings

First Hypothesis

There was no significant difference between the ability of the present budget summary format and the new budget summary format in their ability to provide effective communication for subjects with cognitive dissonance. The null hypothesis must be accepted.

There was a consistent pattern which favored the new budget summary format as a communications device. In testing the difference between male and female perception of data provided in the present format, the probability was consistently in favor of the females. Again there was a consistent tendency toward the new budget summary format, but not at a significant level.

Though the sample was small and the "U" test requires very high quality data to obtain significant results, it seems that a difference exists in the quality of knowledge transmitted by the two budget summaries.

Second Hypothesis

There was no significant difference between the ability of the present budget summary format and the new format in their ability to reduce the magnitude of the dissonance or incompatibility of the two attitudes. The null hypothesis must be accepted.

There was a significant amount of dissonance reduction measured as a result of submitting the subjects to the research design as a total and as a result of exposing the subjects to the present budget summary format. However, when the subjects used a new budget summary format, their attitudes were not significantly different.

In using the Wilcoxon "T" statistic and comparing the pre- and post-test magnitudes of dissonance, the data showed that there was significantly less dissonance after exposure than before the exposure to the current budget summary format and interview. This leads to the conclusion that the partial acceptance of this hypothesis should be considered. Exposure to information does make a significant difference in a positive direction.

The present budget summary came closer than the new budget summary to making a difference in the attitudes of the subjects. The difference, however, was not at a significant level.

Third Hypothesis

It was hypothesized that those who ranked the value freedom high and equality low would be conformist oriented, and much less open to change in attitudes or reduction in attitude incompatibility or dissonance than individuals who ranked both freedom and equality very high. This hypothesis was not verified by the data. The null hypothesis must be accepted.

Fourth Hypothesis

There was a significant difference between the magnitude of the males and females dissonance reduction or reduction in the level of incompatibility. The null hypothesis can be rejected.

In a linear comparison using Budget Test scores as one variable and the magnitude of dissonance reduction as the other variable, it was found that there was no correlation on the part of females. That is, the level of attitude incompatibility was not affected by the amount of information possessed by the females. In fact, there was a negative correlation of $-.22$. The males had a positive correlation of $.68$. The males' attitude incompatibility was significantly affected by the amount of knowledge possessed by the male subjects. This indicates a significant difference between the way the two sexes use information in decision making.

Fifth Hypothesis

It was hypothesized that through a reduction in the magnitude of dissonance or incompatibility between the two attitudes, the subjects' Attitude Toward School Expenditures would become more positive. Only one of seven difference tests supported the hypothesis. The null hypothesis cannot be rejected.

The change in a positive direction indicated that the subjects felt more positive about providing money for school expenditures

after they were exposed to the interview and format of the budget summaries.

The test of linear correlation was not significant. This indicates that though there was a significant change in the attitude, the change was in no significant manner directly proportional to the reduction in the magnitude of the dissonance.

In the post-test condition, an analysis of the difference in attitude change between the two budget summary formats showed no significant differences. This leads to the conclusion that it was not the format that caused the significant alteration of attitudes but was probably the conditions of the testing program that caused the changes.

The tests showed no significant differences between the present and new budget summaries' ability to alter the subjects' attitudes. There was a consistent tendency, however, toward the present budget summary as a change inducing agent.

Sixth Hypothesis

It was hypothesized that with the reduction in the magnitude of dissonance or incompatibility between the two attitudes, the subjects' Attitude Toward Education would become more positive. None of the seven tests supported the hypothesis.

Conclusions

It must be concluded that the alterations in the published budget summary provided the subjects with no reason to alter their attitudes toward either education or school expenditures.

The underlying factors behind this conclusion seem to be that the published budget summary is (1) not an important factor in the voter's decision making process or (2) the budget failed to provide significant information to the voter.

The concept of individuals in dissonance as information seeking persons can be supported in part. The population in the dissonant condition is far from a majority of the total voting population. In the sample there were 41 dissonant voters out of a total of 158 who returned the attitude scales. Of this number, there was a significantly more positive attitude after they had been exposed to the testing situation, though the cause of this change was not isolated.

It should be noted that the subjects' average Attitude Toward Education was above the average in the pre-test condition and the average Attitude Toward School Expenditures was below the average. This indicates a voter whose behavior cannot be predicted. This individual appears to be a friend of education on the surface and at the polls may well vote no. Twenty-two of these dissonant individuals of the total 28 felt that property taxes were too high. Another point

to consider is the fact that the total population sample was drawn from groups that were older and more active in voting on school financial issues.

Individuals were selected for inclusion in the study because their attitudes were inconsistent. The remainder of the sample population was more consistent in their beliefs. They were against education and school expenditures or they were in favor of both issues. The attitudes of these individuals will be difficult to alter as their attitudes are consistent. The group of 41 included in the study would seem to be the critical group of swing votes and the group of individuals most open to attitude alterations.

The new summary format consistently provided a higher level of information, however it was not at a statistically significant level. The new budget format seems to provide a more intelligible method for transmitting information. The format used in the transmission of data seems to make little difference in a subject's attitudes. Whether or not the format does a better job of transmitting the information seems to be an academic point. if the voter fails to use it as a decision making tool.

Though the statistical analysis of values indicated that there was little significant connection in the values ranking and the change in attitudes, this information seems to warrant further consideration.

The conclusions reached by Rokeach from value ratings of the terms equality and freedom have been identified as political value concepts, several of which had their origins as economic philosophies. These ideas carry political connotations in current usage and could be challenged as a result of a statement made by Seymour Lipset (1959:pg. 485), that "the poor everywhere are more liberal or leftist" on economic issues and conversely they tend to be illiberal on non-economic issues. This statement is verified by Jewell's findings (Jewell, 1969).

If we follow this line of reasoning the study might find little motivation for information seeking responses. Subjects might compartmentalize their attitudes between economic (school taxes) and non-economic (education) issues, and view these as non-competitive. The non-competitive point of view was rejected for use in this study, though it does seem to possess significant research implications.

It was previously noted that 29 of the 41 subjects were at the opposite value poles. Thirteen were of an ultra-conservative political orientation with both freedom and equality ranked low. Sixteen subjects ranked both freedom and equality high, an ultra-liberal political position. This seems to warrant the conclusion that the subjects in dissonance were generally drawn from opposite poles and should be viewed as two distinct groups.

The subjects with low freedom and equality value placements could be characterized as possessing economic goals for education while those with high freedom and equality value rankings would possess social goals for educational programs.

The first factor is a reference point about which all others are considered. The subjects made up less than 25% of the total sample population. They were the least consistent in their attitudes. The remaining 75% of the subjects were more consistent in their beliefs.

Twenty-two of the 28 subjects felt that property taxes were too high. Jewell's research indicates that how these subjects felt about providing Money for Schools cannot be altered until the method of raising the revenue for operation of the schools is altered.

The dissonant subjects were very supportive of vocational education and counseling as subject matter areas. They wanted more for the non-academic child. Since this is a popular topic of the times, this may have little long term significance and simply be a reflection of current interests.

The dissonant subjects were opposed to the activities of central office administrative staffs. Over one-half of the subjects felt that the schools did not make good use of the funds available to them and blamed the poor use of funds on the central office staff.

Most of the subjects judged the quality of the school by its teaching staff. It seems that the achievements of the teaching staff should receive significant publicity as a district identified confidence building factors.

The subjects had a great deal of faith in the ability of American education and education in general to solve problems. They did not support the idea that people are losing faith in the schools. With this group of individuals it would do little good to attempt to justify the existence of the schools. They are already convinced that the schools fulfill a useful societal role.

From the mean scores on the two attitude scales, comparing the total group to those used in the interviews, it is apparent that the dissonant group was more positive toward the schools than the total group. It appears that many of education's best supporters may be some of the no voters. Many of the dissonant individuals interviewed were connected directly or indirectly with education at this time. This indicates that the schools should make a consistent effort to influence present faculty members, members of the parent groups, former teachers, and former parents of children who have left the school scene. It is another reason for the administrator to know not only the parents of the community but the non-parents as well.

The altered and present budgets accomplished little in the way of reducing dissonance in cognitions. In several cases the present

budget had a more significant impact upon the attitudes than the new budget. As has been previously stated, it appears that there is little connection between the budget summary formats used in this study and the level of dissonance reduction.

The ability of the budget to reduce dissonance may have been greatly impaired by the fact that the attitude scales used at the pre-test point required a number of decisions on the part of the subjects. As Hovland found, the changing of a subject's attitude, once he has committed himself to a position, was extremely difficult. This contingency in the research design was recognized and the risk taken. It simply points out that any measured change in attitudes is particularly significant when using a pre- and post-test design.

The data also indicated that the male subjects used information in the budget format for decision making purposes as measured in the alterations of attitudes. The more the male subjects learned about the budget, the less dissonant they became. This may be the fulfillment of an assigned societal role for males. Females seemed to use some other factors than those tested in the alteration of their attitudes.

These results indicated that more explicit numerical data will have more of an effect on males. The implication of this research is that males will be more influenced with measures of economic effectiveness and females may be predominantly interested in some

other measure of effectiveness.

Implications

The original goal of the study was to build the foundation of a theory which could predict voter behavior on educational finance issues. Application of the cognitive dissonance concept indicates that education and educational finance decisions are not bound together in the decision making process. They are two separate kinds of decisions. School districts should not expect a positive vote on the budget because they provide a high quality program.

This study substantiated the belief that there is no connection between how people feel about education and how they feel about providing funds for schools. When voters say that they are voting against taxes and not against schools, this study supports their statements. The two attitudes are not related.

As a corollary to this point, the published budget summary apparently does not contain the information the voter wants. A major effort should be exerted to determine what kind of financial information voters want to have reported to them.

The Oregon statutes regarding the reporting of financial data to the public should recognize the need for unique kinds of data. One kind of financial report should be prepared for those individuals familiar with school finances and a different report should be prepared

for the voters. The voter is apparently interested in a different set of data.

Individuals responsible for the financial health of a school district should become aware of the fact that the supporters of local education programs are not compulsive yes voters on school budgets. Efforts need to be made to inform educational supporters of financial decisions and the implications of these decisions. Too often the reaction to a no vote has been an effort to get more voters to vote on the issue. The critical factor may well be the number of educational supporters in the community that vote no on the budget.

The ranking of the values indicates that there are two large and distinct groups. They may be identified as subjects possessing dissonance who view both values, freedom and equality, at opposite poles. Both groups have a positive attitude toward education. Why might a person who views freedom and equality as low ranking values possess a positive attitude toward education?

The implication is that the subjects viewed education for two separate purposes. The first and most often stated purpose for education is that of a social goal (freedom and equality high). That is, education for the maintenance of a democratic society whose members are aware of the needs of others.

The second purpose is economic (freedom and equality low). Education is sought as a way to increased earning power and greater

control over one's own destiny.

The data imply that three kinds of public reports need to be made by school districts and probably by all public service agencies to the voters.

The first and traditional is the financial report detailing the expenditure and income levels of the local governmental agency. This is the report presently provided to the voters.

The second and newest member of the accounting team is the cost effectiveness reporting process. In this process the schools are at a stage somewhat beyond infancy where program budgets are reporting the costs of teaching a person to read, or reporting how much it costs a community for the individual to learn to read and write a foreign language at a given level of competence. The next step in cost effectiveness will be to determine how much the community can expect in economic return for having given the individual an opportunity to learn a foreign language.

The third and yet unspecified content area which data indicate must be considered is the creation of an audit technique which details the social effectiveness of the educational programs. In the case of a student learning a foreign language, the social effectiveness might be measured by the way an individual uses a foreign language to help a people increase their standard of living.

Data which lead to the identification of this three-phase reporting system was accrued in the investigations of cognitive dissonance. Findings indicated that there was no significant reduction in dissonance as a result of using the new budget format.

Research quoted in this study indicated that a possible explanation of this lack of dissonance resolution might be that the subject's two attitude domains, Attitude Toward Education and School Expenditures, may be non-competitive but mutually exclusive attitudes. One, Attitude Toward Education, being a social issue and the other, Attitude Toward School Expenditures, being an economic issue.

The ranking of values, as previously pointed out, fell primarily into two categories. In the first category the individuals ranked both freedom and equality highly. This ranking may be identified as characteristic of individuals with high social expectations for the schools.

The second category ranked both freedom and equality low. This ranking may be characteristic of individuals with high expectations of economic return from the learning process.

Milton Rokeach identified those who ranked both values high as possessing a Socialistic political doctrine. Lewis states that it is the function of a socialistic economy from a utopian point of view to "support all citizens in an egalitarian fashion, " (Lewis, 1970:pg. 15). Citizens evaluating the schools' effectiveness from an egali-

tarian point of view may evaluate primarily the social climate of the institution and the part that institution plays in the overall societal primary focus upon the individual as a social entity.

Rokeach identified those who rank both values low as possessing a Fascistic political doctrine. The Social Darwinistic point of view, which often parallels the Fascistic doctrine, de-emphasizes equality and is still strong in many Americans with the acceptance of the survival of the fittest point negating any belief in the equality of man. Support for this belief is expressed by a significant group of subjects in this study through their ranking of the value equality. However, a similar explanation for the ranking of freedom in a low position is not available unless an elitist view is accepted.

Hofstadter (1944:pg. 37) makes the connection between values and economics when in his discussion of William Graham Sumner, he points out that Sumner "brought together three great traditions of western capitalistic culture: the Protestant ethic, the doctrines of classical economics and Darwinian natural selection. "

These three traditions are still strong in late 20th century America and represent the point of view of a considerable sector of the American voting public.

The subjects indicated that they supported programs with greater vocational emphasis, an economic goal, and they also supported preparation suited for the non-college bound student. They

also spoke very favorably about the programs in guidance and counseling, a social goal. Placing emphasis upon these programs should generate a higher level of program support, though not necessarily financial support.

During the course of this study a number of questions were raised:

1. What kind of financial data does the voter feel is significant and useful in his decision making process?
2. Do school districts which operate a well-designed vocational education program enjoy a higher level of public confidence in the schools overall operations?
3. Do voters from states where there is a high level of state financial support (over 50%) use program quality as a factor in making financial decisions to a greater degree than voters from states where there is a low level of state financial support and a high level of local financial support?
4. Do all age groups support education as an institution and to what degree?
5. What level of property taxes is reasonable? Would voters support any level of property taxes?
6. Are the attitudes toward education and educational finance non-competitive for lower income voters?

7. Is there a dichotomy in the educational expectations of American society with one group desiring education for social ends and another group desiring education for economic ends?

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APPENDICES

APPENDIX I

CRITERIA FOR ATTITUDE STATEMENT CONSTRUCTION*

1. Avoid statement referring to past rather than the present.
2. Avoid factual statements or statements capable of being interpreted as being factual in content.
3. Avoid statements capable of being interpreted in more than one way.
4. Avoid irrelevant statements regarding the psychological object under consideration.
5. Avoid statements that will be endorsed by everyone or no one.
6. Select statements that cover the entire range of the affective scale of interest.
7. Keep the language simple, clear and direct.
8. Statements should be short, never over 20 words in length.
9. Each statement should include only one complete thought.
10. Statements containing universals such as all, always, none, never, often introduce ambiguity and should be avoided.
11. Words like only, just, merely and words of a similar nature should be used with care and moderation in writing statements.
12. Whenever possible the form should be simple sentences, not compound or complex.
13. No words that cannot be understood by those being given the scale should be used.
14. Avoid the use of double negatives.

*Edwards, Allen L., Techniques of Attitude Scale Construction. New York, Appleton-Century-Crofts, Inc., 1957. Pgs. 13-14.

APPENDIX II

January 8, 1971

Dear Friend:

First, let me thank you in advance for the time you are taking to consider these questions.

This is NOT a questionnaire but simply a group of questions that may become part of a questionnaire. Several questions ask the same thing in different ways. Some may be good questions, some are assuredly bad. Your individual answers will not be considered as personal responses, but part of a group.

Through a computerized sorting and statistical procedure I hope to find some statements that can be made part of a true questionnaire which will help schools determine how voters feel.

Thank you again,

Clifford Eberhardt

INSTRUCTIONS

Attached are six (6) pages of questions. Each question has five (5) statements under it. Please underline the statement with which you agree most.

SAMPLE

A. Television has high quality educational programs.

1. Strongly Agree 2. Agree 3. Undecided 4. Disagree 5. Strongly Disagree

In statement "A" above the person answering the question felt that programs were not of high quality. He expressed this feeling by underlining number four (4) DISAGREE. Please express your feelings on every question by underlining your choice.

APPENDIX III

ATTITUDE TOWARD SCHOOL EXPENDITURES

1. Children using school buses should have to pay more for this service.
0-Strongly Agree 1-Agree 2-Undecided 3-Disagree 4-Strongly Disagree
2. Money spent on textbooks for children will provide more than their dollars worth of education.
3. Schools need to spend more time and money on new ideas in education.
4. School boards of school districts make little effort to control educational expenditure in the community.
5. Americans should save their money instead of spending it on education through taxes.
6. Property tax money used to support public schools is the best investment of tax funds possible.
7. Teachers make good use of money given them for supplies to be used in the classroom.
8. Property taxes are too high.
9. School buildings are too fancy.
10. Money spent on teaching equipment is necessary to provide an adequate educational program.
11. School attendance should be required for only 6 months per year so that education costs can be reduced.
12. The cost of subjects other than reading, writing, and arithmetic should be paid by parents.
13. School buildings cost too much money.
14. The education of children in our community would not be hurt if schools had only half as much money to spend.

15. Voters in school districts have no control over the total dollars spent.
16. Gymnasiums cost a great deal but are necessary to provide good physical education programs.
17. School costs which lead to quality education should be eliminated in favor of basic education.
18. Free education through college (16 years) should be provided for all students that have good grades.
19. Money should be spent to make classrooms as pleasant as any home in the community.
20. It is only right that all children should be getting free bus rides to and from school.
21. Individual Americans can make better use of money than the schools.
22. If people knew how school money was being spent, they would vote yes on more school budgets.
23. Local school districts should have all of their money supplied by some agency of the government.
24. The education of boys and girls is an investment in the future.
25. All students should be given free dental care in the public schools.
26. People who have no children in school should not have to pay taxes to support public schools.
27. Students that have a hard time learning should have more money spent on them by the schools.
28. American schools need more money to improve the quality of education provided for children.
29. Teacher salaries are too high.
30. More than half of the tax money used by education is wasted.

31. School buildings are well constructed and not excessive in their costs.
32. Teacher salaries are realistic in view of other wages earned in our society.
33. The total cost of education should be paid by the people who are living in the school district.
34. Money spent on schools shows little result for the dollar spent.
35. Changes in society cost more in dollars than they are worth.

APPENDIX IV
ATTITUDE TOWARD EDUCATION

1. School Administrators and School Boards try to hide the financial facts from the public.

0-Strongly Agree 1-Agree 2-Undecided 3-Disagree 4-Strongly Disagree
2. Too many people are hired because of education instead of experience.
3. Publishing school budgets provides help in making decisions on how to vote on a school budget.
4. Children need the most education that our society can give them.
5. Schools are not the source of skills in our society.
6. Schools use their money effectively.
7. Statements made by educated people are not to be trusted as much as statements made by uneducated people.
8. Children have too much education in America today.
9. Experts are people who push others around.
10. Education is a necessity that needs better long-range financing.
11. School budgets are simple and easily understood.
12. School programs today are more effective than ever before.
13. Participation in high school sports adds nothing to a person's education.
14. Being well educated is no measure of a person's common sense.
15. Education gives increased ability to solve problems.

16. If America is to continue as a world leader we must depend upon a higher level of technical ability.
17. The high cost of medical education has nothing to do with the high fees that doctors charge.
18. Americans worry too much about quality of education given their children.
19. Education cannot take the place of experience.
20. School taxes are wisely used by school boards.
21. There is little social use in education.
22. Highly educated persons are not paid enough in our society.
23. Thinkers are poor leaders.
24. Americans place too much value on education.
25. Judges work harder than loggers.
26. Our society shows too much respect for education and not enough for experience.
27. Adult vocational education and retraining programs need to be expanded.
28. Kindergartens should be provided in all schools.
29. Students in America are given too much freedom.
30. People who try to change things usually do it for a selfish reason.
31. Music and art need to be a strong part of every school program.
32. Schools should provide opportunities for individuals to explore personal interests.
33. There is no need for doctors to have 10 years of education before they can practice by themselves.
34. The practice by recent United States Presidents of having a number of experts as advisors is good.

35. Schools are here to provide boys and girls with an education.
36. College and university students care more about having fun than learning.
37. Vocational education is not available in enough schools.
38. Counseling other supporting educational services must be provided to meet each student's needs.

APPENDIX V

Validation of Items on the Scale
ATTITUDE TOWARD SCHOOL EXPENDITURES

ITEM NO.	$\bar{X}_{H25\%}$	$\bar{X}_{L25\%}$	"t" VALUE	CONCLUSION
1.	3.10	2.16	3.22	accept
2.	2.13	2.50	2.82	accept
3.	2.96	1.66	5.57	accept
4.	3.13	1.70	6.45	accept
5.	3.86	2.96	6.04	accept
6.	2.96	1.90	4.06	accept
7.	2.82	1.80	5.04	accept
8.	1.86	0.40	5.84	accept
9.	2.89	0.50	13.57	accept
10.	3.20	2.60	3.45	accept
11.	3.58	3.10	2.50	accept
12.	3.72	2.80	5.63	accept
13.	2.79	0.43	12.46	accept
14.	3.75	2.56	7.99	accept
15.	3.13	1.53	6.79	accept
16.	3.00	2.06	3.99	accept
17.	3.37	2.36	5.37	accept
18.	2.20	1.23	3.11	accept
19.	2.20	1.16	3.92	accept
20.	2.17	1.03	4.29	accept
21.	3.48	2.46	4.86	accept
22.	2.72	1.23	6.04	accept
23.	1.44	1.26	0.73	reject
24.	3.79	3.26	4.29	accept
25.	1.82	1.00	3.38	accept
26.	3.55	2.76	3.41	accept
27.	2.48	1.70	3.52	accept
28.	2.86	1.23	8.00	accept
29.	3.44	1.90	7.71	accept
30.	3.58	2.46	6.84	accept
31.	2.68	1.00	10.89	accept
32.	1.72	1.60	0.46	reject
33.	0.79	1.56	-3.95	reject
34.	3.34	2.56	4.81	accept
35.	3.41	2.03	6.67	accept

Validation of Items on the Scale
ATTITUDE TOWARD EDUCATION

ITEM NO.	$\bar{X}_{H25\%}$ n=28	$\bar{X}_{L25\%}$ n=30	"t" VALUE	CONCLUSION
1.	2.96	1.50	4.93	accept
2.	2.36	1.17	4.93	accept
3.	2.93	2.46	1.74	reject
4.	3.56	2.57	4.08	accept
5.	2.50	1.78	2.76	accept
6.	2.83	1.07	11.81	accept
7.	3.70	2.92	5.46	accept
8.	3.50	2.89	3.14	accept
9.	3.73	2.75	5.02	accept
10.	3.60	3.07	4.52	accept
11.	0.96	0.75	1.37	reject
12.	2.76	1.46	6.73	accept
13.	2.90	2.39	1.64	reject
14.	1.76	0.89	3.21	accept
15.	3.40	2.60	3.48	accept
16.	2.66	2.75	-0.31	reject
17.	2.33	1.92	1.41	reject
18.	2.96	2.50	2.28	accept
19.	2.03	1.21	3.61	accept
20.	2.53	1.07	8.62	accept
21.	3.50	2.82	4.15	accept
22.	2.13	1.39	3.32	accept
23.	3.00	2.21	3.79	accept
24.	3.13	1.96	5.51	accept
25.	1.93	1.85	0.33	reject
26.	2.56	1.28	7.28	accept
27.	3.50	2.82	3.97	accept
28.	3.43	1.89	6.76	accept
29.	2.43	0.64	7.22	accept
30.	3.13	1.75	6.02	accept
31.	3.23	1.89	5.62	accept
32.	3.50	2.64	4.61	accept
33.	2.93	2.07	3.17	accept
34.	3.40	2.89	3.23	accept
35.	3.50	3.07	3.11	accept
36.	3.20	2.50	3.53	accept
37.	3.03	2.60	1.79	accept
38.	3.53	2.60	4.80	accept

$\bar{X}_{H25\%}$: the mean score of the highest 25% of subjects on this scale.

$\bar{X}_{L25\%}$: the mean score of the lowest 25% of the subjects taking this scale.

APPENDIX VII

At the end of today's meeting I will be handing out these stamped, self-addressed envelopes.

Inside you will find these two items (Hold up the items in the envelope). The one is a set of statements about schools and school taxes. For each statement you are asked whether you strongly agree, agree, undecided, disagree, or strongly disagree. You are asked to indicate a choice. There are 44 statements and it should not take over 10 minutes to complete. Some statements may seem to be extreme, even foolish, but this kind of statement is necessary.

The second item asks you to rank those things you value most to those you value least. One person that has completed this ranking, told me he spent one entire evening ranking these values. I don't intend that anyone should spend over 10 or 15 minutes completing this form. Your first instincts are the ones in which I am interested.

These two items are being given to a number of groups around the state of Oregon. I am asking for your name so that I might contact you for a follow up if it is necessary. Probably not more than one in ten or 15 individuals will be contacted in the follow up. This information will of course be kept confidential.

If you take an envelope and decide that you do not wish to fill out the two forms, please mail the uncompleted material. I am paying for these materials myself.

This research is being done to test some ideas related to how people make their decisions in the hope that schools can become more responsive to the members of the community.

Thank you for your time and if you can spare 20 or 30 minutes in the next five or six days and don't mind signing your names, I would appreciate your taking one of these envelopes with you as you leave the meeting today.

APPENDIX VIII
INTERVIEW FORM

Identification Number _____

COMMUNITY _____ Date of interview _____ 1971

You may remember that some time ago you completed a form that asked you to indicate how you felt about the schools. This is a follow up to that study.

1. Do you have any children? (15)

___ (1) yes

___ (2) no

2. How many children do you have between the ages of six and eighteen that are still attending school? (17)

3. How well do you feel the schools are doing in providing educational opportunities to the children of the community? (19)

___ (1) excellent

___ (4) poor

___ (2) good

___ (5) very poorly

___ (3) fair

4. What causes the school to be in this condition? (50)

___ (1) teachers

___ (4) poor communication

___ (2) money (lack of)

___ (5) discipline

___ (3) administration

___ (6) other _____

5. Do you believe that the community can provide young people with a greater ability to solve problems by giving them schooling? (21)

___ (1) yes

___ (2) no

6. Did you vote on the school budget the first time it was submitted to the voters this Spring? (23)

___ (1) yes

___ (2) no

___ (3) don't remember

7. Do you believe that the schools generally make wise use of the tax dollars? (25)
- ___ (1) yes ___ (2) no ___ (3) don't know
8. Where do the schools make unwise use of money? (27)
- | | |
|-----------------------------------|-----------------------------|
| ___ (1) generally inefficient | ___ (6) buses |
| ___ (2) expensive buildings (in) | ___ (7) field trips |
| ___ (3) expensive buildings (out) | ___ (8) unnecessary classes |
| ___ (4) salaries, administration | ___ (9) other _____ |
| ___ (5) salaries, teacher | _____ |
9. How so you feel about property taxes? (29)
- ___ (1) they are too high
- ___ (2) they are not high enough - go on to #11
- ___ (3) they are about right - go on to #11
10. If property taxes are too high, how do you feel that the money for governmental services should be raised? (31)
- ___ (1) increase the income tax
- ___ (2) support revenue sharing
- ___ (3) cut services
- ___ (4) other _____
11. How many cents of the property tax dollar goes to the schools? If you do not know, please guess... (33, 34)
- \$_._____
12. Have you ever read the school budget as it appears in the paper? (36)
- ___ (1) yes
- ___ (2) no - go on to #14
13. Were you able to understand the printed budget? (52)
- ___ (1) yes ___ (2) no

14. What sources of information do you use in making (38, 39, 40)
up your mind on how to vote on school budgets?

___ (1) radio ___ (4) informal conversations
___ (2) TV ___ (5) no particular sources
___ (3) newspaper

15. If you had the money, would you send your child to a (42)
private school?

___ (1) yes ___ (2) no

16. Have you been inside a public school this year? (44)

___ (1) yes ___ (2) no - END OF QUESTIONS

17. How many times do you think you have been inside (46)
the schools? ___

Please estimate the respondents age. (48)

___ (1) 18-25
___ (2) 25-35
___ (3) 35-45
___ (4) 45-60
___ (5) 60 +

NOTES OF INTEREST:

APPENDIX IX

1. Old
2. New

IDENTIFICATION NUMBER
 (1) (2) (3)

Using the Budget form given to you, please answer as many of the following questions as possible in the time provided. You will have a limited amount of time to complete the questions. Read the questions carefully and search out the answers on the Budget form.

Thank You

1. In the School Lunch Fund, is there a proposed increase of more than \$10, 000. 00 between the 1969-1970 and the 1970-1971 budgets?

____ Yes ____ No C-1 I-0 (7)
2. How much tax money is supposed to be used in the School Lunch Program?
_____ C-1 I-0 (9)
3. Will the Debt Service Funds increase more than 50% next year?

____ Yes ____ No C-1 I-0 (11)
4. Will taxes be increased more than \$500, 000. 00 to support the General Fund?

____ Yes ____ No C-1 I-0 (13)
5. What is the amount for Bus Replacement in the 1970-1971 Budget?
_____ C-1 I-0 (15)
6. How much tax money will be needed for the PL 89-10 Fund during the 1970-1971 period?
_____ C-1 I-0 (17)
7. How much cash was on hand during the 1967-1968 Budget period?
_____ C-1 I-0 (19)
8. What is the proposed income from Local School District Tax in the 1970-1971 Budget period?

C-1 I-0 (21)

9. According to this budget, is the local school district tax currently paying for more or less of the school's operation each year?

☐ more ☐ less C-1 I-0 (23)

10. Does the Federal Government normally pay 5% or more of the total cost of education in this school district?

☐ Yes ☐ No C-1 I-0 (25)

11. Is the state's share of the school district expenses increasing or decreasing in percent?

☐ increasing ☐ decreasing C-1 I-0 (27)

12. What was the amount of the Contingency Fund or Emergency Fund for the 1969-1970 or current budget period of this budget?

_____ C-1 I-0 (29)

13. Has the amount spent for Community Services changed more than 20% in the past few years?

☐ Yes ☐ No C-1 I-0 (31)

14. Has the amount paid to other school district changed more than \$5, 000. 00 in the past two years?

☐ Yes ☐ No C-1 I-0 (33)

15. About what amount is proposed to be spent to directly help boys and girls during the 1970-1971 budget period? UNDERLINE THE CORRECT ANSWER

a. \$2, 000, 000 b. \$5, 500, 000 c. \$3, 000, 000
d. \$3, 500, 000 e. \$4, 000, 000

C-1 I-0 (35)

16. About how much did the cost of administration jump from last year (1969-1970) to this year (1970-1971)?

a. 60% b. 20% c. 30% d. 50%

C-1 I-0 (37)

17. What was the amount spent on Fixed Costs this year (1969-1970)?

_____ C-1 I-0 (39)

18. The total budget requirements for the General Fund for the 1970-1971 budget period are _____. C-1 I-0 (41)
19. From 1969-1970 to 1970-1971 the amount requested for Capital Outlay has risen about:
a. 20% b. 40% c. 60% d. 80% C-1 I-0 (43)
20. Income from the Federal Government in 1967-1968 was _____. C-1 I-0 (45)
21. From the information presented in the budget, were these questions:
a. easy to answer b. hard to answer
c. as expected a-0 b-1 c-2 (47)

APPENDIX X

Form No. 472.1 (Rev. 10-69)
OREGON BOARD OF EDUCATION

NOTICE OF SCHOOL BUDGET HEARING

1 NOTICE is hereby given that a meeting of the governing body of _____ School District No. _____ of _____ County,
2 State of Oregon, will be held at _____ on the _____ day of _____, 19____ at _____ o'clock for the purpose of
3 discussing with interested persons the budget for the fiscal year beginning July 1, 19____ and ending June 30, 19____, hereinafter set forth.
4 The budget ☐ was ☐ was not prepared on a basis of accounting consistent with that used in the preceding year. Major accounting changes, if any, and their effect on the
5 budget are set forth in an accompanying statement.
6 A copy of the budget document is available for inspection at _____ between the hours of _____ and _____. The budget document
7 may be obtained for \$ _____, or parts of it may be obtained for \$ _____ per sheet.

For the Ensuing Fiscal Year Beginning July 1, 19 70

FINANCIAL SUMMARY

Signed _____
District School Board Chairman

	TAX LEVY COMPUTATION (1)	General Fund (2)	Debt Service Fund (3)	Capital Projects Fund (4)	School Lunch Fund (5)	Bus Replacement Fund (6)	PL 89-10 Fund (7)	(8)
8	Total Budget Requirements	4,474,744	730,233	1,262,500	205,048	4,100	76,000	
9	Deduct Total Budget Resources Except Tax To Be Levied	1,392,785	197,800	812,500	205,048	4,100	76,000	
10	Revenue Necessary To Balance Budget	3,081,959	532,433	450,000	-0-	-0-	-0-	
11	Add Est. of Taxes To Be Levied But Not Rec'd in Ensuing Year *	308,195	53,243	45,000				
12	Taxes To Be Levied for Ensuing Year	3,390,154	585,676	495,000	-0-	-0-	-0-	
	Analysis of Taxes To Be Levied							
13	Within 6% Limitation	297,536						
14	Outside 6% Limitation	3,092,618		495,000				
15	Not Subject To 6% Limitation		585,676					
16	Total Taxes To Be Levied	3,390,154	585,676	495,000				

For the Current Fiscal Year Beginning July 1, 19 69

	TAX LEVY COMPUTATION (1)	GENERAL FUND (2)	(3)	(4)	(5)	(6)	(7)	(8)
17	Total Budget Requirements	3,761,496	624,429	626,000	198,672	10,700	85,000	
18	Deduct Total Budget Resources Except Tax To Be Levied	1,356,290	219,000	176,000	198,672	10,700	85,000	
19	Revenue Necessary To Balance Budget	2,405,206	405,429	450,000	-0-	-0-	-0-	
20	Add Est. of Taxes To Be Levied But Not Rec'd in Ensuing Year	240,520	40,542	45,000				
21	Taxes To Be Levied for Ensuing Year	2,645,726	445,971	495,000	-0-	-0-	-0-	
	Analysis of Taxes To Be Levied							
22	Within 6% Limitation	280,695						
23	Outside 6% Limitation	2,365,031		495,000				
24	Not Subject To 6% Limitation		445,971					
25	Total Taxes To Be Levied	2,645,726	445,971	495,000				

STATEMENT OF INDEBTEDNESS

TYPE OF INDEBTEDNESS	Outstanding		Authorized, Not Incurred		PETTY CASH BALANCE	Approved by Budget Committee: Signed _____, 19____ Secretary
	Actual July 1 Current Year	Estimate July 1 Ensuing Year	Actual July 1 Current Year	Estimate July 1 Ensuing Year	ACTUAL July 1 Current Year	
26	Serial Bonds	2,333,000	1,917,000			Chairman
27	Negotiable Interest-Bearing Warrants					
28	Endorsed Warrants				\$	Adopted by District School Board: Signed _____, 19____ Clerk
29	Short-Term Notes				ESTIMATE July 1 Ensuing Year	
30						
31	Total	2,333,000	1,917,000		\$	Chairman

FORM APPROVED BY STATE DEPARTMENT OF REVENUE 12-69

*See explanation on the following page.

PAGE _____

69-11
69-11

BUDGET SUMMARY

School District No. _____

General

FUND

County _____

July 1, 19 77 to June 30, 19 77

PUBLISH THIS PAGE

HISTORICAL DATA			BUDGET RESOURCES	BUDGET FOR ENSUING YEAR		
Actual Second Year Preceding (1)	First Year Preceding (2)	Budget Current Year (3)		Proposed Do Not Publish This Column (4)	Approved (5)	Adopted Do Not Publish This Column (6)
53,378	38,602	26,000	Available Cash on Hand (Cash Basis), or Net Working Capital (Accrual Basis)	50,515		
153,956	176,193	123,115	Revenue from Local Sources Except Tax To Be Levied	124,690		
885,078	945,597	115,936	Revenue from Intermediate Sources	125,005		
1,037,091	1,110,615	1,090,204	Revenue from State Sources	1,044,766		
2,673	160	1,035	Revenue from Federal Sources	35,400		
			Proceeds from Sale of Bonds			
7,282	2,273		Proceeds from Sales	2,500		
			Receipts from Other School Districts	9,909		
			Transfers from Other Funds			
2,139,458	2,273,440	1,356,290	Total Budget Resources Except Tax To Be Levied	1,392,785		
935,520	1,095,870	x x x x x x	District Tax Received in Year Levied	x x x x x x	x x x x x x	x x x x x x
x x x x x x	x x x x x x	2,405,206	District Tax Required To Balance Budget	3,081,959		
3,074,978	3,369,310	3,761,496	TOTAL BUDGET RESOURCES	4,474,744		

BUDGET SUMMARY

School District No. _____

General FUND

County _____

July 1, 19. 70 to June 30, 19. 71

July 1, 19 19 to June 30, 19 77

HISTORICAL DATA			BUDGET REQUIREMENTS	BUDGET FOR ENSUING YEAR		
Actual		Budget Current Year (3)		Proposed Do Not Publish This Column (5)	Approved (6)	Adopted Do Not Publish This Column (7)
Second Year Preceding (1)	First Year Preceding (2)					
77,635	85,255	89,655	Administration—Salaries and Wages	106,860		
8,519	11,323	11,080	—Other	20,265		
2,103,580	2,266,525	2,554,329	Instruction—Salaries and Wages	2,983,141		
137,162	160,699	178,805	—Other	226,290		
1,050	1,150	1,250	Attendance Services—Salaries and Wages	1,400		
150	200	250	—Other	300		
			Health Services—Salaries and Wages			
8,402	549	8,865	—Other	4,900		
34,037	38,708	47,442	Pupil Transportation Services—Salaries and Wages	60,513		
18,892	29,859	30,130	—Other	36,200		
185,766	215,322	231,638	Operation of Plant—Salaries and Wages	244,106		
120,594	131,478	135,515	—Other	141,535		
43,412	43,749	48,187	Maintenance of Plant—Salaries and Wages	50,406		
41,023	57,366	51,375	—Other	63,705		
188,717	211,701	272,950	Fixed Charges	389,950		
			Food Services—Salaries and Wages			
			—Other			
21,270	30,225	34,000	Student Body Activities—Salaries and Wages	40,450		
194	264	250	—Other	250		
12,297	11,395	11,850	Community Services—Salaries and Wages	12,465		
62	26	50	—Other	50		
	616	1,150	Capital Outlay—Sites	1,680		
3,034	3,757	2,760	—Buildings	4,660		
26,025	20,171	24,220	—Equipment	44,230		
			Debt Service—Principal			
			—Interest			
4,555	8,963	8,245	Payments to Other School Districts	10,003		
		10,000	Operating Contingency	15,000		
2,000	2,000	7,500	Transfers to Other Funds	16,385		
3,038,376	3,331,301	3,761,496	TOTAL ESTIMATED EXPENDITURES	4,474,744		
38,602	40,008	-	Unappropriated Balance	-		
3,076,978	3,371,309	3,761,496	TOTAL BUDGET REQUIREMENTS	4,474,744		

PUBLISH THIS PAGE.

PUBLISH THIS PAGE

APPENDIX XI

Form No. 472-1 (Rev. 10-88)
OREGON BOARD OF EDUCATION

NOTICE OF SCHOOL BUDGET HEARING

1 NOTICE is hereby given that a meeting of the governing body of _____ School District No. _____ of _____ County,
2 State of Oregon, will be held at _____ on the _____ day of _____, 19____ at _____ o'clock for the purpose of
3 discussing with interested persons the budget for the fiscal year beginning July 1, 19____ and ending June 30, 19____, hereinafter set forth.
4 The budget ☐ was ☐ was not prepared on a basis of accounting consistent with that used in the preceding year. Major accounting changes, if any, and their effect on the
5 budget are set forth in an accompanying statement.
6 A copy of the budget document is available for inspection at _____ between the hours of _____ and _____. The budget document
7 may be obtained for \$_____, or parts of it may be obtained for \$_____ per sheet.

For the Ensuing Fiscal Year Beginning July 1, 19____

FINANCIAL SUMMARY

Signed _____
District School Board Chairman

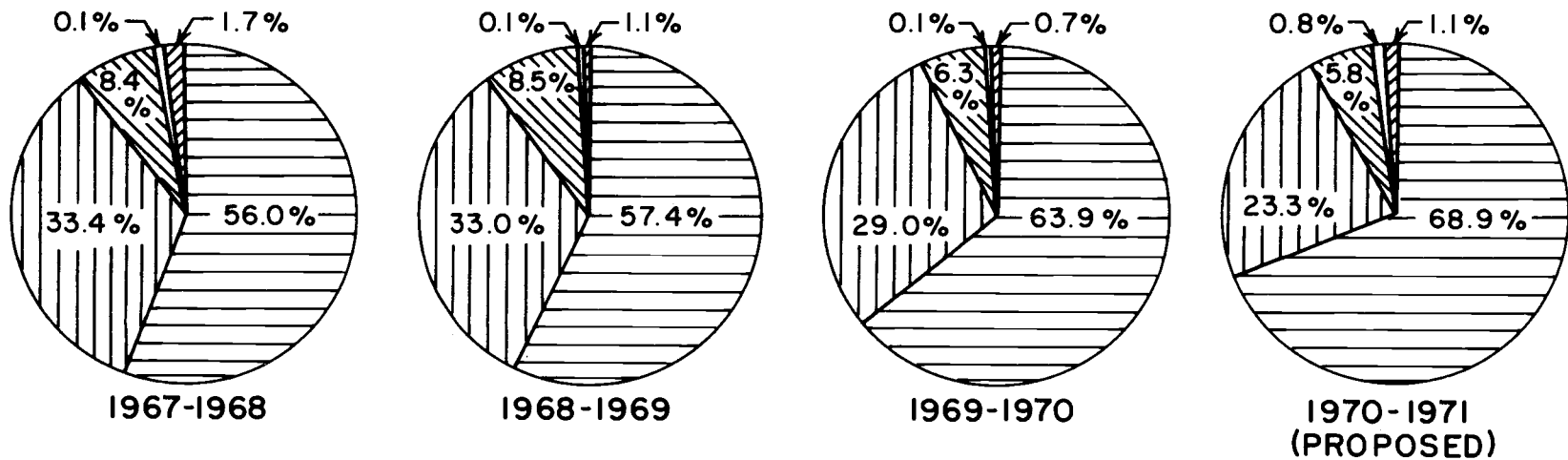
TOTAL BUDGET REQUIREMENTS






General Fund	July 1, 1969 - June 30, 1970	3,761,496	22% increase
	July 1, 1970 - June 30, 1971	4,474,744	
Debt Service Fund	July 1, 1969 - June 30, 1970	624,429	17% increase
	July 1, 1970 - June 30, 1971	730,233	
Capital Projects	July 1, 1969 - June 30, 1970	626,000	103% increase
	July 1, 1970 - June 30, 1971	1,262,500	
School Lunch Fund	July 1, 1969 - June 30, 1970	198,672	4% increase
	July 1, 1970 - June 30, 1971	205,048	
Bus Replacement Fund	July 1, 1969 - June 30, 1970	10,700	62% decrease
	July 1, 1970 - June 30, 1971	4,100	
PL 89-10 Fund	July 1, 1969 - June 30, 1970	85,000	11% decrease
	July 1, 1970 - June 30, 1971	76,000	

TOTAL TAXES TO BE LEVIED

General Fund	July 1, 1969 - June 30, 1970	2,645,726	29% increase
	July 1, 1970 - June 30, 1971	3,390,154	
Debt Service Fund	July 1, 1969 - June 30, 1970	445,971	31% increase
	July 1, 1970 - June 30, 1971	585,676	
Capital Projects Fund	July 1, 1969 - June 30, 1970	495,000	0% increase
	July 1, 1970 - June 30, 1971	495,000	
School Lunch Fund	No Taxes Required		

SOURCES OF THE SCHOOL DOLLAR



	1967-1968	1968-1969	1969-1970	1970-1971
 Cash on Hand	53,378	38,602	26,000	50,515
 Income from Local School District Tax	1,722,133	1,934,747	2,405,206	3,081,959
 Income from State Government	1,037,091	1,110,615	1,090,204	1,044,766
 Income from Federal Government	2,673	160	1,035	35,400
 Income from other Sources	258,816	284,876	238,555	261,360
TOTAL INCOME DOLLARS	3,074,000	3,369,000	3,761,000	4,474,000

BUDGET SUMMARY
General Fund

PROGRAM AREAS	Current	Proposed	% Increase
BASIC TO SCHOOL OPERATION	3,591,779	4,251,261	15.51
AUXILIARY SERVICES	123,567	170,268	27.42
NEW PROGRAMS AND POSITIONS			
COMMUNITY SERVICES	46,150	53,215	13.27
TOTAL	3,761,496	4,474,744	18.96

BASIC PROGRAM

The following items cost \$22.14 per thousand dollars of property value. These items provide a basic educational program.

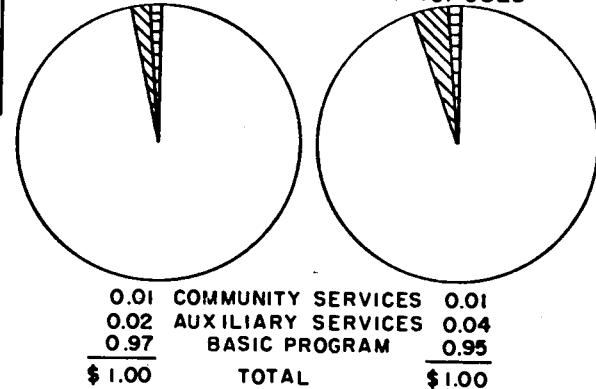
	current	proposed
INSTRUCTION-wages	2,554,329	2,983,141
INSTRUCTION-other costs	178,805	226,290
ADMINISTRATION-wages	89,655	106,860
ADMINISTRATION-other costs	11,080	20,265
BUILDING OPERATION-wages	231,638	244,106
BUILDING OPERATION-other costs	135,515	141,535
MAINTAINANCE-wages	48,187	50,406
MAINTAINANCE-other costs	51,375	63,705
FIXED CHARGES	272,950	389,950
DEBT SERVICE-principal		
DEBT SERVICE-interest		
PAYMENTS TO OTHER DISTRICT	8,245	10,003
EMERGENCY FUND	10,000	15,000
TOTAL	3,591,779	4,251,261

AUXILIARY SERVICES

The following items cost \$ 0.89 per thousand dollars of property value. These items aid the instructional program.

PUPIL ATTENDANCE OFFICE-wages	1,250	1,400
PUPIL ATTENDANCE OFFICE-other costs	250	300
HEALTH SERVICES-wages		
HEALTH SERVICES-other costs	8,865	4,900
TRANSPORTING STUDENTS-wages	47,422	60,513
TRANSPORTING STUDENTS-other costs	30,130	36,200
FOOD SERVICE-wages		
FOOD SERVICE-other costs		
CAPITAL OUTLAY-sites	1,150	1,680
CAPITAL OUTLAY-buildings	2,760	4,660
CAPITAL OUTLAY-equipment	24,220	44,230
TRANSFER TO OTHER FUNDS	7,500	16,385
TOTAL	123,567	170,268

EXPENDITURE	DOLLAR	ALLOCATION
CURRENT		PROPOSED



NEW PROGRAMS AND POSITIONS

The following items cost \$ 0.00 per thousand dollars of property value. These are new programs and positions being proposed.

	current	proposed

COMMUNITY SERVICES

The following items cost \$ 0.22 per thousand dollars of property value. These items provide non-academic services to the members of the community.

	current	proposed
STUDENT BODY ACTIVITIES-wages	34,000	40,450
STUDENT BODY ACTIVITIES-other	250	250
COMMUNITY SERVICES-wages	11,850	12,465
COMMUNITY SERVICES-other	50	50
TOTAL	46,150	53,215

APPENDIX XII

FORM 1 _____ NUMBER _____

NAME _____

ADDRESS _____

street city

PHONE _____ Male _____ Female _____

The activities in which you have been asked to take part are designed to help public and private schools determine what their patrons feelings are on a number of subjects. This is done so that the schools may better serve the community. This research is being carried out by Clifford Eberhardt of Oregon State University.

Your name is asked for so that if follow up research is called for, you may be contacted. Names will be held in confidence and not used in reporting the results of this research.

Under each of the following statements there are five words. Please underline the word which best describes your feelings about the statement at this time. Do not spend much time on any one item, 10 minutes should be enough time to answer all of the statements.

- | | | | | | |
|----|--|-------|-----------|----------|-------------------|
| 1. | Schools need to spend more time and money on new ideas in education. | | | | |
| | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 2. | School boards of school districts make little effort to control educational expenditures in the community. | | | | |
| | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 3. | Americans should save their money instead of spending it on education through taxes. | | | | |
| | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 4. | Property tax money used to support public schools is the best investment of tax funds possible. | | | | |
| | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 5. | Teachers make good use of money given them for supplies to be used in the classroom. | | | | |
| | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 6. | Property taxes are too high. | | | | |
| | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |

7. School buildings are too fancy.
Strongly Agree Agree Undecided Disagree Strongly Disagree
8. The cost of subjects other than reading, writing, and arithmetic should be paid by the parents.
Strongly Agree Agree Undecided Disagree Strongly Disagree
9. School buildings cost too much money.
Strongly Agree Agree Undecided Disagree Strongly Disagree
10. The education of children in our community would not be hurt if schools had only half as much money to spend.
Strongly Agree Agree Undecided Disagree Strongly Disagree
11. Voters in school districts have no control over the total dollars spent.
Strongly Agree Agree Undecided Disagree Strongly Disagree
12. School costs which lead to quality education should be eliminated in favor of basic education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
13. It is only right that all children should be getting free bus rides to and from school.
Strongly Agree Agree Undecided Disagree Strongly Disagree
14. Individual Americans can make better use of money than the schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
15. If people knew how school money was being spent, they would vote yes on more school budgets.
Strongly Agree Agree Undecided Disagree Strongly Disagree
16. The education of boys and girls is an investment in the future.
Strongly Agree Agree Undecided Disagree Strongly Disagree
17. American schools need more money to improve the quality of education provided for children.
Strongly Agree Agree Undecided Disagree Strongly Disagree
18. Teacher salaries are too high.
Strongly Agree Agree Undecided Disagree Strongly Disagree
19. More than half of the tax money used by education is wasted.
Strongly Agree Agree Undecided Disagree Strongly Disagree
20. School buildings are well constructed and not excessive in their costs.
Strongly Agree Agree Undecided Disagree Strongly Disagree
21. Money spent on schools shows little result for the dollar spent.
Strongly Agree Agree Undecided Disagree Strongly Disagree

22. Changes in society cost more in dollars than they are worth.
Strongly Agree Agree Undecided Disagree Strongly Disagree
23. School administrators and school boards try to hide the financial facts from the public.
Strongly Agree Agree Undecided Disagree Strongly Disagree
24. Too many people are hired because of education instead of experience.
Strongly Agree Agree Undecided Disagree Strongly Disagree
25. Children need the most education that our society can give them.
Strongly Agree Agree Undecided Disagree Strongly Disagree
26. Schools use their money effectively.
Strongly Agree Agree Undecided Disagree Strongly Disagree
27. Statements made by educated people are not to be trusted as much as statements made by uneducated people.
Strongly Agree Agree Undecided Disagree Strongly Disagree
28. Experts are people who push others around.
Strongly Agree Agree Undecided Disagree Strongly Disagree
29. Education is a necessity that needs better long-range financing.
Strongly Agree Agree Undecided Disagree Strongly Disagree
30. School programs today are more effective than ever before.
Strongly Agree Agree Undecided Disagree Strongly Disagree
31. Education cannot take the place of experience.
Strongly Agree Agree Undecided Disagree Strongly Disagree
32. School taxes are wisely used by school boards.
Strongly Agree Agree Undecided Disagree Strongly Disagree
33. There is little social use in education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
34. Thinkers are poor leaders.
Strongly Agree Agree Undecided Disagree Strongly Disagree
35. Americans place too much value on education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
36. Our society shows too much respect for education and not enough for experience.
Strongly Agree Agree Undecided Disagree Strongly Disagree
37. Adult vocational education and retraining programs need to be expanded.
Strongly Agree Agree Undecided Disagree Strongly Disagree

38. Kindergartens should be provided in all schools.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
39. Students in America are given too much freedom.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
40. People who try to change things usually do it for a selfish reason.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
41. Music and art need to be a strong part of every school program.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
42. Schools should provide opportunities for individuals to explore personal interests.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
43. College and university students care more about having fun than learning.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
44. Counseling and other supporting educational services must be provided to meet each student's needs.
 Strongly Agree Agree Undecided Disagree Strongly Disagree

APPENDIX XIII

FORM 2

NAME _____

ADDRESS _____

PHONE _____

Male _____ Female _____

The activities in which you have been asked to take part are designed to help public and private schools determine what their patrons feelings are on a number of subjects. This is done so that the schools may better serve the community. This research is being carried out by Clifford Eberhardt of Oregon State University.

Your name is asked for so that if follow up research is called for, you may be contacted. Names will be held in confidence and not used in reporting the results.

Under each of the following statements there are five words. Please underline the word which best describes your feelings about the statement at this time. Do not spend much time on any one item, 10 minutes should be enough time to answer all of the statements.

- | | | | | | | |
|----|---|----------------|-------|-----------|----------|-------------------|
| 1. | School administrators and school boards try to hide the financial facts from the public. | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 2. | Too many people are hired because of education instead of experience. | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 3. | Children need the most education that our society can give them. | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 4. | Schools use their money effectively. | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 5. | Statements made by educated people are not to be trusted as much as statements made by uneducated people. | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 6. | Experts are people who push others around. | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |
| 7. | Education is a necessity that needs better long-range financing. | Strongly Agree | Agree | Undecided | Disagree | Strongly Disagree |

8. School programs today are more effective than ever before.
Strongly Agree Agree Undecided Disagree Strongly Disagree
9. Education cannot take the place of experience.
Strongly Agree Agree Undecided Disagree Strongly Disagree
10. School taxes are widely used by school boards.
Strongly Agree Agree Undecided Disagree Strongly Disagree
11. There is little social use in education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
12. Thinkers are poor leaders.
Strongly Agree Agree Undecided Disagree Strongly Disagree
13. Americans place too much value on education.
Strongly Agree Agree Undecided Disagree Strongly Disagree
14. Our society shows too much respect for education and not enough for experience.
Strongly Agree Agree Undecided Disagree Strongly Disagree
15. Adult vocational education and retraining programs need to be expanded.
Strongly Agree Agree Undecided Disagree Strongly Disagree
16. Kindergartens should be provided in all schools.
Strongly Agree Agree Undecided Disagree Strongly Disagree
17. Students in America are given too much freedom.
Strongly Agree Agree Undecided Disagree Strongly Disagree
18. People who try to change things usually do it for a selfish reason.
Strongly Agree Agree Undecided Disagree Strongly Disagree
19. Music and art need to be a strong part of every school program.
Strongly Agree Agree Undecided Disagree Strongly Disagree
20. Schools should provide opportunities for individuals to explore personal interests.
Strongly Agree Agree Undecided Disagree Strongly Disagree
21. College and university students care more about having fun than learning.
Strongly Agree Agree Undecided Disagree Strongly Disagree
22. Counseling and other supporting educational services must be provided to meet each student's needs.
Strongly Agree Agree Undecided Disagree Strongly Disagree
23. Schools need to spend more time and money on new ideas in education.
Strongly Agree Agree Undecided Disagree Strongly Disagree

24. School boards of school districts make little effort to control educational expenditure in the community.
 Strongly Agree Agree Undecided Disagree Strongly Disagree
25. Americans should save their money instead of spending it on education through taxes.
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36. Individual Americans can make better use of money than the schools.
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Strongly Agree Agree Undecided Disagree Strongly Disagree
43. Money spent on schools shows little result for the dollar spent.
Strongly Agree Agree Undecided Disagree Strongly Disagree
44. Changes in society cost more in dollars than they are worth.
Strongly Agree Agree Undecided Disagree Strongly Disagree

VALUE SURVEY

BIRTH DATE _____ SEX: MALE _____ FEMALE _____

CITY and STATE OF BIRTH _____

NAME (FILL IN ONLY IF REQUESTED) _____

INSTRUCTIONS

On the next page are 18 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life. Each value is printed on a gummed label which can be easily peeled off and pasted in the boxes on the left-hand side of the page.

Study the list carefully and pick out the one value which is the most important for you. Peel it off and paste it in Box 1 on the left.

Then pick out the value which is second most important for you. Peel it off and paste it in Box 2. Then do the same for each of the remaining values. The value which is least important goes in Box 18.

Work slowly and think carefully. If you change your mind, feel free to change your answers. The labels peel off easily and can be moved from place to place. The end result should truly show how you really feel.

1		A COMFORTABLE LIFE (a prosperous life)
2		AN EXCITING LIFE (a stimulating, active life)
3		A SENSE OF ACCOMPLISHMENT (lasting contribution)
4		A WORLD AT PEACE (free of war and conflict)
5		A WORLD OF BEAUTY (beauty of nature and the arts)
6		EQUALITY (brotherhood, equal opportunity for all)
7		FAMILY SECURITY (taking care of loved ones)
8		FREEDOM (independence, free choice)
9		HAPPINESS (contentedness)
10		INNER HARMONY (freedom from inner conflict)
11		MATURE LOVE (sexual and spiritual intimacy)
12		NATIONAL SECURITY (protection from attack)
13		PLEASURE (an enjoyable, leisurely life)
14		SALVATION (saved, eternal life)
15		SELF-RESPECT (self-esteem)
16		SOCIAL RECOGNITION (respect, admiration)
17		TRUE FRIENDSHIP (close companionship)
18		WISDOM (a mature understanding of life)

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE.

Below is another list of 18 values. Arrange them in order of importance, the same as before.

1		AMBITIOUS (hard-working, aspiring)
2		BROADMINDED (open-minded)
3		CAPABLE (competent, effective)
4		CHEERFUL (lighthearted, joyful)
5		CLEAN (neat, tidy)
6		COURAGEOUS (standing up for your beliefs)
7		FORGIVING (willing to pardon others)
8		HELPFUL (working for the welfare of others)
9		HONEST (sincere, truthful)
10		IMAGINATIVE (daring, creative)
11		INDEPENDENT (self-reliant, self-sufficient)
12		INTELLECTUAL (intelligent, reflective)
13		LOGICAL (consistent, rational)
14		LOVING (affectionate, tender)
15		OBEDIENT (dutiful, respectful)
16		POLITE (courteous, well-mannered)
17		RESPONSIBLE (dependable, reliable)
18		SELF-CONTROLLED (restrained, self-disciplined)

APPENDIX XV
ATTITUDE SCALE
PRE TEST MEANS

Number of Subject	Means Score Education A	Means Score Money B	Means Score Difference C=A-B
006	2.50	1.90	.60
012	2.18	1.59	.59
015	2.45	2.27	.18
020	2.22	2.59	-.37
021	1.95	1.50	.45
024	2.00	1.40	.60
028	.77	1.00	-.23
029	1.04	.77	.27
034	2.00	1.59	.41
035	1.81	1.77	.04
039	1.95	1.68	.27
040	1.81	2.22	-.41
042	1.81	1.45	.36
044	2.54	2.45	.09
045	2.72	2.50	.22
048	1.59	1.45	.14
049	1.68	1.36	.32
052	2.90	2.86	.04
053	2.54	2.63	-.09
095	2.59	2.22	.37
096	2.13	1.81	.32
099	2.27	1.90	.37
100	3.09	2.72	.37
101	2.81	2.40	.41
103	2.31	1.90	.41
105	1.13	1.04	.09
108	2.04	2.13	-.09
109	2.59	2.31	.28
110	2.59	2.50	.09
111	2.63	2.40	.23
113	2.59	2.40	.19
114	1.09	.86	.23
116	2.54	2.36	.18
118	2.77	3.04	-.27
119	2.45	2.59	-.14

121	. 95	. 81	. 14
122	2. 13	2. 04	. 09
124	2. 68	3. 13	-. 45
125	2. 68	3. 09	-. 41
126	2. 59	1. 95	. 64
128	3. 00	3. 00	. 00
131	2. 50	2. 22	. 28
132	2. 40	2. 13	. 27
134	2. 77	2. 81	-. 04
136	2. 72	2. 86	-. 14
140	1. 31	1. 54	-. 23
142	2. 68	2. 86	-. 18
144	2. 36	2. 72	-. 36
146	3. 00	2. 63	. 37
147	2. 81	2. 45	. 36
148	2. 45	2. 81	-. 36
151	3. 45	3. 36	. 09
152	2. 81	2. 81	. 00
154	1. 14	1. 21	-. 07
155	2. 63	2. 81	-. 18
157	2. 54	2. 68	-. 14
156	2. 90	2. 86	. 04
159	3. 50	3. 54	-. 04
160	2. 54	2. 77	-. 23
163	1. 77	1. 22	. 55
164	2. 68	2. 68	. 00
166	2. 95	2. 77	. 18
167	2. 27	2. 59	-. 32
168	3. 13	2. 77	. 36
169	2. 68	2. 63	. 05
171	1. 86	2. 18	-. 32
172	2. 72	2. 13	. 59
173	2. 63	2. 68	-. 05
176	1. 81	. 90	. 91
180	2. 50	2. 59	. 09
181	3. 22	3. 36	-. 14
182	1. 86	2. 31	-. 45
183	2. 77	2. 68	. 09
185	2. 50	2. 27	. 23
189	2. 45	2. 54	-. 09
190	2. 45	2. 27	. 18
191	3. 22	3. 04	. 18
192	2. 86	2. 59	. 27
193	2. 63	2. 40	. 23
194	2. 86	2. 72	. 14

195	2. 81	2. 77	. 04
200	3. 13	2. 77	. 36
206	2. 63	3. 04	-. 41
208	2. 50	2. 68	-. 18
216	3. 09	2. 77	. 32
217	2. 31	2. 09	. 22
219	3. 59	3. 27	. 32
220	2. 81	2. 68	. 13
221	2. 40	2. 27	. 13
222	2. 77	3. 04	-. 27
223	2. 59	2. 45	. 14
226	2. 31	2. 31	. 00
225	3. 18	2. 95	. 23
231	3. 04	2. 59	. 45
233	2. 54	2. 72	-. 18
235	3. 31	3. 45	-. 14
236	2. 95	2. 90	. 05
238	2. 40	2. 59	-. 19
239	3. 54	3. 31	. 23
240	3. 00	2. 63	. 37
241	2. 77	2. 86	-. 09
250	2. 86	2. 50	. 36
263	3. 04	3. 18	. 14
264	2. 95	1. 95	1. 00
265	2. 77	3. 45	-. 68
267	2. 59	2. 63	-. 04
269	3. 22	3. 50	-. 28
270	2. 31	1. 95	. 36
271	3. 13	3. 22	-. 09
274	2. 77	2. 81	-. 04
278	2. 53	2. 53	. 00
280	3. 13	3. 18	-. 05
283	1. 64	1. 50	. 14
284	2. 40	2. 13	. 27
287	2. 63	2. 54	. 09
288	2. 22	2. 27	-. 05
290	2. 31	2. 59	-. 28
292	1. 57	1. 42	. 15
294	2. 77	2. 45	. 32
295	3. 00	2. 95	. 05
296	2. 13	2. 59	-. 46
299	3. 63	3. 72	-. 09
301	2. 72	2. 50	. 22
302	1. 96	1. 92	. 04
304	2. 68	2. 90	-. 22

305	3. 13	3. 22	-. 09
307	2. 25	2. 00	. 25
308	2. 40	2. 22	. 18
309	3. 00	2. 95	. 05
310	2. 68	2. 68	. 00
312	2. 50	1. 95	. 55
314	2. 00	1. 89	. 11
325	2. 90	2. 77	. 13
331	2. 63	2. 90	-. 27
343	2. 32	1. 96	. 36
344	1. 46	1. 25	. 21
345	3. 18	3. 22	-. 04
347	2. 95	2. 95	. 00
348	3. 00	2. 77	. 23
351	2. 90	2. 40	. 50
355	3. 27	2. 77	. 50
356	2. 28	2. 25	. 03
359	2. 50	2. 64	-. 14
361	2. 68	2. 72	-. 04
362	2. 95	2. 77	. 18
364	1. 96	1. 92	. 04
367	2. 22	2. 63	-. 41
368	2. 68	2. 45	. 23
370	2. 35	2. 10	. 25
371	3. 13	3. 27	-. 14
372	3. 54	3. 13	. 39
374	3. 09	3. 36	-. 27
379	2. 89	2. 89	. 00
380	3. 27	3. 13	. 14
381	2. 54	2. 86	-. 32
382	2. 54	2. 59	-. 05
385	2. 25	2. 07	. 18
387	3. 22	3. 27	-. 05
388	3. 36	3. 09	. 27
389	1. 92	2. 14	-. 22
390	2. 90	2. 40	. 50

APPENDIX XVI

Distribution of Differences Between the Means in Pre Test

Range	Frequency
1.00 to .91	2
.90 to .81	0
.80 to .71	0
.70 to .61	1
.60 to .51	6
.50 to .41	8
.40 to .31	16
.30 to .21	20 (a)
.20 to .11	18 (b)
.10 to .01	15
0 to -.09	25 (c)
-.10 to -.19	11
-.20 to -.29	10
-.30 to -.39	6
-.40 to -.49	7
-.50 to -.59	0
-.60 to -.69	<u>1</u>
Total	146

 (a) mean = .24

(b) midpoint

(c) mode

APPENDIX XVII

Distribution of Attitude Toward Education Scores

Range	Column I Education Positive	Column II Education Negative
3.61 - 3.70	0	1
3.51 - 3.60	3	0
3.41 - 3.50	1	1
3.31 - 3.40	1	1
3.21 - 3.30	4	3
3.11 - 3.20	3	4
3.01 - 3.10	4	1
2.91 - 3.00	11	0
2.81 - 2.90	12 (a)	1
2.71 - 2.80	5	7
2.61 - 2.70	8 (b)	8 (a)
2.51 - 2.60	8 (c)	7
2.41 - 2.50	7	4 (b)
2.31 - 2.40	8 (d)	3
2.21 - 2.30	1	4 (d)
2.11 - 2.20	3	1
2.01 - 2.10	0	1
Midpoint		
1.91 - 2.00	4	0
1.81 - 1.90	3	3
1.71 - 1.80	1	0
1.61 - 1.70	1	0
1.51 - 1.60	1	0
1.41 - 1.50	0	0
1.31 - 1.40	0	1
1.21 - 1.30	0	0
1.11 - 1.20	1	0
1.01 - 1.10	2	0
.91 - 1.00	0	1
.81 - .90	0	0
.71 - .80	0	1
Totals	92	53

(a) mode

(b) mean (Column I = 2.61; Column II = 2.50)

(c) overall mean 2.57

(d) column midpoint

APPENDIX XVIII

Distribution of Scores on Attitude Toward
Money for School Expenditures

Range	Column I Money Positive	Column II Money Negative
3.71 - 3.80	1	0
3.61 - 3.70	0	0
3.51 - 3.60	1	0
3.41 - 3.50	3	0
3.31 - 3.40	2	2
3.21 - 3.30	5	1
3.11 - 3.20	2	3
3.01 - 3.10	4	3
2.91 - 3.00	2	3
2.81 - 2.90	11 (a)(b)	3
2.71 - 2.80	4	10 (a)
2.61 - 2.70	7	5
2.51 - 2.60	9 (c)	5
2.41 - 2.50	0	8
2.31 - 2.40	1 (d)	9 (b)
2.21 - 2.30	1	8
2.11 - 2.20	2	3
2.01 - 2.10	0	2 (d)
Midpoint		
1.91 - 2.00	0	3
1.81 - 1.90	0	5
1.71 - 1.80	0	1
1.61 - 1.70	0	1
1.51 - 1.60	1	2
1.41 - 1.50	0	3
1.31 - 1.40	0	2
1.21 - 1.30	0	1
1.11 - 1.20	0	0
1.01 - 1.10	0	1
.91 - 1.00	1	0
.81 - .90	0	3
.71 - .80	<u>0</u>	<u>1</u>
Totals	57	88

(a) mode

(b) mean (Column I = 2.81; Column II = 2.32)

(c) overall mean 2.51

(d) column midpoint