

ATTITUDE OF ADULTS IN OTTAWA COUNTY
TOWARD HIGH SCHOOL

by

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B. S., Kansas State College
of Agriculture and Applied Science, 1928

A THESIS

submitted in partial fulfillment of the

requirements for the degree of

MASTER OF SCIENCE

Department of Education

KANSAS STATE COLLEGE
OF AGRICULTURE AND APPLIED SCIENCE

1942

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INTRODUCTION

As a high school administrator, I have often wondered what adults think about the high school as it exists today. Do they understand the purposes and policies of the high school? Are we teaching the things adults would have us teach? Do the methods used in teaching comply with the opinions of adults? Are they conservative or liberal? Is there a tendency toward significant differences of attitudes among groups of adults? These are a few questions for which answers are desired.

The tremendous increases in high school enrollments and graduating classes seem to indicate a firm faith that the four years of high school education is time well spent. The issue here is not whether adults believe high school education is valuable, but rather the kind of high school education that seems most valuable.

Probably most of the interest in this study came after discussions of recent population trends and their effect on the secondary school.

If we are to expect public support in providing schools which develop worth-while learning experiences, it is essential that the adult members of our society give understanding approval to such a program. It is probably impossible for the school program to advance very far beyond the educational ideas and attitudes of the public from which the school derives its support. Educational leaders constantly emphasize the necessity for using every device possible in developing public understanding of a progressive school program and a willingness to support those activities which

seem of most worth.

Unless people have a rather continuous and close relation with the school, or have a firm conviction that educational practices must change to meet new needs, they are likely to feel that the kind of schooling which they experienced should be given to their children without much change. Under these circumstances it becomes quite important to know what attitudes adults have formed.

Attitude is considered to be a disposition toward responding to a stimulus in a given manner. The attitude is primarily a way of being "set" toward or against things. To quote, Thorstone and Chave (6, p. 6) stated, "The concept opinion will be used here to denote the sum total of man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats, and convictions about any specific topic". Attitude cannot be measured directly but a man's attitude may be revealed indirectly by his verbal declarations, by his actions, or by a study of his history.

The scale used here utilized only verbal behavior or opinions as an index of attitude. Several controversial statements were presented to each adult to which he responded verbally, thus, revealing his opinion on the statements. The concept "opinion" means a verbal expression of attitude, that is, an expressed opinion symbolizes an attitude. In this investigation, opinions will be used as a means for measuring attitudes. However, the use of an opinion as an index of attitude is uncertain. People

often act inconsistently with the opinions they profess. Does this mean that verbal behavior is unsuitable for serious research? It seems that, under properly controlled conditions, verbal expression may actually be a more accurate indicator of attitude than overt behavior. A man may act a lie as well as tell a lie. In either case, in order to get a true attitude, it is necessary to remove the incentive to misrepresentation. This is more easily accomplished with verbal expression than with overt behavior. In using an attitude questionnaire the incentive to falsification is reduced by guaranteeing anonymity.

By knowing the existing attitudes, principals may be able to stimulate friendlier feelings toward changes necessary in education to meet modern conditions of social development. Valuable suggestions to this end may come from the adults themselves. It is the purpose of this study to construct a scale and measure the attitudes of adults in Ottawa county through such expressions of opinion.

TECHNIQUES IN ATTITUDE SURVEYS

It is not many years since attitudes were considered beyond the reach of measurement. Today we find an abundant literature on this subject. However, records of experimental studies on attitudes of adults toward high school seems to be lacking.

An important step in the measurement of attitudes is the construction of an attitude scale. The importance of the statements in an attitude scale is emphasized by several writers. We might

say, no scale is better than the statements which compose it. According to Wang (7, p. 367) there are 16 criteria for writing statements which if followed will increase the reliability of the scale:

1. An attitude statement must be debatable.
2. All statements should belong, as nearly as can be judged, to the same attitude variable.
3. An attitude statement must not be susceptible to more than one interpretation.
4. Avoid "double-barreled" statements.
5. An attitude statement should be short.
6. Each attitude statement should be complete in denoting a definite attitude toward a specific issue.
7. Each attitude should contain only one complete thought.
8. Avoid grouping two or more complete sentences as one attitude statement.
9. An attitude statement should be clear cut and direct.
10. Use with care and moderation such words as "only", "mere", "just" (in the sense of only), "merely", etc.
11. Avoid colorless expressions or statements lacking effect.
12. Whenever possible, write an attitude statement in the form of a simple rather than a complex or compound sentence.
13. When a statement cannot be written in the form of a simple sentence, write it as a complex rather than a compound one.
14. It is usually better to use the active rather than the passive voice.
15. In general, use the term of the issue as the subject of a statement.
16. Avoid high-sounding words, uncommon words or expressions, technical terms not ordinarily understood, etc.

A need for generalized scales which can be quickly pressed into service to measure attitude toward any subject or issue was suggested by Remmers (5, p. 298). The more important methods of attitude measurement in current use was summarized by Droba (1, p. 309): "(a) the method of absolute ranking; (b) the case method or essay method; (c) relative ranking; (d) paired comparison; (e) graphic rating scale; (f) equal-appearing intervals". It was pointed out by Kirkpatrick (3, p. 85) that attitude incon-

sistency should be expected and may be analyzed into four types: "(a) behavior forms; (b) verbal inconsistency; (c) logical inconsistency; (d) inconsistency of attitude". This of course complicates considerably the problem of measuring attitudes.

An instrument was developed by Harnly (2, p. 25) to measure the attitude of high school seniors toward certain aspects of education. The Likert technique was used except for the determining of the differentiating power of the statements in which case the sigma method of item analysis was used. Such item analysis reveals the satisfactoriness of any statement, insofar as its inclusion in the scale is concerned, by correlation between the scores on each statement and the scores on the battery of statements. The only difficulty in using this method is that the calculation of the necessary coefficients is unnecessarily laborious. Likert (4, p. 50) has used the much simpler method, criterion of internal consistency, in determining the differentiating power of statements and found its results comparable with those obtained from the sigma method of item analysis.

The Thurstone Technique

The Thurstone technique of developing an attitude scale is well illustrated by Thurstone and Chave (6, p. 23) who described the preparation of a scale to measure attitudes toward the church. They began by preparing a list of 130 statements about the church ranging from the more conservative, "I have seen no value in the church", to the more liberal, "I believe the church is the great-

est institution in America today". The statements were mimeographed on small slips, one statement on each slip. A set of these slips was given to each of 341 subjects who acted as judges. The following instructions were to be followed (6, p. 31):

You are given 11 slips with letters on them, A, B, C, D, E, F, G, H, I, J, K. On slip A put those statements you believe express the highest appreciation of the value of the church. On slip F put those expressing a neutral position. On slip K put those slips which express the strongest depreciation of the church. On the rest of the slips arrange statements in accordance with the degree of appreciation or depreciation expressed in them.

After the 341 judges have sorted the 130 statements into 11 piles a long and laborious technique was used to select the best four statements from each of the 11 piles. To these 44 statements was added another statement taken from the more conservative position making a total of 45 statements used in the completed scale.

Comparison of the Thurstone and Likert Technique

Likert (4, p. 5) described his experimental studies in 1932 and compared his results with those of Thurstone. He took the statements of the original Thurstone Droba War Scale, applied his method of assigning weights to them and obtained higher reliabilities with fewer items than had Thurstone through the utilization of his scale (Table 1).

Table 1. Comparison of the Thurstone and the 1 to 5 method of scoring the Thurstone-Droba War Scale, N = 54.
(Likert, 4, Table 9)

	Correlation	
	Form A. vs. B. Raw	Corrected
Thurstone-Droba scale scored 1-5 method (18 questions only used in each form instead of 22) - - - - -	(18 vs. 18) .88	(36 items) .94
Regular Thurstone scoring (44 items) - (22 vs. 22)	(44 items) .78	(44 items) .88
Coefficient of correlation between the two methods		
	Raw	Corrected for Attenuation
Thurstone scale (44 items) vs. 1-5 scoring of Thurstone scale (36 items) - - - -	.83	.92

Methods Used by Likert in Constructing an Attitude Scale

The following criteria are essential in the construction of an attitude scale when using the Likert technique:

1. Select the attitude variable to be measured.
2. Formulate statements which seem to cover this variable.
3. Arrange the scale so that half of the statements are in sympathy with the attitude variable and half are opposed to this position. These are sometimes called the more liberal and more conservative.
4. When the scale is applied, ask the subjects to respond thus: strongly agree, agree, undecided, disagree, strongly disagree.
5. Assign points to these reactions as follows: strongly agree, 1 point; agree, 2 points; undecided, 3 points; disagree, 4 points; strongly disagree, 5 points. The investigator must then decide whether 1 point is to be scored for a strongly agree reaction to a liberal statement or a conservative statement. In this study 1 point is always earned for the more liberal position and 5 points for the more conservative position.
6. Add the numerical values (1, 2, 3, 4, or 5 points) of each statement and a total score is obtained for all of the statements in the scale. If there are 50 statements, 50 points would indicate the more liberal position and 250 points would indicate the more con-

servative position.

7. Use the criterion of internal consistency to determine statements which do not measure the common attitude variable. This is done by finding the discriminating values for each statement.

As one studies developments in devising scales for the measurement of attitude it seems evident that in general the Likert technique is as effective as any other so far developed and much simpler to use.

METHODS OF PROCEDURE

The attitude variable for this study may be described as adjustment of educational organization and technique toward changing industrial and social conditions. The liberal attitude would favor an aggressive program in this respect, while the opposed or conservative attitude would favor the traditional authoritarian school with crystallized subject matter to be mastered; with emphasis upon unrelated facts and skills outlined in textbooks and fixed courses of study, always within the four walls of the schoolroom.

Experimental Scale

To prepare for the experimental scale 100 statements concerning the high school were formed. They were drawn from numerous sources: professional magazines and other literature on high school principles, aims, objectives, and policies; scale

used by Harnly (2, p. 302); lectures and a number of statements devised from suggestions made by graduate students and college instructors. These statements were formulated to cover the following areas: purposes or aims of high school; high school policies; subject matter content; methods of teaching in high school; miscellaneous.

Each statement conformed, as nearly as possible, to the criteria as presented by Wang (7, p. 367).

Approximately half of these statements were worded conservatively and half liberally. These were examined critically by a number of graduate students and faculty members at Kansas State College with resultant refinements and restatements. They were then arranged in random order and each set up with shades of attitude thus:

All students in the same class should be doing the same things.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

The 100 statements were then headed with the following instructions: "You will probably agree with some of the following statements and disagree with others. Please indicate your own feeling about each of them by underscoring the phrase in parenthesis which most nearly describes it". The resulting form appears in the Appendix.

After these preliminary forms were prepared, through the cooperation of faculty members in the Department of Education, responses to them were secured from individuals ranging from college freshmen to faculty members so that 100 completed responses were available.

Development of Final Scale

To provide an objective evaluation of the reactions to each statement and to the whole list, numerical values from 1 to 5 were assigned to the optional responses to each statement, 1 always designating the strongly liberal and ranging up to 5 for the strongly conservative, irrespective of the form of the statement. This made possible a range of total score on the 100 statements from 100 to 500.

The next step was to examine each paper and assign the appropriate numerical value to the response to each of the 100 statements, then add for total. This done we were ready to apply Likert's criterion of internal consistency in selecting the 50 statements of greatest differentiating power from the entire group. To do this two groups of papers were selected, the 10 scoring highest and the 10 scoring lowest, the sum of the scores in each group determined for each of the 100 statements and the difference between these sums found. The mechanics of the procedure are illustrated in Table 2. These differences ranged from a minus 1 on statement 5 to 18 on statement 60. On the basis of these differences it was possible to select 50 statements with a discriminative value of 8 or more. These 50 statements were then taken for the final scale.

The net result of this procedure was to eliminate the irrelevant and ambiguous statements which did not measure what the whole battery measures. It also eliminated those least effective as measurers.

Table 2. Mechanics of criterion of internal consistency.

Low group individual score		Statement numbers									
		1	2	3	4	5	6	7	8	9	10
3	161	2	1	2	2	1	1	1	3	2	1
4	138	2	1	2	1	3	2	2	2	2	2
7	145	2	1	1	1	3	1	3	2	1	2
10	142	2	1	1	1	3	1	3	2	1	1
11	157	1	1	2	1	2	1	2	2	2	1
13	161	1	1	1	1	1	1	1	2	2	1
19	140	1	1	1	1	2	1	1	2	4	2
23	156	2	1	1	1	2	2	2	2	1	2
61	134	2	1	2	1	2	1	1	2	2	2
99	143	2	1	1	1	2	1	1	1	1	1
Sum of low		17	10	14	11	21	12	17	20	18	15
High group											
5	232	2	2	4	2	2	2	2	2	4	4
6	229	2	1	2	2	2	4	2	2	2	4
12	225	1	2	4	2	2	1	2	2	2	3
22	226	4	1	1	2	2	4	2	2	3	2
36	231	2	2	2	2	2	1	2	2	2	2
44	225	4	1	5	3	2	2	3	2	2	4
62	239	3	1	1	3	1	4	4	2	2	3
72	241	2	1	4	1	2	2	2	2	1	2
94	226	4	1	1	1	2	2	3	4	2	2
96	226	4	1	2	2	3	2	3	4	2	2
Sum of high		28	13	26	20	20	24	25	24	22	28
Sum of low		17	10	14	11	21	12	17	20	18	15
Difference		11	3	12	9	-1	12	8	4	4	13

94	95	96	97	98	99	100
1	1	1	1	1	2	4
1	1	1	2	2	1	2
1	1	2	1	1	2	1
1	1	1	2	1	1	4
1	1	1	2	2	2	2
1	4	3	1	2	2	3
1	2	2	2	3	1	3
1	2	2	1	2	2	2
2	2	3	1	1	2	1
1	1	1	2	2	2	1
11	16	17	15	17	17	23
2	2	2	2	3	4	2
4	2	4	4	2	3	4
1	2	4	2	4	2	2
2	1	2	3	2	4	2
2	3	3	2	2	3	2
3	2	3	4	2	2	2
1	1	2	3	4	2	2
2	2	2	3	2	3	3
3	2	3	3	3	2	3
2	2	2	2	2	2	2
22	19	27	28	26	27	24
11	16	17	15	17	17	23
11	3	10	13	9	10	1

Furthermore, the criterion serves as an objective check upon the correct assigning of numerical values in that, if the numerical values were reversed on a particular statement, the extreme high group would score low on that statement and the extreme low group would score high, resulting in a negative difference between the two extreme groups on that particular statement.

Having selected by the criterion of internal consistency the 50 statements to be used in the final scale, it developed that of these 22 were stated in conservative form and 28 in liberal form. These were arranged in random order to constitute the scale proper.

To facilitate the scoring of papers, number (5) or (1) was placed before the optional responses for each statement and indicated the numerical value of "strongly agree". For liberally worded statements the "strongly agree" response had a numerical value of 1, and for the conservatively worded statements the "strongly agree" response had a numerical value of 5.

In planning to get reactions to this scale it seemed desirable to have considerable personal information about those whose attitudes were being measured so that comparative studies of various groups might be made. Accordingly a check list was prepared to head the scale to indicate age, sex, marital status, number of children, degree of education, rural or city residence and size, church affiliation, occupation, nationality, and tax paying status. All evidence, including preliminary interviews,

indicated that the purpose would be defeated by calling for the name. Several people indicated they would temper their response to certain statements if it were necessary to sign their names, but asserted that such would not be the case with anonymity guaranteed. Consequently, an anonymous response was asked. The complete form is found in the Appendix.

Validity

In discussing the validity of attitude scales it might be well to emphasize that we are dealing only with verbal behavior and claim nothing more than the importance of the verbal reactions. After all, the majority of our reactions in everyday life are verbal. We declare ourselves in favor of an issue or opposed to another, and such declarations are socially accepted as symbols for overt acts. It seems reasonable to conclude that, since our daily behavior is largely verbal, the verbal responses would be valid indexes. Furthermore, if the situation is such as to elicit the honest cooperation of the subject so that he will be likely to state his own attitude and not the attitude that he thinks is expected of him, we feel that we have a valid measure of his attitude. To approach this situation as nearly as possible anonymity was guaranteed.

Procedure Followed in Gathering Data

In setting up the study of attitudes of adults in Ottawa county toward high schools it was planned to compare the atti-

tudes of men vs. women, rural vs. city, people with children vs. people without children, 36 to 50 age group vs. 21 to 35 age group, 51 to 86 age group vs. 21 to 35 age group, 51 to 86 age group vs. 36 to 50 age group, people with 5th to 8th grade education vs. those with 9th to 12th grade education, people with 5th to 8th grade education vs. those with 13th to 20th grade education, and people with 9th to 12th grade education vs. those with 13th to 20th grade education.

To accomplish this purpose it was necessary to get an adequate sampling of each group to be compared. For example, an effort was made to obtain an even distribution of the scales between men and women, the rural and city, the with children and the without children groups, among the three age groups, and among the three educational levels decided upon.

The gathering of the data was simplified by the cooperation of womens' organizations such as ladies' aids, embroidery clubs, and social circles; and men's organizations such as Lions' clubs and commercial clubs. In each case, the president of the organizations was interviewed first and arrangements were made for the distribution of scales. In the church organizations such as ladies' aids and social circles, the organizations were stimulated by giving five cents for each completed scale. The women indicated their interest by requesting a summary of the study to be used for discussion at some future meeting. The scales, filled out at regular meetings of the organizations, were collected by the respective presidents.

The county superintendent and school administrators also assisted by distributing scales among their acquaintances. Naturally, a self addressed stamped envelope was included with each of these scales as was the case in all personal distribution. This also insured anonymity.

In all, 410 copies of the scale were distributed and the first 300 returns were used in this study.

SCORING THE PAPERS

To get an objective measure of each individual attitude response on the scale, numerical values from 1 to 5 were assigned to the optional responses for each statement as was done to interpret the experimental scale, 1 always designating the strongly liberal, regardless of the form. The attitude value was then determined for the response to each statement and a total of these made for each person. This total, then, was taken as a measure of the individual composite reaction to the 50 statements of the attitude scale. The lowest possible score of 50 would then represent the extreme liberal and the highest possible score of 250, the extreme conservative.

OUTCOMES

At this point data are available to determine the reliability of the scale. This was done by the "split-half technique". When a test has no parallel form and cannot be well repeated, we may calculate the reliability of half of the test and then

proceed to estimate the reliability of the whole test by means of the Spearman-Brown formula $\left(r_{11} = \frac{2r_{\frac{1}{2}\frac{1}{2}}}{1+r_{\frac{1}{2}\frac{1}{2}}} \right)$, in which r is the reliability coefficient of the whole test, and $r_{\frac{1}{2}\frac{1}{2}}$, found experimentally, is the reliability coefficient between two "chance-halves" of the test.

To do this the statements of the scale were divided into two equivalent halves by assigning the odd-numbered statements to one half and the even-numbered statements to the other half. The coefficient of correlation obtained between the two "chance-halves" of the scale was .71 which is the assumed reliability of a scale one-half as long as the one used. By application of the Spearman-Brown formula a reliability of .83 was obtained for the whole scale of 50 statements.

The scale used contained 13 conservative and 12 liberal statements in the odd half, and nine conservative and 16 liberal statements in the even half. Probably higher correlation would have been attained had the scale been more carefully built, i.e. had there been in the odd numbers the same number of liberal as conservative statements, the same being true with the even numbers. .83 seems to indicate high reliability for a randomized scale.

Had the experimental scale been given in Ottawa county instead of college students, it might, also, have added a bit to the refinement of the scale.

A composite attitude score having been determined for each individual, these scores were tabulated according to the classifications planned in the study and then were combined into a

distribution of scores for the entire 300 group as shown in Table 3. The actual individual scores among the 300 individuals ranged from 63 to 173 with a mean of 114.7 which shows a trend toward the liberal end of the scale. A score of 125, of course, would represent a neutral or undecided attitude.

Further reference to Table 3 serves as the basis for most of the findings toward which this study was aimed. To put the conclusions from this table in condensed form Table 4 was compiled showing for each group the number of individuals, the range, the mean, sigma, and the standard error of the mean. Reference to this table at once reveals significant trends. The mean for women is slightly lower than that for men which indicates that they may be more liberal. The mean for city people is lower than that for rural people while the mean of the 51 to 86 age group is considerably higher than that for the other two age groups. The mean of the group with 5th to 8th grade education is the highest of all the groups studied and is markedly higher than that of the 13th to 20th grade level. The mean of the 21 to 36 age group compares favorably with that of the highest educated group. A slight difference in means is seen between the group with children and the group without children indicating the group with children may be the more liberal.

Turning to Table 5 we find conclusions concerning the comparisons this study was set up to make together with their statistical significance.

The difference in means of rural over city people is $7.98 \pm$

Table 3. Distribution of total scores of individuals in the groups studied.

Interval	Men and women	Women	Men	With children	No children	Rural	City	Age			Education		
								21-35	36-50	51-86	5-8th	9-12th	13-20th
172-179	1		1	1		1				1			
164-171													
156-163	1		1		1	2				1	1		
148-155	7	3	4	5	2	1	6			6	7		
140-147	10	6	4	10		2	8	1	1	9	8	2	
132-139	26	11	15	20	6	18	9	1	7	18	15	11	
124-131	48	25	23	40	8	28	19	2	18	28	26	13	8
116-123	53	24	29	45	7	15	36	10	22	19	18	26	8
108-115	56	32	24	39	15	16	38	16	23	17	7	24	23
100-107	41	20	21	34	10	11	33	14	24	3	5	21	19
92-99	29	22	7	17	12	7	22	13	11	7	5	13	13
84-91	14	7	7	8	6	2	12	9	4	1	0	4	12
76-83	10	3	7	8	2	3	7	5	5	0	1	1	5
68-75	3	2	1	1	2	1	2	2	1	0	0	0	3
60-67	1	1	0	1	0	0	1	1	0	0	0	0	1
Mean	114.7	113.4	116.0	115.8	110.5	119.7	111.7	103.1	109.4	125.3	126.5	113.6	102.1
Sigma	16.1	16.5	18.0	16.1	16.9	16.6	17.2	14.0	15.2	15.3	15.9	13.4	15.0

Table 4. Range, mean, sigma, and standard error of the means of the total scores for each of the 12 groups studied.

Group	No. of cases	Range of scores	Sigma	Mean and S.E. of mean
Men and women	300	63-173	16.11	114.70 \pm .93
Men	144	68-173	17.99	115.98 \pm 1.50
Women	156	63-152	16.46	113.39 \pm 1.32
Rural	107	68-173	16.62	119.72 \pm 1.61
City	193	63-155	17.20	111.74 \pm 1.24
With children	229	63-173	16.11	115.82 \pm 1.06
Without children	71	68-163	16.88	110.54 \pm 1.99
Age group:				
21 to 35	74	63-144	14.00	103.10 \pm 1.63
36 to 50	116	68-140	15.16	109.42 \pm 1.41
51 to 86	110	91-173	15.27	125.26 \pm 1.45
Education group:				
5th to 8th	93	76-170	15.90	126.54 \pm 1.65
9th to 12th	115	76-147	13.42	113.58 \pm 1.25
13th to 20th	92	63-131	14.95	102.14 \pm 1.55

Table 5. Comparison of means of total scores for various groups studied.

Groups compared		Difference between means	S.E. of difference of means	Significance ratio
More conservative:	More liberal:			
Rural	City	7.98	2.03	3.93
Men	Women	2.59	2.00	1.30
With children	Without	5.28	2.25	2.35
Age groups:				
36 to 50	21 to 35	6.32	2.17	2.92
51 to 86	21 to 35	22.16	2.19	10.12
51 to 86	36 to 50	15.84	1.76	9.00
Education groups:				
5th to 8th	9th to 12th	12.96	1.94	6.68
5th to 8th	13th to 20th	24.40	2.15	11.35
9th to 12th	13th to 20th	11.44	2.00	5.72

2.03 with a significance ratio of 3.93. Statistical authorities tell us that a significance ratio of three or more is significant. While not especially large this difference indicates clearly that city people have a somewhat more liberal attitude than rural people toward high school.

The difference of the means between the men and the women is 2.59 ± 2.00 which produced a significance ratio of 1.30. This indicates a general trend in favor of the women being more liberal than men. Statistical tables indicate that the chances are 90 in 100 that the true difference is greater than zero.

The group comparisons between those with and without children with a difference in means of 5.28 ± 2.25 , in favor of the latter, and a significance ratio of 2.35 gives us still more probability of significance. Likewise, the 36 to 50 age group as compared with the 21 to 36 age group shows a difference in means of 6.32 ± 2.17 with a significance ratio of 2.92. In these cases, the statistical tables show that the chances are 99 and 99.9 out of 100 that there is a real difference.

When we come to a comparison of the 21 to 36 age group with the 51 to 86 age group a really large difference appears which checks with the prevalent notion of old age conservatism. The difference in means is 22.16 ± 2.19 which yields a significance ratio of 10.12. The fact that only two adults of the 21 to 35 age group have total scores more conservative than the interval containing the mean for the 51 to 86 age group is much more indicative of this than the significance ration.

While not so striking, comparison of the middle age group, 36 to 50, with the old age group, 51 to 86, still reveals a difference in means of 15.84 ± 1.76 with a significance ratio of 9.00. This would indicate that the active mature citizenship which is carrying today's burdens has a clearly progressive attitude toward high schools.

Rather similar outcomes are found in two of the group comparisons with respect to education. Those with high school education, 9th to 12th grade, as compared with those with elementary school training only, 5th to 8th grade, show a difference in means of 12.96 ± 1.94 with a significance ratio of 6.68. In similar manner those with high school training as compared with the college trained group, 13th to 20th, bring a difference in means of 11.44 ± 2.00 with a significance ratio of 5.72. In these cases the significance ratio is about double that necessary to show statistical significance.

As we would expect, the most striking difference of all is found between the group with elementary training only and the college trained group. In this case the difference of the means is 24.40 ± 2.15 with a significance ratio of 11.35, nearly four times the 3.00 ratio necessary for statistical significance. Inspection of the distribution of total scores for these groups in Table 3, makes the point still more striking. The mean 126.54 for the group with elementary training only falls into the interval 124-131, and from the distribution of the scores of the college trained group, it is noted that none of the more highly

educated adults have totals in the intervals larger than this one. In other words, none of the higher educated group indicated total scores more conservative than the mean position of the lesser educated group.

As before mentioned an undecided or neutral position on the scale would be represented by a score of 125. It is interesting to note from Table 4 that of the groups studied only two groups, the old age group and that with elementary school training only, fall on the conservative end of the scale and that by a slight margin only. This emphasizes further the generally liberal attitude toward high school of adults studied as measured by this scale.

ELEMENTS IN THE SCALE

In addition to analysis of group attitudes as revealed by the whole scale, a study of the total group reaction to various statements is revealing.

With 300 people covered by the study and a 1 to 5 value assigned to the varying shades of attitude toward a statement a minimum total score of 300 and a maximum total of 1500 is possible on each statement. To find what occurred with each statement Table 6 was constructed showing the total score on each statement. Dividing this total by 300 gives an index of attitude for the total group on each statement. It will be noted from the table that the lowest or most liberal index is 1.57 on statement 24, "The dominating urge to learn should be interest

rather than compulsion". The other extreme, the most conservative index, of 3.84 for statement number 37, "The high school should give more attention to formal drill in grammar, penmanship, and arithmetic".

The general trend on the whole scale is indicated by the mean of the 50 indexes, 2.32, appreciably below the 2.50 point of neutrality or indecision. This point is further emphasized when we notice that of the entire 50 statements only 15 of them come out with a conservative index.

Further light on the attitude toward the individual statements of the scale is revealed in Table 7 which shows the distribution of checks for each of the five shades of attitude on each statement. Table 8 shows the same information in percentages.

With an index determined for each statement in the scale it is challenging to look further into the statements that draw extreme indexes. Among those, for example, that run below 2.00 are no. 6, "Without high schools, the United States would be much less civilized", with an index of 1.67; no. 7, "High schools are not necessary in our democracy", with an index of 1.70; no. 11, "Every child should receive a free high school education", with an index of 1.70, and no. 46, "Education good enough for their parents is not adequate for pupils today", with an index of 1.76. This would seem to indicate an attitude aggressively favoring high school education.

Again, if we turn our attention to no. 13, "High schools

controlled by outstanding educational experts in Washington, D.C. would be better than present control" with an index of 1.98, and no. 16, "Citizens should have a voice in what is taught in our high schools", with an index of 1.97, it leaves little doubt that there is a clear sentiment for local control of the school.

Likewise, no. 2, "The high school should educate the whole child, not merely his mental capacities", with an index of 1.66; no. 5, "The high school should help students to discover local, state, and national situations which need improvement", with an index of 1.91, and no. 26, "Students learn most about good citizenship in a democracy by actually participating in community activities as a part of regular school work", with an index of 1.73, indicate a forward looking attitude toward problems of social development.

If we turn to the indexes at the other end of the scale similar evident trends appear. No. 3, "The teacher should plan work fitted to the average rather than a program adapted to each individual", with an index of 3.38; no. 37, "The high school should give more attention to formal drill in grammar, penmanship, and arithmetic", with an index of 3.84, and no. 1, "The most important objective of classroom work is the mastery of textbook facts", with an index of 3.36, indicate a rather vigorous conservative attitude insofar as subject matter and method are concerned.

Such analysis might be continued at considerable length. By this means the interested school administrator might get many valuable leads as to his problems in dealing with the public.

Table 6. Total scores made by 300 adults on each statement with indexes toward liberalism or conservatism.

Statement number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Total scores	1006	797	686	620	574	500	510	834	528	474	509	777	593	746	777	592	669	894	723	550	990	775	554	471	689	518	551	719	812	1014	893	481	664	680	545	789	1152	558	490	799	715	863	643	624	684	527	656	721	1016	665
Index	3.36	1.66	2.29	2.07	1.91	1.67	1.70	2.78	1.76	1.58	1.70	2.59	1.98	2.49	2.59	1.97	2.23	2.98	2.41	1.83	3.30	2.58	1.85	1.57	2.30	1.73	1.84	2.40	2.71	3.38	2.98	1.60	2.21	2.27	1.82	2.63	3.84	1.86	1.63	2.60	2.38	2.88	2.14	2.08	2.28	1.76	2.19	2.40	3.39	2.22

Table 7. Total numerical scores made on each statement.

Statement numbers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Total score for numerical value 1	25	145	73	82	86	151	154	47	101	141	137	55	115	54	50	73	63	25	52	101	18	48	97	144	63	98	116	42	31	19	45	145	80	54	102	50	11	148	148	34	63	20	70	56	43	126	64	56	12	57
Total score for numerical value 2	87	133	154	161	182	120	114	92	175	152	138	129	119	151	106	184	153	105	149	160	77	124	171	146	158	191	153	156	129	78	98	138	138	185	169	114	43	144	125	141	135	131	172	193	179	147	171	139	80	175
Total score for numerical value 3	7	6	13	27	7	12	4	32	20	4	8	40	31	15	71	23	40	47	25	23	31	51	13	5	21	6	5	50	48	12	40	8	27	8	15	50	20	4	17	41	43	50	12	30	32	4	23	57	25	25
Total score for numerical value 4	134	12	34	15	22	14	20	105	4	3	13	30	24	55	63	18	40	97	72	15	145	59	19	5	43	5	16	45	76	152	53	9	48	33	10	69	135	3	9	60	42	64	37	21	43	20	29	39	146	34
Total score for numerical value 5	47	4	26	15	3	3	8	24	0	0	4	46	11	25	10	2	4	26	2	1	29	18	0	0	15	0	10	7	16	39	64	0	7	20	4	17	91	1	1	24	17	35	9	0	3	3	13	9	37	9

Table 8. Percentage of numerical response on each statement.

Statement numbers	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
% response for numerical value 1	8	49	24	27	29	50	51	16	34	47	46	18	38	18	17	24	21	8	17	34	6	16	32	48	21	33	39	14	10	6	15	48	27	18	34	17	4	49	49	11	21	17	24	19	14	42	21	19	4	19
% response for numerical value 2	29	44	51	54	61	40	38	30	58	51	46	43	40	50	35	61	51	35	50	53	26	41	57	49	53	64	57	52	43	26	33	46	46	2	56	38	14	48	42	47	45	44	57	64	60	49	57	46	27	58
% response for numerical value 3	2	2	5	9	2	4	1	11	7	1	3	14	10	5	24	8	13	16	8	8	10	17	4	2	7	2	2	17	16	4	13	3	9	2	5	16	7	1	6	14	14	16	4	10	11	1	8	19	8	8
% response for numerical value 4	45	4	11	5	7	5	7	35	1	1	4	10	8	18	21	6	13	32	24	5	48	20	7	1	14	1	5	15	25	51	18	3	16	11	4	23	45	1	3	20	14	21	12	7	14	7	10	13	49	12
% response for numerical value 5	16	1	9	5	1	1	3	8	0	0	1	15	4	9	3	1	2	9	1	0	10	6	0	0	5	0	3	2	6	13	21	0	2	7	1	6	30	1	0	8	6	12	3	0	1	1	4	3	12	3

SUMMARY

The purpose of this study was to determine the attitude of adults in Ottawa county toward high school. To do this an attitude scale was developed and applied to 300 adults in Ottawa county.

Procedure

1. A review of the literature on attitude scales led to the conviction that the Likert technique was the most desirable for this study.

2. Steps in the development of the attitude scale included the following: (a) preparation of 100 statements (preliminary scale) bearing upon high school objectives, organization, and procedures collected from various sources; (b) reactions of 100 college students and faculty members to the statements to serve as a basis of item analysis for developing an acceptably valid and reasonably reliable scale; and (c) utilization of the best 50 statements selected from the original 100 to make the final attitude scale, accompanied by a check sheet to get necessary information about individuals reacting to it.

3. Returns on this scale were secured from 300 individuals representative of various classes of adults in Ottawa county and selected at random. The results from these returns were tabulated and analyzed.

Conclusions

1. Techniques have been developed for constructing attitude scales of accepted validity and reasonable reliability.

2. Statistical treatment showed that the scale developed for this study had a reliability of .83.

3. City people are clearly more liberal in their attitudes toward high school than are rural people.

4. The chances are 90 out of 100 that women are more liberal in their attitudes toward high school than are men.

5. The group without children appear to be more liberal than those with children (99 chances out of 100 that this is true).

6. By about the same chances (99.9 out of 100) the middle aged adults are more conservative than the younger adult group.

7. The prevalent notion of old age conservatism is clearly confirmed by a difference in means of 22.16 (with a significance ratio of 10.12) between the oldest group and the youngest group, which is more than three times the 3.00 ratio accepted as indicating a statistically significant difference.

8. The group with high school training are clearly more liberal in attitude than that with grade education only with a significance ratio of 6.68. Likewise, those with college training are more liberal than the high school group, with a significance ratio of 5.72. It follows naturally, that a still larger difference exists between the college group and that with elementary training only, the significance ratio in this case

being highest of all, 11.35.

9. The net outcome on the whole is a clearly liberal trend.

10. Adults in Ottawa county are aggressively in favor of high school education.

11. There is a clear sentiment in favor of local control of high schools, and a forward looking attitude toward problems of social development.

12. A vigorous, conservative attitude is noted insofar as subject matter and method is concerned.

13. School administrators might get many valuable leads in their public relations problems by use of an attitude scale such as used in this study.

ACKNOWLEDGEMENT

Indebtedness is acknowledged to Dr. V. L. Strickland, Professor of Education and major instructor, for directing this study; to the county superintendent, high school administrators, presidents and members of civic and church organizations in Ottawa county for their cooperation in distributing and filling out scales, and to Mrs. C. L. Cassel for her continuous help in this study.

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APPENDIX

Experimental Scale

SURVEY OF ATTITUDES

DO NOT SIGN YOUR NAME

There is no way in which you can be identified.

Directions: You will probably agree with some of the following statements of opinion and disagree with others. Please indicate your own feeling about each of them.

Example of procedure: Underline word or phrase which indicates your opinion.

1. High school should assist students in developing their individualities and interests.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

Statements

1. The most important objective of classroom work is the mastery of textbook facts.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
2. In addition to regular classwork, high schools should help students to find out what they can do best.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
3. Dancing in the high school building should be prohibited.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
4. The dominating urge to learn should be interest rather than compulsion.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
5. Churches are doing more for education than our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
6. Nazism, Communism, and Fascism are topics which should not be studied in high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

7. High schools controlled by outstanding educational experts in Washington D.C. would be better than present local control.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
8. High schools should offer more difficult subjects because they are usually more valuable.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
9. There is more happiness than misery in high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
10. More attention should be given to character development in our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
11. The high school should inspire students to seek any changes in our form of government necessary to improve the conditions of our citizens.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
12. The recently enacted teacher retirement bill will tend to keep better teachers in our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
13. Students do better work if commended for strong points than if scolded for weak points and mistakes.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
14. The majority of high school graduates leave high school today without any definite idea as to what line of work they should enter.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
15. High schools have been the cause of burdensome taxes.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
16. The entire society of the United States should be improved because of its system of high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
17. The community would suffer if our high schools were discontinued.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
18. The high school should not try to develop a better international understanding in our students.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
19. The high school should educate the "whole child", not merely his mental capacities.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

20. Present salaries of lady high school teachers are sufficient to attract enough competent lady teachers.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
21. The high school should not take their students out into the community to study actual conditions.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
22. It is a comfort to know we have high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
23. The high school is worth what it costs.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
24. The high school teaching should be more by doing and less by recitation and lecture.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
25. Attempting to teach students in high school to be open-minded about public questions is dangerous and likely to develop un-american attitudes.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
26. Consolidation of many of our smaller high schools is highly desirable.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
27. Students should be given considerable responsibilities in actually governing themselves.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
28. Education should be very little different from what it was in the past because necessary knowledge and facts do not change.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
29. Sex instruction under competent well trained instructors should be given to every high school student.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
30. It is necessary for the future of democracy to have a good system of high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
31. Change in the educational procedures of the high school should come only after the majority of people approve it.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

32. If a student dislikes a subject, it is his own fault and not the fault of the teacher.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
33. The high school system is the greatest organization for good that we have.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
34. The high school places too much emphasis upon fads and frills.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
35. High schools should not teach students how to make use of their leisure time.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
36. Scientific tests should be given all high school students in order to determine for what they are best fitted.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
37. High school students should be allowed to help select the subject matter.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
38. Since most boys and girls will eventually marry and establish homes, practical instruction in these duties should be a major responsibility of the high school.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
39. School clubs and other student organizations have little real value for education.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
40. The high school should help the students to discover local, state, and national situations which need improvement.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
41. High school buildings should be used only for high school work and high school activities.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
42. Conferences between parent and teacher seldom result in benefits.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
43. A well organized physical education program for all the students is better than athletics for a few.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
44. High schools do more harm than good.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

45. The normal training course is a very desirable course to offer in our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
46. High schools have no real goal.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
47. Many interests which continue long after graduation should be developed by the high school.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
48. We are spending too much on our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
49. Students learn most about good citizenship in a democracy by actually participating in community activities as a part of regular school work.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
50. The college preparatory course is the best course to take in high school, regardless of what the student is going to do in life.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
51. Every normal child should go to high school.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
52. High school should assist students in developing their individual abilities and interests.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
53. The best classroom discipline results from fear of the teacher.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
54. The high school is usurping too many activities that should be left to the home, the church, and other agencies.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
55. Teaching students in high school how to succeed in the severe competition of living is more important than teaching them how to live co-operatively in our democracy.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
56. Salaries of high school teachers are too low in comparison with the incomes of other professions.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
57. Education good enough for their parents is not adequate for pupils of today.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

58. Considerable use of library reference materials tends to interfere with complete mastery of the regular textbook resulting in a loss of desirable development to the student.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
59. The high school should provide opportunity for the students to compare communism and fascism with democracy.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
60. Without high schools, the United States would be much less civilized.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
61. High school teachers do not require nearly as great professional training as is required by those in such professions as law, engineering, and medicine.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
62. Our high schools spend too much time on athletics and not enough on books.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
63. Students and teachers should co-operatively plan the work and activities of the class.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
64. Every child should receive a free high school education.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
65. Grades earned in high school are a better test of an education than how one lives after leaving high school.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
66. Citizens should have a voice in what is taught in our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
67. Students from poor families are discriminated against by high school teachers.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
68. The high school should try to predict what the boys and girls are likely to do as adults and then give them the appropriate training.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
69. Teaching calls for heavy expenditure of nervous energy, therefore, the teacher's assignment should not require more than 40 hours per week.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

70. High schools are not necessary in our democracy.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
71. Salaries of high school teachers should be adequate enough to attract men and women of high caliber to the teaching profession.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
72. It is not desirable for our high school students to discuss both sides of political issues.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
73. Frequent changes in the curriculum are necessary to meet the needs of our changing society.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
74. High school students should be allowed to help plan and carry out activities of the school.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
75. I believe high school has done and can do more for students of high school age than any other existing institution.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
76. If high school students remember the facts they are taught it makes little difference whether they enjoy attending high school.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
77. The high school should give more attention to formal drill in grammar, writing, and arithmetic.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
78. The benefits that come from our high schools are not worth what they cost.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
79. Activities with other schools which involve traveling from one school to another are very desirable.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
80. Most teachers think only of their salary and care little for the welfare of the high school students.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
81. It is not the work of the high school to help students make more intelligent choices regarding a life work.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
82. Having a high school education is an aid in securing a job.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

83. High school buildings should be made beautiful as well as serviceable.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
84. High school teachers are substantially benefitted by the recent enactment of the teacher retirement law.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
85. A high school education discourages belief in old time superstitions.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
86. Married women should not be hired to teach in our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
87. High schools are giving too much emphasis to extra-curricular activities.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
88. High schools are slowly dying a natural death.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
89. The teachers interest in and helpfulness to the student is as important as the subject she teaches.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
90. Our high schools are controlled by a very small group of people.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
91. Present salaries of men high school teachers are sufficient to attract enough competent men teachers.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
92. The high school must not discuss any movement which threatens our democratic way of life.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
93. Only teachers with high grades made in college should be allowed to teach in our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
94. All students in the same class should be doing the same things.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
95. Religious affiliation should not influence the hiring of teachers in our high schools.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

96. The teacher should plan work fitted to the average rather than a program adapted to each individual.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
97. The assignment of duties to our high school teachers should be no greater than they can care for from 8 to 5 o'clock.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
98. High school teachers should try to instill within the student that democracy is the best form of government.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
99. Our high school students learn enough about play and leisure time activities without the school assisting them.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)
100. Wealthy high school students are given more advantages than poor students.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

Final Scale

SURVEY OF ATTITUDESDO NOT SIGN YOUR NAMETHERE IS NO WAY IN WHICH YOU CAN BE IDENTIFIED

Please supply the following information. If you will supply all the information asked for below, it will help greatly in comparing your attitude with those of other people. Please be frank and precise, and omit no items.

City _____ Date _____ 1942.

Age ____ Male ____ Female ____ Married ? Yes ____ No ____
 Divorced ____

Number of children ____ Age of youngest child ____ Number at home ____

Religion: Protestant ____ Catholic ____ No affiliation ____

Nationality: Native born ____ Foreign born ____

Place of residence: Rural ____ City under 250 population ____
 250-500 ____ 500-750 ____ 750-1000 ____ 1000 or more ____

Are you employed ? ____ Unemployed ____ Housewife ____ Retired ____

Occupation: _____
 (farmer)(W.P.A.)(laborer)(skilled laborer)(business)
 (profession)(housewife)

Place a circle around grade you last completed in school -
 : 1 2 3 4 5 6 7 8 : 9 10 11 12 : 1 2 3 4 : 1 2 3 4
 : (grade school) : (high school) : (college) : (graduate)

Do you pay taxes? Yes ____ No ____ What percent of property taxes paid do you think goes to the support of high schools? ____%

Directions: You will probably agree with some of the following statements of opinion, and disagree with others. Please indicate your own feeling about each of them.

Example of procedure: Underline word or phrase which indicates your opinion.

1. High schools should assist students in developing their individual abilities and interests.
(strongly agree)(agree)(undecided)(disagree)(strongly disagree)

STATEMENTS

1. The most important objective of classroom work is the mastery of textbook facts.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
2. The high school should educate the "whole child", not merely his mental capacities.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
3. Attempting to teach students in high school to be open-minded about public questions is dangerous and likely to develop un-american attitudes.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
4. We are spending too much on our high schools.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
5. The high school should help students to discover local, state, and national situations which need improvement.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
6. Without high schools, the United States would be much less civilized.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
7. High schools are not necessary in our democracy.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)

8. The high school system is the greatest organization for good that we have.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
9. Many interests which continue long after graduation should be developed by the high school.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
10. High school should assist students in developing their individual abilities and interests.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
11. Every child should receive a free high school education.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
12. Social dancing at school parties in the school building should be prohibited.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
13. High schools controlled by outstanding educational experts in Washington D.C. would be better than present control.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
14. High school buildings should be used only for high school work and high school activities.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
15. Salaries of high school teachers are too low in comparison with the incomes of other professions.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
16. Citizens should have a voice in what is taught in our high schools.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
17. Teaching calls for heavy expenditure of nervous energy, therefore, the teacher's assignment should not require more than 40 hours per week.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)

18. Present salaries of men teachers are sufficient to attract enough competent men teachers.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
19. The assignment of duties to our high school teachers should be no greater than they can care for from 8 to 5 o'clock.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
20. The high school is worth what it costs.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
21. Change in educational procedures of the high school should come only after the majority of people approve it.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
22. Consolidation of some of our smaller high schools is highly desirable.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
23. High school buildings should be beautiful as well as serviceable.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
24. The dominating urge to learn should be interest rather than compulsion.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
25. Conferences between parent and teacher seldom result in benefits.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
26. Students learn most about good citizenship in a democracy by actually participating in community activities as a part of regular school work.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
27. The best classroom discipline results from fear of the teacher.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)

28. Activities with other schools which involve traveling from one school to another are highly desirable.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
29. All students in the same class should be doing the same things.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
30. The teacher should plan work fitted to the average rather than a program adapted to each individual.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
31. Nazism, Communism, and Fascism are topics which should not be studied in high schools.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
32. More attention should be given to character development in our high schools.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
33. Since most boys and girls will eventually marry and establish homes, practical instruction in these duties should be a major responsibility of the high schools.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
34. School clubs and other student organizations have little real value for education.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
35. A well organized physical education program for all students is better than athletics for a few.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
36. The high school should try to predict what the boys and girls are likely to do as adults and then give them the appropriate training.
(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)
37. The high school should give more attention to formal drill in grammar, penmanship, and arithmetic.
(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)

38. The teachers interest in and helpfulness to the student is as important as the subject she teaches.
 (1) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
39. High school teachers should try to instill within the student that democracy is the best form of government.
 (1) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
40. Our high school students learn enough about play and leisure time activities without the high school assisting them.
 (5) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
41. Sex instruction under competent well trained instructors should be given to every high school student.
 (1) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
42. Our high schools spent too much time on athletics and not enough on books.
 (5) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
43. It is not desirable for our high school students to discuss both sides of political issues.
 (5) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
44. Frequent changes in the high school curriculum are necessary to meet the needs of our changing society.
 (1) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
45. Students should be given considerable authority in actually governing themselves.
 (1) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
46. Education good enough for their parents is not adequate for pupils today.
 (1) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)
47. The high school should not take their students out into the community to study actual conditions.
 (5) (strongly agree)(agree)(undecided)(disagree)
 (strongly disagree)

48. The high school teaching should be more by doing and less by recitation and lecture.

(1) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)

49. Our high schools are controlled by a very small group of people.

(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)

50. High schools have been the cause of burdensome taxes.

(5) (strongly agree)(agree)(undecided)(disagree)
(strongly disagree)