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OPINIONS OF PHYSICIANS, LAWYERS, AND COLLEGE PROFESSORS IN OKLAHOMA CONCERNING RECENT CRITICAL JUDGMENTS OF PUBLIC EDUCATION

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APPROVED BY

THESIS COMMITTEE

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OPINIONS OF PHYSICIANS, LAWYERS, AND COLLEGE PROFESSORS IN OKLAHOMA CONCERNING RECENT CRITICAL JUDGMENTS OF PUBLIC EDUCATION

CHAPTER I

INTRODUCTION

There has been a steady increase in the number of criticisms of public education in the popular and professional literature in recent years. One evidence of this increase is revealed by the number of articles listed in the Education Index under the heading of "Public Schools -- Criticism" from 1942 to 1952. The following rubric shows this increase:[1]

Year	Number of Articles	Year	Number of Articles
1942	3	1948	7
1943	5	1949	13
1944	8	1950	12
1945	7	1951	35
1946	6	1952	49
1947	10		

[1]C. Winfield Scott and Clyde M. Hill, Public Education Under Criticism, p. 3. New York: Prentice-Hall, Inc., 1954.

It will be noted that the greatest increase occurred after 1950. Criticism of public education is by no means a new phenomenon even though the above figures reveal a recent increase in amount. Indeed, the pages of educational history are replete with conflicting viewpoints concerning administration, curriculum, methodology, and numerous other aspects of public education.

Forward looking individuals are now viewing the criticisms of education as an indication of "growing pains," which if properly handled may contribute toward long delayed improvements. This by no means implies that the teaching profession welcomes unfair attacks by persons not interested in the progress of public education. The fact that such persons and groups have dealt damaging blows to the cause of public education in recent years has alerted the profession to their tactics and has beyond doubt prevented many similar occurrences. Neither does the profession welcome criticisms which distort facts and ignore experimental evidence which is readily available to anyone who will look for it. The kinds of criticism which are most desired by the profession are those which come from honest and sincere individuals who have the facts and nevertheless find the schools weak in certain respects.

Several studies have been conducted to tap the opinions of cross-sections of the general public in the United States concerning issues relating to the public schools.[1] Not only do such studies provide the teaching profession with a clearer picture of public opinion concerning specific aspects of public education, but they also serve as a means of

[1]Several examples of such studies will be discussed in the review of related literature later in this chapter.

unifying the profession and the public through discussion of common problems. This is of utmost importance in a democracy. There is always a danger of the teaching profession becoming so specialized that it divorces itself from those for whom it exists. William Burton has said:

> Free interchange of beliefs and open discussion of differences is no mere "right" of the schoolman; it is a cornerstone and safeguard of democracy. Without it cultural decay is as inevitable as the night which it resembles.[1]

Statement of the Problem

The broad public opinion polls concerning public education have served a worthy purpose in supplying information about the prevailing climate of opinion concerning public education. On the whole such studies have revealed a definite favorable opinion toward today's schools. However, because of the heterogeneity of the populations studied, it has been impossible to state with any assurance what specific groups think about public education.

The National Opinion Research Center at Denver poll of 1944[2] indicated that those individuals with the most education were most critical of the schools, while those with the least education were least critical. This finding leads to the question of how specific groups of professional people feel about public education. One such group is that of college professors. Since the establishment of the first chair in pedagogy in American universities there has been a

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[1]William Burton, "Get the Facts: Both Ours and the Other Fellow's," Progressive Education, XXIX (January, 1952), 89.

[2]"Are the Schools All Right?," School Executive, LXIII (August, 1944), 23.

growing conflict between the older "liberal arts" departments and the newly created departments of education. The present investigation has sought to determine how great the differences might be between these two specific groups regarding basic issues relating to public education. Two other influential professions are those of medicine and law. Public education has not been exempt from criticism by these groups.[1,2] Nor have all of their criticisms been of the negative variety.[3,4] There is a need for a better understanding of the opinions of several other specific professional groups such as ministers, newspaper editors, radio commentators, etc. Because of their differences in education and the difficulty in selecting representative samples, the latter groups were not included in the study.

Therefore the question to be answered by the present study is: To what extent do physicians, lawyers, liberal arts and education professors in Oklahoma concur with various critical judgments of public education which have appeared in the literature in recent years?

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[1]"Investigation of Subversive Propaganda in Educational Institutions," U. S. Congressional Record, Proceedings, and Debates of the 81st Congress, Second Session, XCV (April, 1950 -- May, 1950), 5676.

[2]Paxton Blair, "Lawyers and Education: A Discursive View," Vital Speeches, XVII (October, 1951), 756-762.

[3]Virgil Haneher, "Some Critics of Education," Personnel and Guidance Journal, XXXIII (November, 1954), 167.

[4]Walter B. Saul, "I'll Stick up For the Schools," The Saturday Evening Post, CCXXII (April, 1950), 22.

Delimitation of the Problem

The period of time from which criticisms were selected was limited to the past 15 years, viz. 1940 to 1955. This was the period of time over which Scott and Hill[1] surveyed the literature in preparing their volume of selected criticisms. The population from which physicians were selected was limited to members of the American Medical Association in Oklahoma. Likewise, the lawyer population consisted of members of the American Bar Association in Oklahoma. Professors were selected from private and public colleges and universities in Oklahoma accredited by the North Central Association.

Purposes of the Study

Horace Mann is reported to have said:

> All measures designed to promote education must depend for their success, in this country, on the hearty cooperation of public opinion. It is only by enlightening and concentrating that opinion that powerful effects can be produced.[2]

One purpose of the present study is to provide evidence of existing opinions of specific professional groups. Such information should be useful to the teaching profession in enlightening such other professional groups in cases where there may be misinformation or a lack of information concerning certain aspects of public education. Another purpose of the study is that of determining the degree to which these groups concur with various criticisms which certain critics have dogmatically stated that they held. For example, Bestor has stated:

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[1]Scott and Hill, op. cit., 414.

[2]Cooperative Study of Secondary school standards, Evaluation of Secondary Schools, p. 29. Menasha, Wisconsin: George Banta Publishing Company, 1939.

> In every community, searching questions about present-day educational policy are being raised by intelligent, responsible, disinterested citizens. The criticism is not that of "reactionaries." Among my acquaintances and correspondents, the liberals in political and social matters are just as outspoken in their denunciation of current trends in the public schools as are the men and women whose views can be labelled conservative. Upon college and university faculties the criticism does not come primarily from classicists in the older "traditional" branches of learning; it comes with perhaps greatest intensity from professors in the sciences, in mathematics, and in the other disciplines directly connected with the problems of a modern technological world.[1]

A third purpose in making the study is the value it may have in predicting the probable response of the professional groups to further educational innovations in the future. A fourth purpose, and by no means the least, is that of providing such information in order that it may be used as a means of evaluating ourselves. There is some value in seeing ones self as others see him even though such evaluations must be interpreted with caution especially when the evaluator may be uninformed.

Review of Related Studies

In 1944 the National Opinion Research Center at Denver conducted an opinion study of a nation-wide cross-section of United States citizens.[2] At that time 57 percent of the respondents had no changes to suggest in the schools. In 1950 Roper[3] found that only 33.4% of his respondents were "very satisfied" with their schools, 38.2% were "only fairly satis-

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[1]Arthur Bestor, Jr., Educational Wastelands; The Retreat From Learning in Our Public Schools, p. 4. Urbana: University of Illinois Press, 1953.

[2]"Are the Schools All Right?," op. cit., 23-24.

[3]"What U. S. Thinks About Its Schools," Life, XXIX (October, 1950), 11.

fied," and 16.8% were "not satisfied." From a comparison of the two reports it might appear that the amount of dissatisfaction with the schools increased between 1944 and 1950. The Denver Poll showed that persons with children of school age and persons with college backgrounds were most critical of the public schools.

Henderson and Hand[1] found that the majority of the parents who responded anonymously to their questionnaires in Illinois were either satisfied or very well satisfied with the teaching methods employed in their schools. Since this was a cross-section of parents of school children, the question arises as to how the more educated groups reacted to the same question. He reported the public as sympathetic toward the schools' efforts to help pupils with life problems. Some critics have asserted that the public in general is opposed to such efforts by the schools. Again, there is a need for learning how more highly educated groups react to similar questions. Are the critics more nearly correct in the case of college graduates?

In 1951 the National School Service Institute which is a trade association of school supply and equipment manufacturers and distributors sent out a questionnaire with some of their literature to lay persons all over the United States. Men and women numbering 99,370 in 371 cities and villages in more than a third of the 48 states returned the questionnaire. In summary they reported:

> Yes, the jury of 100,000 Americans has reached a verdict. America's schools are doing a good job, considering the handicaps under which they are operating. Given better facilities

[1]Kenneth Henderson and Harold C. Hand, "To What Extent is the General Public in Sympathy With the Current Attacks on the Schools," Progressive Education, XXIX (January, 1952), 111.

> and more adequate finance, today's schools are prepared to make even greater contributions to prosperity, citizenship and world understanding.[1]

A recent study undertaken by Phi Delta Kappa's Commission on Free Public Education[2] showed that Americans by about a 2-to-1 majority think that current attacks on education are unjustified. Approximately 39% of their cross-section of lay public had no opinion. This could be a significant finding since that group might be ready to side one way or another depending on the kind of information they receive. They felt by a 9-to-1 majority that today's schools are better than those of 30 or 40 years ago.

All of these studies have one major finding in common. They all show a high degree of satisfaction with the public schools by lay groups, which is contrary to the assertions of some of the more severe critics. In general, the more highly educated groups were the most critical among all persons participating in these studies. The present study serves to locate some of the aspects of public education toward which they are most critical.

Definition of Terms

Criticism. Criticism as used in this study is defined as the act of judgment in discriminating among values. It involves taking thought as to what is better and worse in public education. No conscious

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[1]Otis A. Crosby. "The Nation Reaches a Verdict in the Case of the People vs. Today's Schools," Nation's Schools, XLVII (January, 1951), 37.

[2]Walter B. Lovelace, "Preliminary Report on Opinion Survey," Phi Delta Kappan, XXXVI (March, 1955), 234.

effort was made to select criticisms predominantly favorable or unfavorable. Rather, an attempt was made to select criticisms as representative as possible of those found in the literature.

Opinion. An opinion as defined in this study is a statement made by an individual which is largely of an intellectual nature. Attitudes as differentiated from opinions are characterized by a predisposition to act in a certain way. Even though this distinction is made between the two terms, it seems justifiable to assume that anonymous responses of a large number of persons to a large number of statements (77 in this study) may be strongly indicative of attitudes or predispositions to act in certain ways. However, such an assumption would seem untenable if based on the responses of one person to one statement.

CHAPTER II

THE CONSTRUCTION OF THE OPINIONNAIRE

Selection of Items

One of the first problems to be answered in constructing the opinionnaire was, what statements should be used from the vast amount of literature which has been written? This, of course, was a question of obtaining statements which were most representative. The popular and educational literature containing lay opinions concerning public education is immense.[1] Therefore, it would not have been possible for the writer to read all of the literature. Fortunately, what was considered to be an excellent synthesis of criticisms of public education has just been completed by a group of researchers at Yale University, the report of which was published in Public Education Under Criticism by Scott and Hill.[2] Several reviewers have praised the work highly. The following is an example of such a review:

> . . . this anthology stands out as the best single source of information on virtually all phases of the recent criticisms of public education. . . . A glance at the authorship of the

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[1] In corresponding with the National Education Association Educational Research Service it was discovered that 38 rather lengthy circulars are required to catalog the articles containing lay opinion of public education which have been collected by that research service group.

[2] Scott and Hill, op. cit., 414.

> articles will reveal beyond question the editors' success in the attainment of a non-partisan policy of selection.[1]

The scope of the report is best expressed by Scott and Hill who reported:

> The editors reached the point of diminishing returns before completing the selection process and feel that the anthology is representative. They also believe that the majority of the selections qualify as belonging to the best articles that have been written.[2]

Therefore, the Scott and Hill book was used as the major source of criticisms of education for the study. Specific criticisms either favorable or unfavorable toward public education were recorded on 3" by 5" cards. This was done for all readings in the Scott and Hill book, as well as many other articles and books from 1940 to 1955. Two hundred and eighty such criticisms were recorded. It was possible also to combine many of these items, so that the essentials of the various criticisms seemed to be contained in 110 items.

In constructing the items, the following criteria were observed:

1. Each statement should be as short as possible.

2. Only one thought should be included in each statement. Avoid double-barrelled statements.

3. The statements should be as free as possible from ambiguities.

4. The statements should be about equally divided between those

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[1]William W. Brickman, "Critical Analyses of American Education," School and Society, (October, 1954), 136.

[2]Scott and Hill, op. cit., 13.

"favorable" toward education and those "unfavorable." The purpose in so doing was to eliminate respondent bias which might result from having all statements either favorable or unfavorable. In an earlier study, Rundquist and Sletto[1] found that respondents tend to disagree with negative statements more often than they agree with positive ones. Therefore a few more statements were included stated in a "positive" rather than a "negative" way.

5. They must be written in terms understandable to all respondents.

6. Avoid stereotypes or emotionally-loaded words or phrases.

Choice of Response Categories

The question arose in constructing the opinionnaire as to how many choices should be allowed the respondents in checking each statement. The relative merits of a three choice response or a five choice response were considered. Probably the chief advantage of a three choice response is its simplicity in statistical computations, whereas, the advantage of a five choice response is that it may not force choices into a poor representation. In an opinion study of this type it is desirable to have as few "Don't Know" responses as possible since there is no way of knowing just what such a response might mean. It is, also, assumed that the items included in the opinionnaire are statements about things toward which the respondents have definite opinions otherwise they would not be included. The most rational answer to how many choices

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[1] E. A. Rundquist and R. F. Sletto, Personality in the Depression, p.298. Minneapolis: University of Minnesota Press, 1936.

of response to be allowed would seem to reside in the problem under investigation itself and in the statements themselves; therefore, a check was made in a test-run using the questionnaire to determine (1) which method, three or five responses, gave the fewer "Don't Know" responses, (2) which took the least time to answer and (3) which seemed to arouse the least anxiety on the part of the respondents in attempting to answer it.

For the purpose of the test-run, opinionnaires were administered to students in two classes at the University of Oklahoma. The groups compared were not matched: one was a class of 17 graduate students in education and the other was a class of 28 undergraduates in education. This was not considered to be a controlled experiment but rather a means of arriving at a decision on the basis of the above three criteria. The undergraduate group was given a choice of three responses to the items, while the graduate group was given five. The median percentage of "Don't Know" responses for the undergraduates was 6.6%. The median percentage of "Don't Knows" for the graduates was 6.9% per item. The mean time for administering the opinionnaire to the sophomores was 19.6 minutes, while for the graduates, it took 19.9 minutes. On the basis of observation and statements expressing doubts, uncertainties, etc. more anxiety seemed to be manifested in the graduate group than in the undergraduate group.

Since almost all opinion polls of this type in the past have utilized the three-category response rather than five, and on the basis of the agreement of a majority of the writer's doctoral committee, it was decided that the three-category response would best serve the purpose

of the study.

Readers and Revisions

The items were read and criticized by six professors at the University of Oklahoma. One professor was in history, one was in educational psychology, three were in secondary education, and one was in educational administration. The opinionnaire was subjected to eight rather extensive revisions before it was printed in final form. As considerable time was spent in the office of the Oklahoma Medical Association and the Oklahoma Bar Association while setting up the mailing list, it was possible to confer with two lawyers and one physician who kindly read the items and made several suggestions for rewording that would make them more meaningful to those in these professions.

After completing the test-run, seventy-seven items remained which were considered to have survived the standards set up for selection of items.

Categories of Items

In selecting items, major consideration was given to writing items which were as independent as possible and non-overlapping. Nevertheless, certain items seemed to fall into classes even though they were considered independent. These classes of items seemed to be very similar to classes of criticism set up by other writers.[1,2] It was decided that

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[1]Harold Alberty, Let's Look at the Attacks on the Schools, p. 144. Columbia: College of Education, Ohio State University, 1951.

[2]Ernest O. Melby, American Education Under Fire: The Story of the 'Phony Three-R Fight, p. 43. New York: Anti-Defamation League of B'nai B'rith, 1951.

it would not only be interesting to compare the responses of various groups of professional people toward specific items but also compare their opinions toward classes of criticism. Therefore the items were grouped within the opinionnaire by classes. Through the use of a Table of Random Numbers[1] "favorable" and "unfavorable" statements toward public education were randomized within the categories. The categories named are:

1. Meeting the individual needs of pupils.
2. The teaching of the "fundamentals."
3. Teaching pupils to think critically.
4. "Fads and frills" in the schools.
5. Discipline in the schools.
6. Citizenship training.
7. Moral and ethical training.
8. Teachers and teacher training.
9. Public relations.
10. Finance, plant facilities, and materials.

Reliability of the Opinionnaire

Although the opinionnaire was carefully refined, it was thought advisable to test its reliability statistically. The re-test method was the only method which seemed feasible to utilize. The split-half method seemed inappropriate since no assumptions were made concerning unidimensionality of the instrument, i. e. the items were considered to be meas-

[1]Ronald Fisher and Frank Yates, Statistical Tables for Biological, Agricultural and Medical Research, p. 126. New York: Hafner Publishing Company, Inc., 1953.

uring different opinions, therefore a total score for any one person would be considered meaningless. The group selected on which to test the reliability of the opinionnaire was an undergraduate class in educational psychology. The class was composed mainly of college sophomores. This group was selected as the most appropriate in that it was assumed that an introductory course in educational psychology was least closely related to the types of items in the opinionnaire than other courses in the College of Education. Therefore, it was believed that less change would occur in the group between tests. The first administration was during a regular class period. The class was told that the writer was desirous of carrying out a little experiment related to his doctoral dissertation research. No mention was made of the fact that the opinionnaire would be administered once more on the same day of the week as before. Some investigators have held that recall of the answers to specific items of a test is a disadvantage when an identical test form is given a second time. One writer, however, states that "it is unlikely that this possibility will be a consideration, for the number of items in any test is too large for the retention of many."[1] Three weeks was considered to be a sufficient length of time to minimize the effects of whatever recall might have been operative especially since seventy-seven items were in the opinionnaire.

Since total scores for individuals completing the opinionnaire would have been meaningless, the correlation coefficient between the two administrations of the opinionnaire was computed by correlating items

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[1]Frank S. Freeman, The Theory and Practice of Psychological Testing, p. 18. New York: Henry Holt & Co., 1950.

rather than people. For example, the percentage of students checking "Agree" for item one in the first administration was 65%. In the second administration, the percentage was 62%. These two "scores" then serve as coordinates of a point in the scatterplot for computation of the coefficient of correlation. The Pearsonian Coefficient of Correlation determined in this manner is .95. A scatter diagram is shown in Table 1. The R. A. Fisher z-function formula was used in testing the reliability of the obtained coefficient of correlation. The transformation from r to z has two distinct advantages according to McNemar.[1] They are:

> (1) the distribution of z for successive samples is independent of the universe value, $\hat{r}$; i. e., for a given N the sampling distribution will have the same dispersion for all values of $\hat{r}$;
> (2) the distribution of z for successive samples is so nearly normal that it can be treated as such with very little loss of accuracy.

The standard error of z is

$$\sigma_z = \frac{1}{\sqrt{N-3}}$$

To state confidence limits for $\hat{r}$, we transform the obtained r to z by the formula

$$z = 1.1513 \log_{10} \frac{1 + r}{1 - r}$$

then determine σ_z, find $z + 2.58\sigma_z$ and $z - 2.58\sigma_z$, and then transform these two z values back to r's by using Table C.[2] When the obtained coefficient of correlation of .95 between the two administrations of the opinionnaire was transformed to z, the z transformation is 1.832. The σ_z is .12. The obtained value for $z + 2.58\sigma_z$ is 2.142 while the ob-

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[1] Quinn McNemar, Psychological Statistics, pp. 123-124. New York: John Wiley & Sons, Inc., 1949.

[2] Ibid., p. 365.

TABLE 1

CORRELATION SCATTER DIAGRAM FOR TWO ADMINISTRATIONS OF THE OPINIONNAIRE

	1	3	1	1	3	4	3	2	2	7	5	2	0	3	1	4	4	7	9	15	77
95																			1	7	8
90																		2	6	2	10
85																	1	3		5	9
80																1	1		1	1	4
75																	1	1			2
70												1				1	1	1	1		5
65										1	1			1							3
60												1		1		2					4
55											2			1	1						4
50										3											3
45									1		2										3
40							1	1		1											3
35									1												1
30					1	1															2
25	1				1	2	1			1											6
20								1		1											2
15	1		1			1															3
10					1		1														2
5																					0
0	1	1	1																		3
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	77

tained value for $z = 2.58\sigma_z$ is 1.523. When the latter two values were transformed back to r's by using Table C, the r's are found to be .972 and .910. Thus, the fiduciary probability is .99 that the true coefficient of correlation lies within the interval of .91 and .97. This means that an r between .91 and .97 may be expected in ninety-nine out of every one hundred times the instrument is re-administered. This is the reliability usually found in well standardized objective tests. Therefore, it is believed that the instrument is reliable enough for the purposes of the present study.

Validity of the Opinionnaire

Validity of a measuring instrument has been defined as how well the instrument does the job it is employed to do. "Validity is always validity for a particular purpose. It indicates how well the test serves the purpose for which it is used."[1] The purpose which the opinionnaire was to serve was that of obtaining opinions toward criticisms of public education. In order for a valid response to be secured the respondent must understand the given issue and the questions asked him. For this reason great care was taken to have several individuals read the items for clarity of meaning to them. In the case of some items such as item 65 ("Too many courses in schools and colleges of education as now taught are shallow, meaningless, and nonsensical") it was realized that those who had not taken education courses would not have had first hand experience. Nevertheless, it was assumed that all respondents had heard

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[1]Edward E. Cureton, "Validity," Educational Measurement (E. F. Lindquist, ed.) p. 621. Washington, D. C.: American Council on Education, 1951.

others comment or had read such criticisms which would make it possible for them to respond in one way or another. The same was true with several items in which comparisons were made with 30 or 40 years ago. Admittedly, many of the respondents did not "remember that far back" but nevertheless they had heard others comment and read concerning such comparisons. Since the purpose which the instrument was to serve was that of obtaining opinions, no assumptions were made concerning the degree to which the responses were indicative of action tendencies in the respondents. Some writers have made a distinction between "private" and "public" attitudes.[1] "Private" attitudes are defined as those attitudes which the individual possesses but will not necessarily express overtly; whereas "public" attitudes" are those which are expressed freely in public but do not necessarily indicate the "private" attitudes of the person. By the definition for "attitudes" given above, it would not be correct to call those designated by some writers as "public" as attitudes at all. More properly by definition these would be called "opinions." As one means of attempting to tap "private" attitudes as much as possible, anonymity was requested. Anastasi says:

> Whenever feasible, anonymity is a desirable condition in most types of attitude surveys, because it encourages frankness and is more likely to evoke "private" attitudes."[2]

Finally, in defense of self-reporting technique, Cronbach says:

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[1]Anne Anastasi, Psychological Testing, pp. 580-581. New York: MacMillan Co., 1954.

[2]Ibid., p. 582.

> Empirical uses of self-reports are necessarily valid: The report itself is a behavior; one obtains a direct record of response to a standardized stimulus when he asks a verbal question. . . . the response to a test item /is/ taken as an intrinsically interesting segment of verbal behavior, knowledge regarding which may be of more value than any knowledge of the "factual" material about which the item superficially purports to inquire. Thus if a hypochondriac says that he has many headaches the fact of interest is that he says this.[1]

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[1]Lee J. Cronbach, Essentials of Psychological Testing, p. 309. New York: Harper & Brothers, 1949.

CHAPTER III

SAMPLING PROCEDURE

One of the chief weaknesses of opinion surveys in the past has been in the method of sampling. Therefore, considerable care was taken to ensure the selection of representative random samples from each of the specific groups. Anastasi[1] has pointed out that one of the weaknesses in mailed questionnaires is that those who fill out and return the questionnaires differ systematically from those who do not reply. She says, "In many cases, the mail respondents tend to be more favorably inclined toward the company or organization which may be sponsoring the survey, and their responses reflect this favorable bias."[2] This factor was considered in planning the study and every attempt possible was made to ensure as large a percentage of returns as possible. It has been stated,[3] however, that when mail ballots are sent to lists of homogeneous persons, the reliability of the results is often higher than when interviewers obtain the data. The sampling error is minimal within homogeneous groups; therefore those who do not return ballots do not differ significantly

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[1]Anastasi, op. cit., 583.

[2]Loc. cit.

[3]"Public Opinion Surveys," Encyclopaedia Britannica, Vol. XVIII, 1955.

from people who do return them. Also, a person who fills out a questionnaire by himself seems more likely to tell the truth than when he is faced with an interviewer.

A "representative" sample is a sample which must be a properly balanced cross-section of the various groups which form the population.[1] The major reason for making a sample representative with respect to sub-groups of the population is to increase the certainty that the percentages obtained in repeated samples would cluster around the "true" percentages in the population. This means that representativeness lessens the risk of bias in the sample.[2]

The sub-groups selected in the present study were physicians in Oklahoma who were members of the American Medical Association, lawyers in Oklahoma who were members of the American Bar Association and liberal arts and education professors in colleges and universities accredited by the North Central Association in Oklahoma.

Determination of Sample Size

McNemar[3] has criticized many opinion studies because of the bias involved in using too small samples. He has pointed out that too much error is involved in opinion research even when large samples are utilized. With this consideration in mind it was decided that the size of the smallest sample would be 50 or more. A conservative estimate of the

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[1]S. S. Wilks, "Representative Sampling and Poll Reliability," Public Opinion Quarterly, IV (June, 1940), 262.

[2]Ibid., p. 265.

[3]Quinn McNemar, "Opinion-Attitude Methodology," Psychological Bulletin, XLIII (July, 1946), 337.

number of returns which would be received from the various groups was 50%. Assuming that 50% only would be returned, it was possible to predict that at least 15% or more of the total parent population would be represented, which seemed to be a high percentage compared with other studies. Table 2 shows the population size for each of the professional groups and the 25% sample size which made a total of 942 to whom opinionnaires were mailed.

TABLE 2

POPULATION AND SAMPLE SIZES OF THE FOUR PROFESSIONAL GROUPS

Professional Group	Population Size	Sample Size
Physicians	1564	393
Lawyers	910	230
Liberal Arts Professors	952	238
Education Professors	324	81

Selection of Lawyers

A complete listing of all lawyers was found in the Martindale-Hubbell Law Directory.[1] There were a total of 910 lawyers in Oklahoma who were members of the American Bar Association. The names and addresses of those lawyers were listed on slips of paper. They were alphabetized and numbered consecutively. Since a 25% sample was needed it was necessary to select 228 names from the 910. Using the Fisher and Yates

[1] Martindale-Hubbell Law Directory, pp. 1929-1973. Summit, New Jersey: Martindale-Hubbell, Inc., 1955.

Table of Random Numbers,[1] 228 numbers were selected which fell within the range of 00 to 909.

In order to ascertain if those lawyers selected still resided at the same address, the 230 names were compared with the new Oklahoma Legal Directory[2] -- a more recent directory. The reason that it could not be utilized from the beginning was because it did not differentiate between members of the American Bar Association and non-members. Nine names were not found in the new directory. Twelve new names were drawn through use of the Table of Random Numbers. Eleven of the twelve names were listed in the recent directory. Therefore, the final mailing list to lawyers numbered 230.

Selection of Physicians

The latest directory available of physicians who were members of the American Medical Association was published in 1950.[3] The best representative sample possible therefore was to select names from that directory and confirm their residence in various cities by checking telephone directories. This meant that medical school graduates since 1950 could not be included. It would not have been possible to select names directly from telephone directories since several physicians lived in rural areas and in communities where Bell Telephone Companies were not located. Also, there would have been no way of ascertaining if they

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[1]Fisher and Yates, op. cit., pp. 114-119.

[2]Oklahoma Legal Directory, pp. 99. Los Angeles: Legal Directories Publishing Company, 1955.

[3]American Medical Directory, pp. 1639-1661. Chicago: American Medical Association, 1950.

were members of the American Medical Association.

The Table of Random Numbers[1] was again used to select the needed 391 physicians, which was a 25% sample from the 1564 physicians who were members of the American Medical Association in the state of Oklahoma. Out of the 391 selected, 19 were not found in the current telephone directories and thirteen lived in areas where there were no Bell Telephone systems. Nevertheless they were mailed to those not having Bell telephones. Twenty-five new names were selected using the Table of Random Numbers and four of these were not found in current telephone directories, thus the final mailing list stood at 393.

Selection of Professors

For a sample of college professors it was necessary to have representative groups of liberal arts professors and education professors. It was necessary to decide upon the subject-matter areas to be included in the liberal arts professor group. The concept of what the term "liberal arts" means has changed drastically over the years. One recent writer has defined the liberal arts as:

> . . . the basic studies from which all phases of the educational process -- general, vocational, professional, elementary, secondary, and higher -- draw nourishment and without which they languish and fail.[2]

Opinions differ, of course, as to how these "basic studies" should be presented along with vocational studies. For the purpose of the present study it was thought best to tabulate subject-matter areas under colleges and departments called "liberal arts" or "arts and sciences" in several

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[1]Fisher and Yates, op. cit., pp. 114-119.

[2]Whitney A. Griswold, "What We Don't Know Will Hurt Us," Atlantic Monthly, CCIX (July, 1954), p. 76.

large colleges and universities throughout the United States and on the basis of a frequency count determine the final selection of subject-matter areas to be included.

Therefore, ten colleges and universities were selected at random throughout the United States. These were:

1. The University of Wyoming.
2. The University of Colorado.
3. The University of Tennessee.
4. The University of Missouri.
5. The University of Michigan.
6. The University of New Mexico.
7. The University of Maine.
8. Texas Technological College.
9. Western College for Women.
10. Lehigh University.

A concise statement of the purpose of the College of Arts and Sciences at the University of New Mexico probably best represents the major purpose of most other similar colleges:

> The College of Arts and Sciences attempts to supply the cultural training which should underlie the more specialized work of the graduate, professional, or vocational school. The materials for this training are provided by the interests and achievements of man as they appear in his cultural records, his social institutions, and his investigations of natural laws.[1]

Through a synthesis of the courses listed in the ten colleges and universities, the following subject-matter areas were deduced:

Anthropology
Architecture
Art
Bacteriology
Biology
Chemistry
Classical Languages and Literature
Comparative Literature
Drama
History
Journalism
Mathematics
Modern Languages
Music
Philosophy
Physics
Plant Sciences
Political Science
Psychology

[1] Catalog of the University of New Mexico, p. 84. Albuquerque: University of New Mexico, 1955-56.

Economics	Religion
English	Sociology
Geology	Speech
Geography	Zoology
Government	

For the purpose of the present study, only those subjects which would fall under one of the above areas were included.

Catalogs from the thirteen colleges and universities accredited by the North-Central Association in Oklahoma were used in the selection of samples. The chi-square technique was used to determine the degree to which the proper proportions of professors from various subject-matter areas might be selected if every fourth name were drawn from alphabetical lists of professors in the various catalogs. The following null-hypothesis was tested: The observed proportions of professors in various major subject-matter areas in the random sample are not different from those in the population.

In order to set up a simple test of the above hypothesis, four colleges were selected representing four types of colleges in Oklahoma. These were:

Northeastern State College, Tahlequah, Oklahoma (a state supported institution)
Langston University, Langston, Oklahoma (a state supported negro college)
The University of Tulsa, Tulsa, Oklahoma (a municipal university)
Phillips University, Enid, Oklahoma (a private church college)

The broad subject-matter areas used as a basis for classification of subject-matter areas in Doctoral Dissertations Accepted by American Universities[1] were used to test the null hypothesis. Table 3 shows the

[1]Arnold Trotier and Marion Harman, Doctoral Dissertations Accepted by American Universities, 1953-54. New York: H. W. Wilson Co.

frequencies and percentages of professors from the four colleges in each of the broad subject-matter areas. When every fourth name was selected

TABLE 3

FREQUENCIES AND PERCENTAGES OF PROFESSORS FROM FOUR COLLEGES IN SEVEN BROAD SUBJECT-MATTER TEACHING FIELDS

Subject-Matter Area	Number	Percentage
Philosophy & Religion	19	6
Earth Sciences	14	4
Biological Sciences	48	14
Social Sciences	83	24
Humanities	101	30
Education	34	10
Physical Science	41	12
Total	340	100%

from alphabetical lists from the four colleges the following frequencies and percentages in Table 4 were selected from the various subject-matter areas:

TABLE 4

FREQUENCIES AND PERCENTAGES OF A 25% SAMPLE OF COLLEGE PROFESSORS IN FOUR COLLEGES IN SEVEN SUBJECT-MATTER TEACHING FIELDS

Subject-Matter Area	Frequency	Percentage
Philosophy & Religion	4	5
Earth Sciences	6	7
Biological Sciences	10	12
Social Sciences	18	21
Humanities	28	33
Education	5	6
Physical Sciences	14	16

Table 5 shows the computation of chi-square using the population and sample frequencies from the above two tables:

TABLE 5

COMPUTATION OF CHI-SQUARE TO DETERMINE THE EXTENT TO WHICH A 25% SAMPLE (EVERY FOURTH NAME FROM A LIST) IS REPRESENTATIVE OF THE TOTAL POPULATION

Subject-Matter Area	Observed Frequency	Expected Frequency	o-e	$(o-e)^2$	$\frac{(o-e)^2}{e}$
Philosophy & Religion	4	4	0	0	0.00
Earth Sciences	6	3	3	9	3.00
Biological Sciences	10	12	-2	4	.33
Social Sciences	18	20	-2	4	.20
Humanities	28	26	2	4	.15
Education	5	9	-4	16	1.78
Physical Sciences	14	10	4	16	1.60
				$\chi^2 =$	7.06

d. f. = 7-3 = 4 $\quad .20 > p > .10$

For four degrees of freedom (N minus three constants, viz. N, $\bar{o}$, and σ_o) the probability is that if further samples were drawn in the same way, ten to twenty times out of 100, differences as great as those found between the observed sample frequencies and those expected on the basis of population figures can be attributed to chance. In other words, there is no significant difference between the sample proportion and the population proportion; therefore, the null hypothesis is accepted. This chi-square test indicated that it was safe to assume that the correct proportions from various subject-matter groups could be expected by selecting every fourth name from alphabetical lists of college professors by

catalogs.

Every fourth name was selected from the college catalogs from the following thirteen colleges and universities in the state:

Northwestern State College, Alva, Oklahoma
Southwestern State College, Weatherford, Oklahoma
East Central State College, Ada, Oklahoma
Southeastern State College, Durant, Oklahoma
Northeastern State College, Tahlequah, Oklahoma
University of Oklahoma, Norman, Oklahoma
Oklahoma A. & M. College, Stillwater, Oklahoma
University of Tulsa, Tulsa, Oklahoma
Langston University, Langston, Oklahoma
Phillips University, Enid, Oklahoma
Oklahoma City University, Oklahoma City, Oklahoma
Oklahoma Baptist University, Shawnee, Oklahoma
Oklahoma College for Women, Chickasha, Oklahoma

Table 6 is a summary table showing the total population figures for each group, the number to whom opinionnaires were mailed, and the number and percentage of the samples returning opinionnaires. The last column shows what the percentages of returns were of the total populations in Oklahoma for the four professional groups.

TABLE 6

SUMMARY OF SAMPLING DATA FOR THE FOUR PROFESSIONAL GROUPS

Profession	Total Population	Sample Size	Number of Returns	Percentage Returns Were of Sample	Percentage Returns Were of Population
Physicians	1564	393	239	60.8	15.3
Lawyers	920	230	148	64.3	16.1
Liberal Arts Professors	952	238	177	74.4	18.6
Education Professors	324	81	69	85.2	21.3
Total	3760	942	633		

One postal card follow-up was sent two weeks after the opinionnaires were mailed. Two weeks later, another opinionnaire was mailed to all of those who had not responded by that time. Two weeks later the Oklahoma Medical Association mailed another followup to physicians who had not responded.

CHAPTER IV

ANALYSIS OF THE DATA

Since public opinion studies of this nature are highly subjective, and subject to numerous types of errors as manifested by similar studies in the past, considerable caution is observed in presenting the findings which will be reported in the following pages. The extent to which inferences can be made from a sample to a population depends on the randomness of the sample. The steps taken to secure a random sample have already been discussed in the preceding chapter. There is, of course, always the problem of obtaining unanimous responses with mail questionnaires. This is very seldom possible. However, mail questionnaires sent to homogeneous groups of people often have a higher reliability than can be attained with interviews.[1] The sampling error is minimal within a homogeneous group, i. e., those who do not return questionnaires do not differ significantly from those who do. Anonymity of response has certain advantages over non-anonymity since the respondent is more likely to tell the truth about the way he feels than he would in a face to face interview.

Another problem relative to the extent to which inferences might be made from the data obtained in the present study is that of the respon-

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[1] "Public Opinion Surveys," Encyclopaedia Britannica, op. cit., Vol. XVIII.

dents who answer "Do Not Know." In a recent study by Rosen and Rosen[1] the validity of the undecided response to questionnaires has been seriously questioned. A conclusion from their study was that many of those who answer "undecided" do have more definite opinions if they could be brought out. In order that undue weight might not be given to the significance of differences between groups when many respondents answered "Do Not Know," the following procedure has been arbitrarily followed in determining significant differences between percentages. The mean percentage of all respondents on all items in the "?" (Do Not Know) column was computed. This mean was found to be 16%. In computing significance of differences between percentages responding "Agree" and "Disagree" with the various items, differences are not reported as significant if more than 16% responded "Do Not Know" on any specific item. This precaution probably underestimates the significance of differences in some cases, but it is thought best to be overly-conservative rather than make statistical inferences from insufficient evidence.

In order that the maximum might be learned from the data gathered, tests were made of the statistical significance of differences found. The "t" test was used in order to determine the significance of differences between proportions on specific items.[2] Two types of significance of difference analyses were made.

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[1]Hjalmar Rosen and R. A. Hudson Rosen, "The Validity of 'Undecided' Answers in Questionnaire Responses," Journal of Applied Psychology, XXXIX (May, 1955), 178-181.

[2]To facilitate the determination of significance of differences between proportions, the "Significance of Differences Between Proportion Nomograph" by a Committee on Educational Research at the University of Minnesota, 1946, is utilized.

In one type of analysis, the significance of differences between the proportion in any one professional group agreeing with a specific statement and the proportion disagreeing with the statement was determined. This is given in Tables 7 and 8. This type of significance test was based on the logic that the farther the proportions of "agrees" and "disagrees" depart from equal proportions, i. e., 50:50, the more significant is the extent to which that professional group agrees or disagrees with that particular statement. The nomograph used for determining "t" provides a means of estimating how confident one can be that a given departure from chance, or from a 50:50 relationship, would occur 95 or 99 times out of 100 similar random samples.

The other type of analysis made was that of finding the significance of differences between the proportion that agreed with a statement in one professional group with the proportion that agreed with the statement in another professional group. This is given in Table 9.

In Section 1 which follows the response of the professional groups to the opinionnaire will be discussed consecutively. In Section 2 an analysis of the ten categories of criticisms listed in Chapter II will be discussed, viz. (1) Meeting the individual needs of pupils, (2) The teaching of the "fundamentals," (3) Teaching pupils to think critically, (4) "Fads and frills" in the schools, (5) Discipline in the schools, (6) Citizenship training, (7) Moral and ethical training, (8) Teachers and teacher training, (9) Public relations, (10) Finance, plant facilities, and materials. Section 3 describes the responses of the four professional groups to the request in the opinionnaire for "additional criticisms or comments." In section 4 several other interesting observations from the data are discussed.

TABLE 7

FREQUENCIES AND PERCENTAGES OF THE FOUR PROFESSIONAL GROUPS RESPONDING "AGREE," "?," AND "DISAGREE" TO EACH OF THE SEVENTY-SEVEN ITEMS[a]

Opinion Statement		Physicians N = 239			Lawyers N = 148			Liberal Arts Professors N = 177			Education Professors N = 69		
		A	?	D	A	?	D	A	?	D	A	?	D
1	f	225	9	5	141	4	2	160	12	4	69	0	0
	%	94	4	2	95	3	1	90	7	2	100	0	0
2	f	218	12	9	129	9	9	137	20	18	69	0	0
	%	91	5	4	87	6	6	78	11	10	100	0	0
3	f	126	30	81	83	18	46	152	9	12	38	7	24
	%	53	13	34	56	12	31	86	5	8	55	10	36
4	f	191	18	29	103	19	25	134	22	20	65	2	2
	%	80	8	12	70	13	17	76	12	11	94	3	3
5	f	121	21	95	72	21	52	73	24	78	27	5	37
	%	51	9	40	49	14	36	21	14	44	39	7	54
6	f	161	20	57	98	15	31	105	32	37	33	5	31
	%	67	8	24	68	10	21	59	18	22	48	7	45
7	f	163	51	22	92	38	16	109	38	27	54	9	6
	%	68	21	9	62	26	11	62	22	15	78	13	9
8	f	56	15	167	40	13	94	60	22	94	31	8	30
	%	23	6	70	27	9	64	34	12	53	45	12	43
9	f	42	31	164	23	28	96	22	35	116	30	6	33
	%	18	13	69	16	19	65	12	21	66	43	9	48
10	f	205	15	17	119	18	9	137	20	18	66	2	1
	%	86	6	7	80	12	6	77	11	10	96	3	1

[a]It will be noted that the percentages do not always total 100%. The frequencies and percentages of those not responding to specific items are not included in the table.

TABLE 7 -- Continued

Opinion Statement		Physicians			Lawyers			Liberal Arts Professors			Education Professors		
		A	?	D	A	?	D	A	?	D	A	?	D
11	f	122	17	99	60	21	65	55	41	80	54	8	7
	%	51	7	41	41	14	44	31	23	45	78	12	10
12	f	126	20	90	91	7	47	126	18	32	41	6	22
	%	53	8	38	62	5	32	71	10	18	59	9	32
13	f	176	13	49	98	15	30	85	29	62	49	5	15
	%	74	5	21	66	10	20	48	16	35	71	7	22
14	f	151	15	72	104	10	32	122	21	34	30	6	33
	%	63	6	30	70	7	22	69	12	19	43	9	48
15	f	158	10	69	84	15	47	58	31	87	49	5	15
	%	66	4	29	57	10	32	33	18	49	71	7	22
16	f	115	22	100	59	14	72	75	27	74	54	7	8
	%	48	9	42	40	10	49	42	15	42	78	10	12
17	f	143	14	80	101	13	32	103	26	47	27	5	36
	%	60	6	34	68	9	22	58	15	27	39	7	52
18	f	49	30	156	21	19	105	43	41	91	8	7	54
	%	21	13	65	14	13	71	24	23	51	12	10	78
19	f	206	7	25	119	8	19	122	25	28	64	2	2
	%	86	3	11	80	5	13	69	14	16	93	3	3
20	f	133	51	55	63	38	45	72	49	55	51	11	7
	%	56	21	23	43	26	30	41	28	31	74	16	10
21	f	101	15	121	60	16	69	117	16	44	15	6	48
	%	42	6	51	41	11	47	66	9	25	22	9	69
22	f	150	50	39	89	29	27	58	66	51	52	12	5
	%	63	21	16	60	20	18	33	37	29	75	17	7
23	f	110	51	77	65	45	35	94	40	43	36	6	27
	%	46	21	32	44	30	24	53	23	24	52	9	39

TABLE 7 — Continued

Opinion Statement		Physicians			Lawyers			Liberal Arts Professors			Education Professors		
		A	?	D	A	?	D	A	?	D	A	?	D
24	f	190	22	27	96	21	28	107	40	30	66	0	3
	%	80	9	11	65	14	19	61	23	17	96	0	4
25	f	199	23	17	115	21	10	127	35	14	61	2	6
	%	83	10	7	78	14	7	72	20	8	88	3	9
26	f	106	15	117	56	9	81	126	15	36	49	4	16
	%	44	6	49	38	6	55	71	9	20	71	6	23
27	f	110	36	90	68	23	55	82	41	53	13	6	50
	%	46	15	38	46	16	37	46	23	30	19	9	72
28	f	115	94	28	65	64	15	76	73	27	53	13	3
	%	48	39	12	44	43	10	43	41	15	77	19	4
29	f	119	43	74	75	28	43	93	40	44	17	4	48
	%	50	18	31	51	19	29	53	23	25	25	6	69
30	f	97	23	117	64	18	63	68	33	74	12	2	55
	%	41	10	49	43	12	43	38	19	42	17	3	80
31	f	100	66	71	52	40	51	67	42	68	50	8	11
	%	42	28	30	35	27	35	38	24	38	72	12	16
32	f	98	25	115	46	14	84	66	40	71	53	3	13
	%	41	11	48	31	9	57	37	23	40	77	4	19
33	f	109	41	87	72	20	54	79	46	51	11	5	52
	%	46	17	36	49	14	37	45	26	29	15	7	75
34	f	73	22	142	41	13	92	30	36	111	38	11	20
	%	31	9	59	28	9	62	17	20	63	55	16	29
35	f	118	27	92	71	14	60	108	22	46	10	11	48
	%	49	11	39	48	10	41	61	12	26	14	16	70
36	f	173	31	33	84	38	24	91	60	26	61	5	3
	%	72	13	14	57	26	16	51	34	15	89	7	4
37	f	166	30	42	92	19	35	75	33	65	57	8	4
	%	70	13	18	62	13	24	42	19	37	83	11	6

TABLE 7 -- Continued

Opinion Statement		Physicians			Lawyers			Liberal Arts Professors			Education Professors		
		A	?	D	A	?	D	A	?	D	A	?	D
38	f	79	79	80	29	58	59	21	70	86	33	17	19
	%	33	33	33	20	39	40	12	40	49	48	25	27
39	f	158	21	59	86	19	41	144	14	18	30	9	30
	%	66	9	25	58	13	28	81	8	10	44	13	44
40	f	149	24	65	88	15	44	89	44	43	58	7	4
	%	62	10	27	60	10	30	50	25	24	84	10	6
41	f	104	42	91	74	19	53	44	43	88	7	6	55
	%	44	18	38	50	13	36	25	24	50	10	9	80
42	f	211	18	8	126	12	9	140	25	12	65	1	2
	%	88	8	3	85	8	6	79	14	7	94	1	3
43	f	153	32	54	86	25	36	90	49	38	58	7	4
	%	64	13	23	58	17	24	51	28	22	84	10	6
44	f	166	33	40	96	26	25	97	44	36	62	6	1
	%	70	14	17	65	18	17	55	25	20	90	9	1
45	f	87	51	101	41	31	74	69	66	42	53	12	4
	%	36	21	42	28	21	50	39	37	24	77	17	6
46	f	156	30	52	82	24	40	92	38	47	59	7	3
	%	65	13	22	55	16	27	52	22	27	86	10	4
47	f	64	20	154	46	19	81	32	32	112	39	9	21
	%	27	8	64	31	13	55	18	18	63	57	13	30
48	f	90	50	96	49	30	66	29	43	104	7	10	52
	%	38	21	40	33	20	45	16	24	59	10	15	75
49	f	101	37	100	60	26	61	19	36	122	6	5	58
	%	42	16	42	41	18	41	11	20	69	9	7	84
50	f	111	81	46	72	48	27	29	73	75	10	18	41
	%	46	34	19	49	32	18	16	41	42	15	26	59

TABLE 7 -- Continued

Opinion Statement		Physicians			Lawyers			Liberal Arts Professors			Education Professors		
		A	?	D	A	?	D	A	?	D	A	?	D
51	f	67	70	99	29	50	67	49	72	54	10	12	47
	%	28	29	41	20	34	45	28	41	31	15	17	68
52	f	50	23	165	26	14	106	29	32	114	5	4	60
	%	21	10	69	18	9	72	16	18	64	7	6	87
53	f	102	24	113	64	18	65	70	38	68	50	7	12
	%	43	10	47	43	12	44	40	22	38	73	10	17
54	f	91	17	130	53	15	79	40	34	101	14	6	48
	%	38	7	54	36	10	53	23	19	57	20	9	70
55	f	194	9	36	126	4	16	136	17	23	47	8	13
	%	81	4	15	85	3	11	77	10	13	68	12	19
56	f	112	82	42	74	58	15	83	23	69	41	7	20
	%	47	34	18	50	39	10	47	13	39	59	10	29
57	f	145	52	42	82	33	31	58	37	80	50	5	14
	%	61	22	18	55	22	21	33	21	45	73	7	20
58	f	68	77	93	36	57	53	95	31	49	27	9	32
	%	29	32	39	24	39	36	54	17	28	39	13	41
59	f	136	35	67	66	25	54	83	44	50	62	3	4
	%	57	15	28	45	17	37	47	25	28	90	4	6
60	f	76	92	71	48	53	44	24	43	109	22	13	34
	%	32	39	30	32	36	30	14	24	62	32	19	49
61	f	126	48	65	77	32	37	16	12	149	29	9	30
	%	53	20	27	52	22	25	9	7	84	42	13	44
62	f	141	56	42	77	41	28	27	20	129	45	5	19
	%	59	23	18	52	28	19	15	11	73	65	7	28
63	f	194	31	14	104	29	13	104	45	25	61	6	2
	%	81	13	6	70	20	9	59	25	14	88	9	3

TABLE 7 -- Continued

Opinion Statement		Physicians			Lawyers			Liberal Arts Professors			Education Professors		
		A	?	D	A	?	D	A	?	D	A	?	D
64	f	24	21	192	15	11	121	30	23	122	1	3	65
	%	10	9	80	10	7	82	17	13	69	2	4	94
65	f	70	96	70	49	60	38	135	24	17	27	7	35
	%	29	40	29	33	41	26	76	14	10	39	10	51
66	f	152	55	31	77	39	30	25	41	111	48	9	12
	%	64	23	13	52	26	20	14	23	63	70	13	17
67	f	125	35	79	60	25	61	73	57	45	52	6	11
	%	52	15	33	41	17	41	41	32	25	75	9	16
68	f	131	29	78	61	31	54	68	66	41	36	5	28
	%	55	12	33	41	21	37	38	37	23	52	7	41
69	f	160	34	41	107	19	20	124	36	15	47	10	12
	%	67	14	17	72	13	14	70	20	9	68	15	17
70	f	228	5	6	139	4	4	164	4	8	68	1	0
	%	95	2	3	94	3	3	93	2	5	99	1	0
71	f	80	50	108	66	23	58	30	71	75	11	11	47
	%	34	21	45	45	16	39	17	40	42	16	16	68
72	f	76	42	120	51	27	69	71	55	51	31	5	33
	%	32	18	5	35	18	47	40	31	29	45	7	48
73	f	205	9	24	112	14	21	160	7	9	67	1	1
	%	85	4	10	76	9	14	90	4	5	97	1	1
74	f	135	34	68	80	34	32	59	60	58	22	4	43
	%	57	14	29	54	23	22	33	34	33	32	6	62
75	f	152	55	30	78	32	35	83	82	11	44	14	10
	%	64	23	13	51	22	24	47	46	6	64	20	15
76	f	90	26	119	64	13	67	61	38	76	13	6	48
	%	38	11	50	43	9	45	35	22	43	19	9	69

TABLE 7 -- Continued

Opinion Statement		Physicians			Lawyers			Liberal Arts Professors			Education Professors		
		A	?	D	A	?	D	A	?	D	A	?	D
77	f	224	6	8	141	3	3	158	9	9	60	4	5
	%	94	3	3	95	2	2	89	5	5	87	6	7

TABLE 8

SIGNIFICANCE OF DIFFERENCES BETWEEN PROPORTIONS AGREEING AND DISAGREEING WITH EACH ITEM FOR PHYSICIANS, LAWYERS, LIBERAL ARTS AND EDUCATION PROFESSORS[a]

Item Number	Physicians				Lawyers				Liberal Arts Professors				Education Professors			
	Agree		Disagree		Agree		Disagree		Agree		Disagree		Agree		Disagree	
	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01
1.		x				x				x				x		
2.		x				x				x				x		
3.		x				x				x			x			
4.		x				x				x				x		
5.	x				x											
6.		x				x				x						
7.		x				x				x				x		
8.				x				x				x				
9.				x				x				x				
10.		x				x				x				x		
11.	x										x		x			
12.		x				x				x				x		
13.		x				x			x				x			
14.		x				x				x						
15.		x				x						x		x		
16.														x		
17.		x				x				x						
18.				x				x				x				x
19.		x				x				x				x		
20.		x			x									x		

[a]Small "x" indicates level of significance. Differences which are not significant at the .01 or .05 level of significance are not shown in the table.

TABLE 8 -- Continued

Item Number	Physicians				Lawyers				Liberal Arts Professors				Education Professors			
	Agree		Disagree		Agree		Disagree		Agree		Disagree		Agree		Disagree	
	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01
21.										x						x
22.		x				x								x		
23.		x				x				x						
24.		x				x				x				x		
25.		x				x				x				x		
26.							x			x				x		
27.										x						x
28.		x				x				x				x		
29.		x				x				x						x
30.																x
31.		x												x		
32.								x						x		
33.						x				x						x
34.				x				x				x		x		
35.	x									x						x
36.		x				x				x				x		
37.		x				x								x		
38.								x				x		x		
39.		x				x				x						
40.		x				x				x				x		
41.					x							x				x
42.		x				x				x				x		
43.		x				x				x				x		
44.		x				x				x				x		
45.								x		x				x		

TABLE 8 — Continued

Item Number	Physicians				Lawyers				Liberal Arts Professors				Education Professors			
	Agree		Disagree		Agree		Disagree		Agree		Disagree		Agree		Disagree	
	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01
46.		x				x				x				x		
47.				x				x				x		x		
48.							x					x				x
49.												x				x
50.		x				x						x				x
51.				x				x								x
52.				x				x				x				x
53.														x		
54.				x				x				x				x
55.		x				x				x				x		
56.		x				x								x		
57.		x				x					x			x		
58.			x				x			x						
59.		x								x				x		
60.												x				x
61.		x				x						x				
62.		x				x						x		x		
63.		x				x				x				x		
64.				x				x				x				x
65.										x						
66.		x				x						x		x		
67.		x								x				x		
68.		x								x						
69.		x				x				x				x		

TABLE 8 -- Continued

Item Number	Physicians				Lawyers				Liberal Arts Professors				Education Professors			
	Agree		Disagree		Agree		Disagree		Agree		Disagree		Agree		Disagree	
	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01
70.		x				x				x				x		
71.			x									x				x
72.				x				x	x							
73.		x				x				x				x		
74.		x				x										x
75.		x				x				x				x		
76.			x													x
77.		x				x				x				x		

TABLE 9

SIGNIFICANCE OF DIFFERENCES BETWEEN PROPORTIONS AGREEING WITH EACH ITEM FOR PAIRS OF PROFESSIONAL GROUPS[a]

Item Number	Liberal Arts Professors & Physicians		Liberal Arts Professors & Lawyers		Liberal Arts Professors & Education Professors		Education Professors & Physicians		Education Professors & Lawyers		Lawyers & Physicians	
	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01
1.					x							
2.	x					x	x		x			
3.		x		x		x						
4.					x		x			x		
5.									x			
6.						x		x		x		
7.		x										
8.		x						x		x		
9.						x		x		x		
10.						x	x		x			
11.	x					x		x		x		
12.		x	x		x							
13.		x		x	x							
14.	x					x	x			x		
15.		x		x		x						
16.						x		x		x		
17.						x	x			x	x	
18.			x			x						
19.	x					x	x					
20.	x					x	x			x	x	

[a]Small "x" indicates level of significance. Differences which are not significant at the .01 or .05 level of significance are not shown in the table.

TABLE 9 -- Continued

Item Number	Liberal Arts Professors & Physicians		Liberal Arts Professors & Lawyers		Liberal Arts Professors & Education Professors		Education Professors & Physicians		Education Professors & Lawyers		Lawyers & Physicians	
	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01
21.		x		x		x		x		x		
22.		x		x		x	x		x			
23.												
24.	x					x	x			x	x	
25.												
26.		x		x				x		x		
27.						x		x		x		
28.						x		x	x			
29.						x		x		x		
30.						x		x		x		
31.						x		x		x		
32.			x			x		x		x		
33.						x		x		x		
34.	x					x		x		x		
35.	x		x			x		x		x		
36.						x	x			x		
37.		x		x		x	x			x		
38.		x	x			x				x	x	
39.		x		x		x		x	x			
40.						x		x		x		
41.		x		x		x		x		x		
42.												
43.						x		x		x		
44.						x		x		x		
45.	x			x		x		x		x		

TABLE 9 -- Continued

Item Number	Liberal Arts Professors & Physicians		Liberal Arts Professors & Lawyers		Liberal Arts Professors & Education Professors		Education Professors & Physicians		Education Professors & Lawyers		Lawyers & Physicians	
	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01
46.						x		x		x		
47.			x			x		x		x		
48.		x		x				x		x		
49.		x		x				x		x		
50.		x		x				x		x		
51.					x							
52.					x		x		x			
53.						x		x		x		
54.	x		x				x		x			
55.												
56.		x		x					x			
57.		x		x		x						
58.		x		x	x							
59.		x				x		x		x	x	
60.		x		x	x							
61.		x		x		x	x		x			
62.		x		x		x						
63.		x				x						
64.	x		x			x	x			x		
65.		x		x		x						
66.		x		x		x						x
67.					x			x		x		
68.												
69.	x											
70.						x	x		x			

TABLE 9 -- Continued

Item Number	Liberal Arts Professors & Physicians		Liberal Arts Professors & Lawyers		Liberal Arts Professors & Education Professors		Education Professors & Physicians		Education Professors & Lawyers		Lawyers & Physicians	
	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01	.05	.01
71.	x			x				x				
72.		x	x									
73.	x			x				x		x		
74.		x		x	x			x		x		
75.				x								
76.						x		x		x		
77.												

Section 1. Analysis of Responses to Specific Statements in the Opinionnaire

To What Extent are the Schools Meeting the Individual Needs of Pupils?

All four professional groups agree significantly ($p<.01$) with Item 1 that the "Schools are doing more than they did 30 or 40 years ago in discovering pupils' vocational interests." Only 4% of the combined groups indicate that they "Do Not Know." Similarly, all four groups tend to agree with Item 2, "Today's schools are more effectively discovering pupils' talent than were schools 30 or 40 years ago ($p<.01$)." The greatest difference between groups on this statement is between liberal arts and education professors. Even though the liberal arts professors express the viewpoint to a significant degree that schools are discovering talents more effectively than formerly; nevertheless, their agreement with the statement (88% agree) is significantly less than education professors (100% agree). A difference this great assures one that it is possible to be confident in 99 samples out of 100 similar to that used in this study, assuming that this sample is completely random, that a real difference exists between these two groups. Physicians are inclined to agree with this statement to a greater extent than are liberal arts professors ($p<.05$). Education professors agree to a greater extent than do physicians or lawyers ($p<.05$). The responses to this item illustrate a pattern that is found frequently among the seventy-seven items. This pattern is the order of "favorableness" toward the schools among the four specific professional groups. The order of "favorableness" on the majority of items and on all items combined is:

First (Most favorable) -- Education Professors

Second -- Physicians

Third -- Lawyers

Fourth (Least Favorable) -- Liberal Arts Professors

In response to Item 3, "Bright students are not being taught so that they achieve anywhere near that which they could be achieving," lawyers, liberal arts professors, and education professors agree significantly (Lawyers and Liberal Arts Professors, $p<.01$; Education Professors, $p<.05$). Liberal arts professors agree with the statement to a significantly greater degree than do the other three groups ($p<.01$).

All four groups agree significantly (p .01) with Item 4, "Most educators are giving greater attention to personality development of pupils than did educators 30 or 40 years ago." Education professors are inclined to agree more often with this statement than do the other three groups.

The groups are not so ready to agree with Item 5, "Students with low academic abilities are not receiving adequate attention in the public schools today" as in the case of the above similar statement concerning bright students. All of the professors are about equally divided in their agreement with the statement. In other words, they neither agree nor disagree to a significant degree with the statement. The physicians agree significantly with the statement ($p<.05$). When the four groups are paired with each other separately, i. e., lawyers with physicians, lawyers with liberal arts professors, etc. there are no significant differences.

All groups tend to agree with Item 6 that "Most schools are failing to teach students how to use their leisure time profitably;" however, the agreement of education and liberal arts professors with this statement is not significant. The other two groups agree significantly ($p<.01$). Also, when education professors are paired with the other three groups on this statement, they agree significantly less than do physicians and lawyers ($p<.01$).

Education professors agree significantly ($p<.01$) with Item 7, "One desirable practice in some present-day schools is that of assigning pupils for instruction in various subjects according to present levels of pupil achievement." Liberal arts professors (22%), physicians (21%), and lawyers (26%), respond to this statement much more frequently that they "Do Not Know" than do education professors (13%).

The education professors are the only respondents who do not disagree significantly with Item 8 that "Most schools are failing to provide for the proper physical education of pupils." This would indicate that the other three professional groups are more satisfied that the schools are meeting the physical education needs of pupils, while education professors are about equally divided concerning the statement. Even though the liberal arts professors disagree significantly ($p<.01$), they disagree significantly less ($p<.01$) than do the physicians.

Physicians disagree significantly ($p<.01$) with Item 9, "The 'force-feeding' of information which pupils may never need is driving many students away from highschools today." When education professors are paired with the three other groups, they are significantly more inclined to agree with the statement than are the physicians. Nineteen percent

and 20 percent respectively of lawyers and liberal arts professors, the two most critical groups, indicate that they "Do Not Know."

All groups agree significantly ($p<.01$) with Item 10 that "The increased addition of trained counselors in many schools who help school age youth with all kinds of personal problems is a promising trend in present-day education." Education professors agree to a significantly greater extent with the statement than do the other three groups (with liberal arts professors, $p<.01$; with physicians and lawyers, $p<.05$).

Are the Public Schools Fulfilling Their Responsibilities in Teaching the "Fundamentals"?

Education professors agree significantly ($p<.05$) with Item 11, "Arithmetic is being taught as well or better in schools today than 30 or 40 years ago." They agree significantly more ($p<.01$) with the statement than do physicians and lawyers. The group with the largest percentage indicating that they "Do Not Know" is the liberal arts professors (23%).

All groups agree significantly ($p<.01$) with Item 12 that "Foreign languages are not being taught to the extent which they should be taught in most schools today." There is a significantly greater degree of agreement with the statement among liberal arts professors than among each of the other groups. Physicians agree least with the statement, though not significantly less except as compared with liberal arts professors.

The four groups are significantly in agreement ($p<.01$) with Item 13, "As much or more 'factual knowledge' is being acquired by pupils in schools today as 30 or 40 years ago." The greatest differences found between the four groups are between the liberal arts professors and each

of the other groups, the liberal arts professors agreeing significantly less often.

Physicians, lawyers, and liberal arts professors agree significantly ($p<.01$) with Item 14 that "Spelling is not being taught as effectively as it was 30 or 40 years ago." Education professors tend to disagree with the statement but not significantly. At the same time physicians, lawyers, and liberal arts professors agree significantly more than do the education professors with the statement. Physicians tend to agree less with the statement than do lawyers and liberal arts professors, but this difference is significant only in the case of the liberal arts professors ($p<.05$).

A striking difference between the responses of liberal arts professors and the other three groups is observed toward Item 15, "Public schools are preparing pupils for college as well or better than 30 or 40 years ago." Physicians, lawyers, and education professors agree significantly ($p<.01$) while those liberal arts professors who express definite opinions disagree significantly ($p<.01$). There are 18% of the liberal arts professors who indicate that they "Do Not Know;" therefore, this level of significance should be interpreted with caution. There are no significant differences between the other three professional groups, but of course, all three groups differ significantly from liberal arts professors ($p<.01$).

Education professors agree significantly with Item 16 that "Reading in today's schools is being taught as well or better than 30 or 40 years ago." The other three groups manifest varying degrees of agreement and disagreement. In none of these three other groups are the differ-

ences significant between those who agree and those who disagree. When the proportion of education professors who agree with the statement is compared with the proportions in the three other groups that agree, education professors agree significantly more ($p<.01$) than any of the other groups.

Physicians, lawyers, and liberal arts professors agree significantly ($p<.01$) with Item 17 that "Writing is not being taught as effectively as it was 30 or 40 years ago." Education professors tend to disagree with the statement but not significantly. Physicians, lawyers, and liberal arts professors agree significantly more often than do the education professors (physicians $[p<.05]$; liberal arts professors and lawyers $[p<.01]$) with the statement. Lawyers tend to agree significantly more than physicians ($p<.05$) with the statement.

To What Extent Are Pupils Being Taught to Think Critically?

All groups disagree significantly ($p<.01$) with Item 18, "Pupils today are receiving only enough education to be victimized by advertizing and propaganda" except for liberal arts professors who also tend to disagree (53%) more than they agree (24%). However, 23% of the liberal arts professors indicate that they do not know which tends to make dubious any statement of level of significance. As discussed earlier, it is impossible to infer what "Do Not Know" might mean for that group.

All four groups agree significantly ($p<.01$) with Item 19 that "Schools today are teaching students to have greater poise and confidence in expressing themselves than they did 30 or 40 years ago." The percentage of each of the four groups agreeing with this statement is typical of

the majority of the statements on the opinionnaire. This is shown in Table 10 below:

TABLE 10

PERCENT OF THE FOUR GROUPS AGREEING WITH ITEM 19 THAT "SCHOOLS TODAY ARE TEACHING STUDENTS TO HAVE GREATER POISE AND CONFIDENCE IN EXPRESSING THEMSELVES THAN THEY DID 30 OR 40 YEARS AGO."

Profession	Percent Favorable
Education Professors	92.8
Physicians	86.2
Lawyers	80.4
Liberal Arts Professors	68.9

Education professors agree significantly ($p < .01$) with Item 20, "As compared with schools 30 or 40 years ago, present-day schools are more effective in teaching children how to suspend judgments on issues until all available evidence can be obtained on which to base decisions." Approximately 40 percent of the liberal arts professors agree, while 31 percent disagree. Since 28 percent of the latter professors indicate they "Do Not Know," it would be presumptuous to state the significance of difference between those checking agree and disagree for this item.

There are widely differing opinions between the groups concerning Item 21, "In schools today too much emphasis is placed on meeting the 'vocational' needs of students at the expense of much needed 'intellectual' training." Liberal arts professors agree significantly ($p < .01$), while education professors disagree significantly ($p < .01$). Physicians and lawyers disagree but not significantly. There are significant differ-

ences ($p<.01$) between all groups when they are paired one with another except between physicians and lawyers.

Physicians, lawyers, and education professors tend to agree with Item 22 that "Today's schools are producing wise citizens capable of bringing about improvements in American society." However the percents indicating "Do Not Know" are so great that levels of significance cannot be stated with any certainty. Liberal arts professors with definite opinions are about equally divided on this statement, while 37% indicate they "Do Not Know."

Respondents agree with the statement "Teachers are giving pupils too much 'pre-digested' subject-matter without referring them to original sources where they may see relationships on their own." Such differences are not significant, however. There are no significant differences between the groups when they are paired with one another on this statement.

Are the Public Schools Constantly Being Influenced by Fads and Frills in Curriculum and Methods of Teaching?

All respondents except liberal arts professors agree significantly ($p<.01$) with Item 24 that "Topics which are more meaningful to pupils are being studied in schools today than was the case 30 or 40 years ago." Liberal arts professors tend to agree but 23% checked "Do Not Know."

All groups agree with Item 25, "Audio-visual materials are being used effectively in schools to promote better learning experiences for children." Such agreement can be considered significant at the .01 level of significance for physicians, lawyers, and education professors. Twenty percent of the liberal arts professors "Do Not Know." There are no significant differences between the separate professional groups when they

are paired one with another. This finding is of interest since audio-visual aids have been criticized by some writers as being over-stressed in the public schools to the exclusion of "book" learning. Table 11 shows the percent of each group agreeing with this statement thus indicating favorable opinions toward the schools in this area:

TABLE 11

PERCENT OF THE FOUR PROFESSIONAL GROUPS AGREEING WITH ITEM 25 THAT "AUDIO-VISUAL MATERIALS ARE BEING USED EFFECTIVELY IN SCHOOLS TO PROMOTE BETTER LEARNING EXPERIENCES FOR CHILDREN

Profession	Percent Favorable
Physicians	83.3
Lawyers	77.7
Liberal Arts Professors	71.8
Education Professors	88.4

All professors, both liberal arts and education, agree significantly ($p<.01$) with Item 20, "Too much emphasis is being placed in the high-schools on athletic games between schools." But not so with lawyers and physicians. Lawyers disagree with the statement ($p<.05$) while physicians tend to disagree but not significantly. There are no significant differences between education and liberal arts professors or between physicians and lawyers; however, there are significant differences ($p<.01$) between professors and physicians and lawyers, e. g. liberal arts professors vs. lawyers; liberal arts professors vs. physicians, etc.

Liberal arts professors, physicians and lawyers tend to agree with Item 27 that "Inefficient and easy methods of work have been sub-

stituted in today's schools for the time-tested methods of drill and recitation," however not significantly. In contrast, education professors disagree significantly ($p<.01$). There are no significant differences between the percentages of physicians, lawyers, and liberal arts professors who agree with this statement, but differences between education professors and physicians and lawyers are significant ($p<.01$).

All groups tend to agree, but not significantly, with Item 28 that "A desirable practice presently found in some highschools is that of providing longer class periods where problems relating to pupil interests are studied." Education professors agree more with this statement than do the other three groups, but not significantly. Large percentages of physicians, lawyers, and liberal arts professors indicate they "Do Not Know" as shown in Table 12:

TABLE 12

PERCENT OF THE FOUR GROUPS CHECKING "?" (DO NOT KNOW) TO THE STATEMENT "A DESIRABLE PRACTICE PRESENTLY FOUND IN SOME HIGHSCHOOLS IS THAT OF PROVIDING LONGER CLASS PERIODS WHERE PROBLEMS RELATING TO PUPIL INTERESTS ARE STUDIED

Professional Group	Percent Checking "?" (Do Not Know)
Physicians	39.3%
Lawyers	43.2%
Liberal Arts Professors	41.2%
Education Professors	18.8%

Education professors are the only respondents who disagree significantly ($p<.01$) with Item 29, "Public school educators are continually

being swayed by fads in curriculum and methods of teaching." The three other groups agree but not significantly with the statement. There are no significant differences between the four groups as to the extent of their agreement; however education professors differ most from the other three groups.

The education professors are the only respondents who disagree significantly ($p<.01$) with Item 30 of the opinionnaire, "The schools are wasting time on too many inconsequential subjects, especially in the social studies." The other groups are fairly evenly divided on the statement. Education professors not only disagree significantly, but they also differ significantly ($p<.01$) from physicians and lawyers.

Education professors agree significantly ($p<.01$) with Item 31, "The older practice of teaching many separate subjects was less effective than the more recent attempts to combine two or more subjects for instructional purposes." Liberal arts professors and lawyers are about equally divided on the statement. Considerably large percentages of physicians (28%), lawyers (27%), and liberal arts professors (24%) indicate that they "Do Not Know." None of the groups differ significantly from one another as to percentages of each group agreeing with the statement.

Are the Schools Failing to Discipline Pupils, to Develop Respect for Authority, and to Develop Efficient Habits of Work?

In response to Item 32, "Interesting learning experiences provided in today's schools make strict disciplinary measures more unnecessary than was the case 30 or 40 years ago," lawyers and education professors express the greatest differences. Education professors agree

significantly ($p<.01$), while lawyers disagree significantly ($p<.01$). Physicians and liberal arts professors appear to disagree but not significantly. Education professors differ significantly ($p<.01$) from physicians and lawyers in the number who agree with the statement.

Education professors disagree significantly ($p<.01$) with Item 33 that "Today's classrooms are too often a chaos of undisciplined play programs defended by educators as 'learning by doing'." Liberal arts professors, lawyers, and physicians tend to agree but insignificantly. Education professors and lawyers differ significantly ($p<.01$) from lawyers, the lawyers tending to agree (48% agree, 36% disagree) while 75% of the education professors disagree.

Physicians and lawyers disagree significantly ($p<.01$) with Item 34 that "The schools are developing respect for authority in pupils as well or better than they did 30 or 40 years ago." Contrastingly, Education professors agree significantly ($p<.01$) with the statement. Those of the liberal arts professors who express definite opinions agree with physicians and lawyers. However, 20% indicate they "Do Not Know."

Liberal arts professors agree significantly ($p<.01$) with Item 35, "The policy in today's schools of passing a large percentage of pupils is unfair to the industrious pupil who finds that the rewards for his labors are the same as those for the lazy pupil." Education professors disagree significantly ($p<.01$). Liberal arts professors agree significantly more than physicians ($p<.05$), lawyers ($p<.05$), and education professors ($p<.01$). Education professors agree significantly less than physicians and lawyers.

Physicians and education professors agree significantly with Item 36 ($p < .01$) that "In those schools where pupils are given many opportunities to plan and direct their own activities, they are more eager to learn and show greater interest." Likewise, lawyers and liberal arts professors tend to agree but larger percentages of these groups (26% of lawyers and 34% of liberal arts professors) indicate they "Do Not Know." Even though education professors and physicians agree significantly with the statement, education professors agree to a significantly ($p < .05$) greater extent than do the physicians.

Physicians, lawyers, and education professors agree significantly ($p < .01$) with Item 37 that "A desirable practice found in some schools is that of promoting a pupil on the basis of his achievement compared with his own ability rather than his achievement compared with other students." Education professors agree significantly more than physicians ($p < .05$) and lawyers ($p < .01$). Liberal arts professors are not significantly opinionated either way, while 19% indicate they "Do Not Know."

Large percentages of each group indicate they "Do Not Know" concerning Item 38, "Schools are effectively teaching pupils to forego many 'immediate' rewards in order that they may seek to attain long-range goals." The percentages of each group responding thus are: physicians, 33%; lawyers, 39%; liberal arts professors, 40%; and education professors, 25%. Even though not significant because of the large number of "Do Not Know" responses, education professors differ from lawyers and liberal arts professors in that those who do give definite answers tend to agree (48%), while only 20% of the lawyers and 12% of the liberal arts professors agree.

Physicians, lawyers, and liberal arts professors agree significantly ($p<.01$) with Item 39 that "The policy in today's schools of passing a large percentage of students is enabling lazy students to get by without work." Education professors are about evenly divided on this statement. Liberal arts professors agree significantly more ($p<.01$) than the other three groups. Education professors agree significantly less with the statement than do physicians ($p<.01$) and lawyers ($p<.05$).

To What Extent are the Public Schools Training Pupils for Citizenship in the American Democracy?

All groups agree with Item 40 that "Pupils are being trained to assume responsibilities of citizenship as well or better than 30 or 40 years ago." For physicians, lawyers, and education professors such agreement is statistically significant. At the same time, education professors agree significantly more ($p<.01$) than do physicians and lawyers. It is not possible to state how significant the agreement is for liberal arts professors since 25% indicate that they "Do Not Know."

Physicians and lawyers express contrasting views from liberal arts and education professors on Item 41, "Today's schools are overemphasizing cooperative action at the expense of rugged individualism, thereby tending to undermine the free enterprise system." Lawyers agree significantly ($p<.05$). Physicians agree more than they disagree (Agree: 44%; Disagree: 38%) however this cannot be considered too significant since 18% indicated they "Do Not Know." Education professors show significant disagreement ($p<.01$) with the statement. Liberal arts professors tend to disagree (disagree: 50%; Agree: 25%); however, similar to the physicians, 24% of their number indicate they "Do Not Know;" there-

fore, a statement of the statistical significance of their disagreement would be untenable. There is a significant difference ($p<.01$) between education professors and lawyers, education professors disagreeing and lawyers agreeing.

All groups agree significantly ($p<.01$) with Item 42, "Today, racial tolerance is being taught more effectively than it was 30 or 40 years ago." There are no significant differences between the groups as to the extent of their agreement.

Physicians and education professors agree significantly ($p<.01$) with Item 43, "Currently, schools are producing citizens with better social-personal development for effective citizenship than did schools 30 or 40 years ago" and Item 44, "Present-day schools are more effective in developing pupil attitudes and skills of cooperativeness than were schools 30 or 40 years ago." Lawyers and liberal arts professors, also tend to agree but such agreement cannot be considered significant since too many of their number indicate they "Do Not Know," viz. lawyers: 17% on Item 43 and 18% on Item 44; liberal arts professors: 28% on Item 43 and 25% on Item 44. Education professors agree significantly more ($p<.01$) with the statements than do physicians.

Education professors and liberal arts professors tend to agree with Item 45 that "American history is being taught as well or better than it was 30 or 40 years ago," while physicians and lawyers disagree. The percentages indicating they "Do Not Know" made statistical tests of the significance of these opinions questionable. Table 13 shows the percentages of each group checking "?", "Do Not Know."

TABLE 13

PERCENT OF THE FOUR GROUPS CHECKING "?" "DO NOT KNOW" ON ITEM 45, "AMERICAN HISTORY IS BEING TAUGHT AS WELL OR BETTER THAN IT WAS 30 OR 40 YEARS AGO

Professional Group	Percent Checking "?" "Do Not Know"
Physicians	21.3%
Lawyers	20.9%
Liberal Arts Professors	37.3%
Education Professors	17.4%

Physicians, lawyers, and education professors agree significantly ($p<.01$) with Item 46 that "Schools are significantly more effective in developing leadership abilities in pupils than were schools 30 or 40 years ago." Liberal arts professors also agree, but 22% indicate they "Do Not Know;" therefore, making a test of significance untenable. Education professors agree significantly more often ($p<.01$) than physicians.

Physicians and lawyers disagreed significantly ($p<.01$) with Item 47 that "Pupils are being trained as well or better in the common courtesies than students 30 or 40 years ago." Liberal arts professors tend to disagree, but 18% indicate they "Do Not Know;" therefore, the statistical significance of such disagreement cannot be stated with any degree of confidence. Education professors, however, agree significantly ($p<.01$) with the statement.

All groups tend to disagree with Item 48, "The modern school's emphasis upon 'social learnings' is actually training the pupil for a

collectivist state by subordinating him to the group." The only group which can be said to disagree significantly is education professors ($p<.01$). An average of 21.8% of these groups indicate they "Do Not Know."

Physicians and lawyers are about equally divided on Item 49, "Too many teachers present the asserted virtues of foreign ideologies while giving too little praise to American achievements." Liberal arts professors and education professors disagree with the statement, education professors disagreeing significantly ($p<.01$). Education professors agree significantly ($p<.01$) less often than do physicians.

High percentages of all groups indicate they "Do Not Know" regarding Item 50, "Some present-day textbooks contain statements which strike unfavorably at the foundations of American liberty" as shown in Table 14.

TABLE 14

PERCENT OF THE FOUR GROUPS CHECKING "?" "DO NOT KNOW" ON ITEM 50, "SOME PRESENT-DAY TEXTBOOKS CONTAIN STATEMENTS WHICH STRIKE UNFAVORABLY AT THE FOUNDATIONS OF AMERICAN LIBERTY"

Professional Group	Percent Checking "?" "Do Not Know"
Physicians	33.9%
Lawyers	32.4%
Liberal Arts Professors	41.2%
Education Professors	26.1%

Among those with definite opinions, 71% of the physicians and 73% of the lawyers agree with the statement, while 30% of the liberal

arts professors and 20% of the education professors agree.

Large percentages of all groups indicate they "Do Not Know" concerning Item 51, "The schools are providing too many 'immediate' rewards for pupils" (viz. physicians, 29.3%; lawyers, 33.8%; liberal arts professors, 40.7%; and education professors, 17%). Among those with definite opinions the tendency is toward disagreement with the statement but this cannot be stated with any degree of statistical certainty.

To What Extent are the Public Schools Providing Moral and Ethical Training for Pupils?

All groups tend to disagree with Item 52, "In defending the constitutional provision for separation of church and state, the schools have caused pupils to consider religion unimportant." Such disagreement is significant ($p<.01$) for all groups; however, 18% of the liberal arts professors indicate they "Do Not Know," therefore making a statement of statistical significance in their case somewhat questionable. Education professors disagree significantly ($p<.05$) more than physicians and lawyers.

Education professors agree significantly ($p<.01$) with Item 53 that "Ethical principles such as 'truth,' 'honesty,' and 'justice' are being taught as well as they were 30 or 40 years ago." There are no significant opinions expressed by the other three professional groups, who are about equally divided (liberal arts professors have about 22% who checked "Do Not Know"). Education professors agree significantly more ($p<.01$) with the statement than do physicians and lawyers.

All groups disagree with Item 54, "A considerable amount of the blame for juvenile delinquency today must be placed on the schools for

their failure to teach moral and spiritual values." Such disagreement should be questioned regarding its statistical significance in the case of liberal arts professors since 19% indicate they "Do Not Know." Education professors disagree significantly more ($p<.05$) with the statement than physicians and lawyers.

All groups agree significantly ($p<.01$) with Item 55 that "A desirable situation exists in those communities where the patrons of the school have a clear understanding that the primary responsibility for teaching moral values resides in the home and churches rather than the schools." There are no significant differences between the groups on this statement.

To What Extent are Teacher Training Institutions Turning Out Well Qualified Teachers and Just How Competent are the Teachers Now in the Public Schools?

Education professors agree significantly ($p<.01$) with Item 56 that "Many promising candidates for the teaching profession are lost, because they choose to concentrate all their college work in other departments rather than taking the education courses required for state certification." Thirty-four percent of the physicians and 39% of the lawyers indicate they "Do Not Know." Those who do express definite opinions tend to agree more than they disagree with the statement.

Education professors agree significantly ($p<.01$) with Item 57, "Present-day schools of education are producing large numbers of competent teachers with good backgrounds of general information and professional training." Those physicians and lawyers who express definite opinions tend to agree with the education professors. Contrary to these

groups, those liberal arts professors who express definite opinions tend to disagree with the statement. Twenty-two percent of the physicians, 22% of the lawyers, and 21% of the liberal arts professors indicate they "Do Not Know."

Education professors tend to disagree with Item 58, "In the majority of instances it is the average to below average college student who enters the teaching field," but not significantly. Of those liberal arts professors who express definite opinions, twice as many agree with the statement as those who disagree. Thirty-two percent of the physicians and 39% of the lawyers checked "Do Not Know." Among those physicians and lawyers who express definite opinions approximately three times as many agree as those who disagree; and twice as many lawyers agree as those who disagree. Thus, though not considered significant due to the large percentage of "Do Not Know" responses, physicians and lawyers tend to agree with education professors.

Physicians and education professors agree significantly ($p<.01$) with Item 59 that "Teachers today, as contrasted with teachers 30 or 40 years ago, are more concerned that pupils acquire knowledge which will be useful and help them live full and enriched lives." Seventeen percent of the lawyers and 25% of the liberal arts professors indicate they "Do Not Know." Those lawyers and liberal arts professors who express definite opinions tend to agree, but this cannot be considered significant. Education professors agree significantly more ($p<.01$) with the statement than do physicians.

There are no significant differences between the responses of the four groups to Item 60, "On the whole the training of public school

administrators in work other than professional education courses is adequate." Those liberal arts and education professors who do express definite opinions tend to disagree with the statement, liberal arts professors more often than education professors.

Education professors are about equally divided on Item 61, "The fact that public school teachers take the major part of their graduate training in professional education courses rather than other areas of instruction is desirable." Liberal arts professors disagree with the statement significantly ($p<.01$). Those physicians and lawyers who express definite opinions tend to agree with the statement but such agreement cannot be considered significant. There is a significant difference ($p<.01$) between the percentage of education professors who agree with the statement and liberal arts professors.

The responses to Item 62 are very similar to those on Item 61. Liberal arts professors do not believe that "Most teachers are receiving sufficient training in the subject-matter areas which they will teach ($p<.01$). Education professors believe the statement to be true, but not significantly.

Education professors and physicians agree significantly ($p<.01$) with Item 63, "Increased educational effectiveness lies ahead if experimenters are given an opportunity to continue their research in education." Lawyers and liberal arts professors tend to agree. Twenty percent and 25% respectively of the latter groups indicate they "Do Not Know."

All groups disagree significantly ($p<.01$) with Item 64, "There is no justification for having a school of education in colleges and universities since the essentials for teachers can be taught in other

departments." Liberal arts professors agree significantly more often with the statement than do the other groups (liberal arts professors vs. physicians -- $p<.05$; vs. lawyers -- $p<.05$; vs. education professors -- $p<.01$). Education professors agree significantly less with the statement than do physicians ($p<.05$) and lawyers ($p<.01$).

Education professors tend to disagree with Item 65, "Too many courses in schools of education as now taught are shallow, meaningless, and nonsensical," but not significantly. Liberal arts professors agree significantly ($p<.01$). Physicians and lawyers are about equally divided with approximately 40% indicating they "Do Not Know." Liberal arts and education professors disagree significantly concerning the statement ($p<.01$).

Among those expressing definite opinions, physicians, lawyers, and education professors tend to agree with Item 66, "The increased requirements, by state teacher certificating agencies, that teachers take more courses in schools of education has brought about a steady improvement in public education." Among those three groups, education professors are the only ones who express such agreement to a significant extent ($p<.01$). Liberal arts professors tend to disagree but not significantly.

How Well do Educators Cooperate with the Public in Order to Provide the Best Education Possible for Pupils?

Education professors and physicians agree significantly ($p<.01$) with Item 67 that "Educators in general show a sincere respect for the taxpayer's opinions concerning school offerings and methods of teaching." Lawyers are about equally divided on this statement with 17% indicating

"Do Not Know." Those liberal arts professors with definite opinions tend to agree, but 32% of the total liberal arts professor group "Do Not Know." Education professors agree significantly ($p<.01$) more often with the statement than do physicians.

Physicians are the only respondents who agree significantly ($p.<.01$) with Item 68, "Teachers are doing an effective job of reporting to parents the comparative standing of pupils in their classes." Those liberal arts professors with definite opinions tend to agree. Thirty-seven percent of the liberal arts professors indicate "Do Not Know."

All groups agree more often than they disagree with Item 69 that "Without full public approval, public education has extended itself to include many aspects of the child's life not considered the province of the school 30 or 40 years ago." Such agreement seems significant ($p<.01$) for all groups except liberal arts professors among whom 20% indicate they "Do Not Know."

All groups agree very significantly ($p<.01$) with Item 70 that "A desirable trend in education is the attempt to make education available to all regardless of abilities, race, creed, or economic level." Education professors agree significantly more with the statement than do each of the other groups. The greatest difference between groups is that between liberal arts professors and education professors ($p<.01$). An average of only 2% indicate that they "Do Not Know."

Education professors disagree significantly ($p<.01$) with Item 71 that "Educators too often dominate school board members in local school situations." Those physicians and liberal arts professors who express definite opinions tend to disagree also; however 21% of the physi-

cians and 40% of the liberal arts professors indicate they "Do Not Know." Lawyers tend to disagree but not significantly.

Education professors are fairly closely divided on Item 72, "Educators too often address lay patrons in elusive pedagogical terms that are not easily understood." Physicians and lawyers tend to disagree; however, 18% of these groups indicate they "Do Not Know." Liberal arts professors tend to agree, but 31% indicate they "Do Not Know."

How Adequately is Public Education Being Financed and How Well are Those Entrusted with Financial Responsibilities Carrying Out Those Responsibilities?

As might be expected, all groups agree significantly ($p<.01$) with Item 73 that "Teacher's salaries are not commensurate with their professional training and qualifications." The agreement of liberal arts professors and education professors is not significantly different. These two groups agree significantly more often than do physicians and lawyers. Only 4.6% of all respondents indicate they "Do Not Know."

Education professors disagree significantly ($p<.01$) with Item 74, "There is no scarcity of study materials and attractive reference materials in most schools today." Physicians agree significantly ($p<.01$) with the statement in contrast with education professors. Lawyers tend to agree with the statement; however, 23% indicate "Do Not Know." Liberal arts professors are about equally divided on the statement with 34% saying they "Do Not Know."

All groups tend to agree with Item 75 that "Superintendents are generally thrifty in handling school finances." However an average of 27.5% who indicate they "Do Not Know" makes a statement of level of

significance questionable.

Significant disagreement is found among physicians ($p < .05$) and education professors ($p < .01$) concerning Item 76, "When one considers the amount being spent on public education today, he must conclude that children are benefiting too little." Lawyers and liberal arts professors are about equally divided on the statement. Twenty-two percent of the liberal arts professors state they "Do Not Know." Education professors disagree significantly more ($p < .01$) with the statement than do physicians and lawyers.

All groups agree significantly ($p < .01$) with Item 77 that "Most school buildings are better and safer than they were 30 or 40 years ago." Only 3.8% of all groups state "Do Not Know."

Section 2. Analysis by the Ten Classifications of Items

In addition to the analysis of responses to individual items on the opinionnaire, Table 16 shows the responses of the four professional groups to the ten classes of criticism. The chi-square values in Table 16 indicate the significance of differences between favorable and unfavorable responses toward the ten classes of criticism. Large positive values indicate highly favorable opinions, while large negative values indicate highly unfavorable opinions. The classes of criticism are ranked from 1 (most favorable) to 10 (least favorable). Table 15 illustrates the way in which the first chi-square value in Table 16, viz. 45.59 is computed.

All groups are significantly favorable ($p < .01$) toward the extent to which the schools are "Meeting the Individual Needs of Pupils." Even though significantly favorable, the education professors rank this area

TABLE 15

COMPUTATION OF CHI-SQUARE TO DETERMINE THE SIGNIFICANCE OF DIFFERENCES BETWEEN FAVORABLE AND UNFAVORABLE RESPONSES OF PHYSICIANS TOWARD THE EXTENT TO WHICH SCHOOLS ARE MEETING THE INDIVIDUAL NEEDS OF PUPILS

Direction of Opinions	Observed Frequency	Expected Frequency	o-e	$(o-e)^2$	$\frac{(o-e)^2}{e}$
Favorable	157	107.5	49.5	2450.25	22.793
Unfavorable	58	107.5	49.5	2450.25	22.793
				χ^2 =	45.59
	d. f. = 1		p .001		

of criticism in sixth position among the ten, while the other professional groups rank it much more favorably.

Liberal arts professors rank "Teaching Pupils to Think Critically" in seventh position. The chi-square value for liberal arts professors in this area of criticism is .47 which is neither significantly favorable nor unfavorable. Physicians, lawyers, and education professors are significantly favorable ($p<.01$) toward the schools in this area, physicians and lawyers ranking it in second position, while education professors rank it third.

A striking difference in opinions is revealed in the area of "Teachers and Teacher Training." The chi-square values for physicians, lawyers, and education professors are all large and positive indicating significantly favorable opinions in this area; while the chi-square value for liberal arts professors is large and negative indicating significantly unfavorable opinions. Even though education professors are significantly

TABLE 16

RANK ORDER OF AREAS OF CRITICISM INDICATING SIGNIFICANCE OF DIFFERENCES BETWEEN FAVORABLE AND UNFAVORABLE OPINIONS TOWARD PUBLIC EDUCATION OF THE FOUR PROFESSIONAL GROUPS[a]

Areas of Criticism	Physicians		Lawyers		Liberal Arts Professors		Education Professors	
	Rank	χ^2	Rank	χ^2	Rank	χ^2	Rank	χ^2
1	2	3	4	5	6	7	8	9
Meeting Individual Needs of Pupils	1	45.59	1	20.48	3	17.79	6	14.78
Teaching Pupils to Think Critically.	2	29.97	2	13.33	7	.47	3	24.42
Teachers and Teacher Training.	3	26.60	3	9.66	8	-9.44	7	9.29
Fads and Frills.	4	14.88	6	5.34	6	.74	4	20.25
Finance, Plant Facilities and Materials	5	11.90	5	5.74	5	1.86	10	.70
Public Relations	6	10.27	8	.81	4	3.47	8.5	7.00
Moral and Ethical Training	7	9.09	4	8.90	2	19.04	2	29.35
Citizenship Training . .	8	7.96	7	2.98	1	19.56	1	39.36
Discipline in the School	9	.12	9	-.67	9	-9.53	5	17.07
Teaching of the "Fundamentals	10	.29	10	-1.48	10	-10.20	8.5	7.00

[a]Large chi-square values indicate most favorable opinions concerning public education. Chi-square values are never negative; however, in cases where a greater percentage of replies were "unfavorable," minus signs have been assigned to indicate the direction of opinions.

favorable in this area, they rank it in seventh position among the ten areas.

The chi-square values for physicians, lawyers, and education professors are large and positive indicating significantly favorable opinions toward the schools in the area of criticism called "Fads and Frills." In other words, they do not agree that schools are constantly being swayed by ridiculous innovations as some of the critics have asserted. The liberal arts professors are neither significantly favorable nor unfavorable toward the schools in this area.

Physicians and lawyers are significantly favorable ($p<.01$) toward school "Finance, Plant Facilities, and Materials." Liberal arts professors and education professors are neither significantly favorable nor unfavorable. Although not significantly unfavorable, education professors rank this area of criticism tenth or lowest among the other areas.

Physicians and education professors are significantly favorable ($p<.01$) toward the schools in the area of "Public Relations." Lawyers and liberal arts professors are neither significantly favorable nor unfavorable.

All groups are significantly favorable ($p<.01$) toward the schools in the area of "Moral and Ethical Training." Even though significantly favorable, physicians and lawyers rank this area of criticism lower than do liberal arts and education professors.

Physicians, liberal arts, and education professors are significantly favorable ($p<.01$) toward the schools in the area of "Citizenship Training." Lawyers, however, tend to be favorable but not to a statistically significant degree.

Education professors are the only respondents who express significantly favorable ($p<.01$) opinions toward the schools in the area of "Discipline." Liberal arts professors are significantly ($p<.01$) unfavorable toward the schools in this area, while physicians and lawyers are about equally divided. One interesting observation from the responses of liberal arts professors is the difference in ranks given to "Discipline" and "Citizenship Training." They rank "Discipline" ninth, while "Citizenship Training" is ranked first. When one considers the close relationship between discipline and citizenship training, this might appear rather inconsistent. One might well ask the liberal arts group, why be so concerned about discipline in the schools if we are producing such good citizens?

Similar to the area of "Discipline" just described, education professors are the only respondents who are significantly favorable ($p<.01$) toward the schools in the area of "Teaching of the 'Fundamentals.'" Liberal arts professors are significantly unfavorable, while physicians and lawyers are about equally divided.

Section 3. Analysis of Additional Criticisms and Comments Made by the Four Groups

The last three and one-half pages of the opinionnaire were left blank in order that respondents might write additional criticisms or comments. These comments provide a means of locating some of the areas of greatest concern on the part of the different professional groups. A tabulation of these criticisms provides additional information not necessarily found in responses to the opinion statements. There are, however, striking similarities between the responses to opinion statements

and these non-structured comments.

Non-Structured Responses of Physicians

Table 17 shows the rank order of ten of the most frequently mentioned criticisms by physicians:

TABLE 17

RANK ORDER OF MOST FREQUENTLY MENTIONED AREAS OF CRITICISM BY PHYSICIANS

Area of Criticism	Rank
Teachers' Salaries	1
Socialistic Teachings in the Schools	2.5
Failure to Teach the 3-Rs	2.5
Failure to Teach Pupils Mental Discipline	4
Too Many Activities (Competitive Sports, etc.)	5
School "Blocs" Usurping Authority of Home	6.5
Neglecting the Gifted	6.5
Poorly Qualified Teachers	8
Failure to Teach Respect for Authority	9.5
Fads and Frills	9.5

An example of the type of comment made quite frequently by physicians other than specific criticisms asked for is: "I feel my children are getting better schooling in the public schools of this community than I received in the early 1920's in private and public schools." A small number of physicians express disfavor toward desegregation and federal aid to education. Concerning teacher training programs, three physicians state the desirability of shortening the pre-professional training period and lengthening the internship and residency time.

Non-Structured Responses of Lawyers

The eight most frequently mentioned areas of criticism by lawyers are shown in Table 18:

TABLE 18

RANK ORDER OF MOST FREQUENTLY MENTIONED AREAS OF CRITICISM BY LAWYERS

Area of Criticism	Rank
Neglecting the 3-Rs	1
Finance (Salaries and Buildings)	2
Socialistic Teachings in Schools	4
Fads and Frills	4
Teachers and Teacher Training	4
Public Relations	6
Moral and Ethical Training	7
Discipline	8

Similar to physicians, a small number of lawyers express dissatisfaction with desegregation. The types of favorable comments received from lawyers are as follows: ". . . with all the criticism you may get, the teachers are generally doing far more than the parents and students -- and deserve our respect and support. You sacrifice for us all." And:

> It is my observation, from the conditions of things in our own state, that the teaching profession is to be sincerely commended for the job it is doing, not only with our children, but in raising the requirements for its own profession, and making the public aware of the need for high requirements in the profession. It is unfortunate that salaries commensurate with the task involved are not either paid or available for payment in most cases.

And:

On the whole, it appears to me that we have made great strides of progress, and that teaching is far superior to 30 or 40 years ago. Greater dignity is afforded each child, and opportunity for personality development is greater than previously.

I think our educational system does a good job in the "moral" field. Too little is done by parents.

Regardless of the nature of people to "beef" and "gripe," I think that in the final analysis, we must all recognize the great strides which have been made in "education," and our hats should be off to those who have and are doing something about it.

Non-Structured Responses of College Professors

Table 19 shows the areas of most frequent criticism by liberal arts professors. Spontaneous praise of present-day education is less common among liberal arts professors than from any of the other groups.

TABLE 19

RANK ORDER OF AREAS OF MOST FREQUENT CRITICISMS BY LIBERAL ARTS PROFESSORS

Area of Criticism	Rank
Teaching of the 3-Rs	1
Courses in "education"	2.5
Failure to Require Sufficient Subject-Matter Courses in Teacher Training Programs	2.5
Failure to Teach Mental Discipline in Pupils	4
Fads and Frills	5

Fewer comments were made by education professors than for any of the other groups. This is consistent with their highly favorable responses to the opinionnaire statements. The most frequently mentioned criticisms by education professors concerned education courses, finance, and standards for admission to the teaching profession.

Section 4. Other Observations From the Data

Table 20 shows the percent of the four groups responding "Do Not Know" to the ten areas of criticism:

TABLE 20

PERCENT OF EACH GROUP RESPONDING "?" (DO NOT KNOW) TO EACH OF THE TEN AREAS OF CRITICISM

Area of Criticism	Physicians	Lawyers	Liberal Arts Professors	Education Professors
1. Meeting Individual Needs of Pupils. .	9%	12%	13%	6%
2. Teaching the "Fundamentals"	7%	9%	16%	9%
3. Teaching Pupils to Think Critically .	14%	17%	22%	11%
4. Fads and Frills . .	17%	19%	23%	7%
5. Discipline in the Schools.	14%	16%	23%	12%
6. Citizenship Training	16%	17%	25%	12%
7. Moral and Ethical Training	19%	11%	20%	8%
8. Teachers and Teacher Training	24%	27%	18%	10%
9. Public Relations. .	14%	14%	27%	9%
10. Finance	11%	13%	22%	8%

In Table 21 the four groups are ranked from the largest to the smallest percent responding thus to each of the ten areas of criticism. It

TABLE 21

RANK ORDER OF THE FOUR GROUPS ACCORDING TO THE PERCENT OF "?" (DO NOT KNOW) RESPONSES TO EACH OF THE TEN AREAS OF CRITICISM[a]

Area of Criticism	Physicians	Lawyers	Liberal Arts Professors	Education Professors
1. Meeting Individual Needs of Pupils . .	3	2	1	4
2. Teaching the "Fundamentals". . .	4	2.5	1	2.5
3. Teaching Pupils to Think Critically. .	3	2	1	4
4. Fads and Frills. . .	3	2	1	4
5. Discipline in the Schools	3	2	1	4
6. Citizenship Training.	3	2	1	4
7. Moral and Ethical Training.	2	3	1	4
8. Teachers and Teacher Training.	2	1	3	4
9. Public Relations . .	2.5	2.5	1	4
10. Finance.	3	2	1	4

[a]A rank order of 1 indicates the group with the largest percent of "Do Not Know" responses, while a rank order of 4 indicates the group with the smallest percent of "Do Not Know" responses.

will be noted that liberal arts professors rank first or highest among the groups as to size of percent responding "Do Not Know" to all areas

of criticism except that of "Teachers and Teacher Training." They rank second in that area, which would seem to indicate more definite opinions in that area than for any of the other areas. From Table 16 on page 77 it can also be seen that they are significantly unfavorable toward teachers and teacher training, ranking it tenth among the ten areas of criticism in the "unfavorable" direction.

Education professors express more definite opinions than any of the other groups. They rank fourth (smallest percentage of "Do Not Know" responses) in nine areas of criticism. The one area in which they do not rank fourth, but rather 2.5, is that of the teaching of the "fundamentals." Physicians are most strongly opinionated in that area with fewest "Do Not Know" responses. Table 16 on page 77 shows that this more definite expression of opinions by physicians is in an unfavorable direction since teaching of the fundamentals ranks tenth by them.

More lawyers checked "Do Not Know" in the area of "Teachers and Teacher Training" than did any of the other groups. This indicates a greater lack of definite opinions in this area than by professors as might have been expected.

When "Do Not Know" responses are omitted and comparisons are made between pairs of groups responding "Agree" to each statement, the order of pairs of professional groups showing the most significant differences (i. e. $p<.05$) are shown in Table 22. It can be seen from Table 22 that the greatest differences are found between education and liberal arts professors with physicians and lawyers showing fewest differences.

TABLE 22

RANK ORDER OF PAIRS OF PROFESSIONAL GROUPS SHOWING THE MOST SIGNIFICANT DIFFERENCES ON THE SEVENTY-SEVEN ITEMS[a]

Professions	Rank
Education and Liberal Arts Professors	1
Education Professors and Lawyers	2
Education Professors and Physicians	3
Liberal Arts Professors and Physicians	4
Liberal Arts Professors and Lawyers	5
Physicians and Lawyers	6

[a]A rank of 1 indicates two groups showing the greatest differences, while a rank of 6 designates the two groups showing fewest differences.

Table 23 shows the rank order of the four groups when "Do Not Know" responses are omitted, from the one with the most significant favorable responses (i. e. $p<.05$) to the one with the least favorable responses. Education professors are most favorable, while liberal arts professors are least favorable. It should be pointed out that the

TABLE 23

RANK ORDER OF THE FOUR GROUPS FROM THE ONE WITH THE MOST SIGNIFICANTLY FAVORABLE RESPONSES TO THE ONE WITH THE LEAST FAVORABLE RESPONSES[a]

Professional Group	Rank
Education Professors	1
Physicians	2
Lawyers	3
Liberal Arts Professors	4

[a]The most significant "favorable" responses.

differences found in the latter two tables should be interpreted with caution in the light of tables preceding them. Since the "Do Not Know" responses cannot be considered too valid,[1] those responding in that manner might very well have definite opinions which remain unexpressed.

One other interesting finding is revealed in Table 16 on page 77. The majority of chi-square values are large and positive which indicates that the groups are more favorable toward public education than unfavorable. There is one notable exception however in the responses of liberal arts professors. They ranked three areas, viz. "Teachers and Teacher Training," "Discipline in the School," and "Teaching the Fundamentals" significantly unfavorable. In four other areas they were neither significantly favorable nor unfavorable. In only three areas out of the ten were they significantly favorable. These were "Meeting Individual Needs," "Moral and Ethical Training," and "Citizenship Training."

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[1]Rosen and Rosen, op. cit., 38.

CHAPTER V

SUMMARY AND IMPLICATIONS

Previous inquiries concerning the public's opinion of public education have included broad heterogeneous cross-sections of the lay public. On the whole, such studies have tended to show highly favorable opinions toward the schools. As might be suspected, some of those studies have indicated that the most critical persons are from the more highly educated groups.

In the present study an attempt has been made to investigate more carefully the extent to which four specific professional groups, viz. physicians, lawyers, liberal arts and education professors, agree or disagree with critical judgments, both favorable and unfavorable, of public education. Such criticisms of public education were selected from the literature over the past fifteen years, 1940-1955.

An opinionnaire was constructed containing seventy-seven specific criticisms which were classified into ten categories of criticism. The test-retest coefficient of reliability of the opinionnaire was found to be .95 when administered to college students.

All respondents to the opinionnaire resided within the state of Oklahoma. Physicians were members of the American Medical Association, lawyers were members of the American Bar Association, and college pro-

fessors were employed by colleges and universities accredited by the North Central Association of Colleges and Secondary Schools.

A fairly representative random sample of each of these groups was selected to whom opinionnaires were mailed. Nine hundred and forty-two opinionnaires were mailed in all. Six hundred and thirty-three, or 67% of the total number mailed, were used in the analysis of data.

Findings

Perhaps the most outstanding finding from the study is that the four professional groups are much more favorable toward public education than some of the critics would have us believe. In the majority of areas of criticism, the groups are not only favorable toward public education but they are significantly favorable. By "significant" is meant that one can infer that in 95 samples of professional people out of 100 similar to the sample used in the present study, the majority of persons would have favorable opinions.

At the same time the study shows clearly that the most critical group among the four is liberal arts professors. They are the only group which express significantly unfavorable opinions toward public education. The three areas of criticism in which they express such unfavorable opinions are teacher training, discipline in the schools, and teaching of the "fundamentals." Another factor which accentuates their unfavorable opinions of teacher training today is the fact that in nine of the ten areas of criticism, a larger percentage of liberal arts professors check "Do Not Know" to the items than any of the other groups. However, in the area of teacher training they rank 2.5 among the four

professional groups in the percentage of "Do Not Know" responses, thus indicating more definite opinions in this area than any of the other areas.

Another finding from the study is that the greatest differences in opinions between the professional groups studied lie within the academic walls. Education and liberal arts professors differ significantly on more statements than any other two groups. The least differences are found between physicians and lawyers.

The responses of specific groups to particular statements in many cases are exactly what one might have predicted, thus confirming our suppositions. To a number of statements, however, the responses were different from what might have been supposed. The following are some of the more significant specific findings:

As might have been expected, liberal arts professors were concerned that bright students are being neglected in the public schools. They disagreed to a significant degree ($p<.01$) that pupils are being prepared for college as well or better than 30 years ago. The other three groups agree significantly ($p<.01$) with this statement. The liberal arts professors agree significantly ($p<.01$) that too much emphasis is placed on meeting the "vocational" needs of students at the expense of much needed "intellectual" training. Education professors disagree significantly ($p<.01$) with this statement. Liberal arts professors agree significantly ($p<.01$) that "The policy in today's schools of passing a large percentage of pupils is unfair to the industrious pupil who finds that the rewards for his labors are the same as those for the lazy pupil." Education professors disagree to a significant degree ($p<.01$)

with the statement.

Physicians, as well as lawyers, seem concerned that the schools are failing to teach pupils how to use their leisure time profitably. One might wonder why they are more critical than professors. Perhaps some of the problems with which they are confronted such as juvenile law-breakers, unwed mothers, etc. make this criticism seem more urgent for lawyers and physicians than for professors. Surprisingly, physicians appear to be most satisfied of all the groups that the physical education needs of pupils are being met. Physicians disagree significantly ($p<.01$) that schools are developing respect for authority in pupils as well or better than they did 30 or 40 years ago. Education professors agree significantly ($p<.01$) with the statement.

Large percentages of physicians, lawyers and liberal arts professors indicate they "Do Not Know" concerning several newer school practices such as longer class periods where problems relating to pupil interests are studied and the practice of combining two or more subjects for instructional purposes.

Lawyers appear to be especially concerned about disciplinary practices in the schools. They disagree significantly with the statement number 32, "Interesting learning experiences provided in today's schools make strict disciplinary measures more unnecessary than was the case 30 or 40 years ago."

Both physicians and lawyers express concern with socialistic trends in the schools. They tend to agree that "Today's schools are over-emphasizing cooperative action at the expense of rugged individualism, thereby tending to undermine the free enterprise system." Approxi-

mately one-third indicate they "Do Not Know" about the extent of textbooks which strike unfavorably at the foundations of American liberty. Among those who express definite opinions, however, 71% of the physicians and 73% of the lawyers agree with the statement thus expressing their suspicions of such textbooks.

Concerning teacher training practices, all groups disagree significantly with the statement, "There is no justification for having a school of education in colleges and universities since the essentials for teachers can be taught in other departments. At the same time criticisms of courses in colleges of education, especially by liberal arts professors, and not excluding a sizable proportion of education professors, indicate dissatisfaction with many such courses.

Apparently physicians are not aware of the shortage of materials in schools today. They agree significantly with the statement, "There is no scarcity of study materials and attractive reference materials in most schools today." Education professors disagreed significantly with the same statement. Even though all groups agreed significantly that "Teachers' salaries are not commensurate with their professional training and qualifications," physicians and lawyers agreed significantly less than professors.

Implications

It is highly revealing to find in this study that these educated people, whom earlier studies have found to be the most critical among all lay groups, react so favorably toward public education. Reactions to all statements combined are decidedly toward the favorable rather the unfav-

orable end of the continuum.

Liberal arts professors reveal by their expressed opinions a striking lack of information concerning the achievements of public education. An analysis of their responses shows clearly that they are more concerned about the minority of pupils who go to college than they are about the majority of the public school population. Their significant disagreement with item 15, "Public schools are preparing pupils for college as well or better than 30 or 40 years ago," would seem to indicate that they are not considering the fact that a far broader range of talent is being prepared for college today than was the case in former years. Formerly even the public high schools had a more selective enrollment and the curriculum in such highschools was typically college preparatory and of a much narrower range of subject-matter. In an earlier day much less time was spent on extra-curricular activities.

Concerning the significantly unfavorable opinions of liberal arts professors toward the teaching of the "fundamentals," the following factual evidence should not be by-passed by these professors: First, in 1900 the population of the United States was 100,000,000. The school enrollment was 16 per cent of the total population. This meant that only one student out of 32 was attending high school. The school population today is much different. The total population now stands at 160,000,000. Approximately 20 percent of the total population now attends school. Now, one out of every four is a highschool student. Over ten times as many students are completing highschool today as a generation ago. This means that a far less select group enters college. At the same time the liberal arts professors should not forget that these students, by and

large, are products of traditional academic programs rather than a newer type program as some of them would have us believe.[1] Besides, many of these professors have taught that pupils "transfer" their knowledge of subject-matter and nowhere does one find less than 24 semester hours of college credit in ones subject-matter teaching area as a minimum requirement for teachers. If an increase in the amount of training that teachers must have in their subject-matter area will bring about improvements in education as these liberal arts professors usually contend, then today's teachers should be much better than they have been in the past when the requirements in their subject-matter area were less. Another evidence that their contention that the "fundamentals" are not being taught is not valid is that literacy has through the years steadily improved in the United States.

Tremendous changes have been made in the curricula of the public secondary schools to meet the needs of the large percentage of pupils who will not go to college and numerous other demands of many adult citizens groups. Therefore many college-bound pupils are taking some courses which are primarily vocational and cultural, e. g. health, but not in the traditional sense. When they arrive in college they are not so well versed in the arts and sciences as these professors would desire. The problem is much greater than it might appear on the surface. The public schools are confronted with a tremendous teacher shortage which means that there are more pupils per teacher than ever before. The public school teacher must not only teach subject-matter, the 3-Rs, but also guide the pupils

[1]Howard Wakefield, "In the Limelight -- Part II," Phi Delta Kappan, XXXVI (December, 1954), 124-126.

so as to prepare them for citizenship in one of the most complex societies which has ever existed. The industrial age with shortened working hours means more time for leisure-time activities: this task, that of teaching pupils how to spend their leisure-time wisely, also falls to the teacher. Such problems as these were practically non-existent in an earlier age when many of these liberal arts professors went to high school.

By their significant agreement with Item 21, "In schools today too much emphasis is placed on meeting the 'vocational' needs of students at the expense of much needed 'intellectual' training," liberal arts professors reveal their failure to consider that the lower intellectual level group of public school pupils cannot comprehend the more highly abstract symbols which these professors are expecting them to master. The public schools have a range of talent from morons to the genius level. To believe that all these pupils should be expected to master such highly intellectual and often impracticable materials would be extremely unrealistic. One major avenue of escape for such pupils is to drop out. The problem of drop-outs in public schools has been a concern of educators for some time. In their highly penetrating discussion "On the Conflict Between the 'Liberal Arts' and the 'Schools of Education'" a committee[1] from the American Council of Learned Societies states: "There may be financial or other reasons for the 'drop-out,' but one reason is certainly that the last grades of high school, despite all adjustments to average or even below average intelligence, are still too

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[1] American Council of Learned Societies, "On the Conflict Between the 'Liberal Arts' and the 'Schools of Education,' p. 17-38, Newsletter, V (July, 1954).

abstract and verbal for a large part of our youth.[1]

The concern of liberal arts professors that the schools are not providing pupils with enough intellectual training should also be analyzed in the light of the fact that 75% of all persons dismissed from their positions in trade, industry, and technical occupations are dismissed for personality difficulties, and not for technical inefficiency.[2] It is much easier to teach these literary and academic skills that liberal arts professors want than to teach for personality development and character improvement. It is training for the latter to which school people are now giving serious attention.

Concerning their criticism of courses in education: if the child is a major subject, then teachers must major in their subject like physicians and lawyers do in their subjects, and nothing short of a Ph.D. comparable to the M. D. will ever be completely satisfactory training. Besides, the body of scientific knowledge about a child and his learning, the adaptability of subject matter to mental level, and the learning of personality traits is immense. A degree in education in most universities of the United States requires from 18 to 25 hours in professional education courses, that is to completely understand children and their learning; while the pharmacist who is primarily a "pill-mixer" and follows directions of a doctor, must have approximately 100 hours in

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[1]For further evidence see: Holding Power and Size of High Schools, Federal Security Agency, Office of Education, 1950, p. 1+. "One in five of all youth, as represented by the enrollment in the fifth grade, did not reach high school; nearly half of those who entered dropped out before graduation . . . . Morover, of the 42 /percent/ who do graduate from high school, fewer than 12 /percent/ enter college and only 5 /percent/ remain to graduate college."

[2]William H. Burton, The Guidance of Learning Activities. p. 220. New York: Appleton-Century-Crofts, Inc., 1952.

pharmacy.

It would seem that the liberal arts professors are completely overlooking or are unaware of much that we have learned about individual differences, the matter of motivation in learning, and the whole range of known facts about children's learnings. These critics are students of their chosen academic area. They have little understanding of the ways in which learning best occurs -- the crucial "know-how" of teaching. It is not what is in a teacher's head that counts, but what he gets in the heads of his students. This transfer is psychological and requires a thorough understanding of the psychology of learning.

Liberal arts professors are also concerned about "discipline" in the public schools today. Concerning this type of criticism, Burton says:

> The modern school rejects the theory of discipline as the blind obedience and quiet imposed in authoritarian fashion by teacher dictators. The result of that kind of discipline is a citizenry which is easy prey for the demogogue on the way to dictatorship. The discipline of democracy is self-discipline, the acceptance of responsibility, the development of personal reliability and integrity. Long, slow growth is necessary.[1]

The pages of educational history are replete with examples of revolt by pupils in schools of an earlier day where authoritarian disciplinary practices were found. It also appears that the liberal arts professors contradict themselves in one sense in their responses to items concerning discipline and other items concerning citizenship training in the schools. One might ask why they should react so unfavorably

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[1]William H. Burton. "Get the Facts: Both Ours and the Other Fellow's," Progressive Education, XXIX (January, 1952), 82-90.

toward school discipline, while they admit very strongly that the schools are doing an excellent job of preparing citizens. Educators would be the first to admit that numerous improvements need to be made in public education. Constant re-evaluation of purposes, methods, and outcomes is necessary if such improvements are to be made.

The present study has shown that four specific professional groups express predominantly favorable opinions toward public education. Among the four, liberal arts professors express the most unfavorable opinions. Regardless of the underlying reasons for such opinions on the part of those professors, the abundance of factual evidence concerning achievements of the schools indicates that progress has been steady and continuous. A defense of public education with a careful analysis of factual evidence now available goes far beyond the problem of this investigation. This is not only a task for the researcher but for every member of the teaching profession. The facts are now available for anyone who will take the time to search for them. In a recent article appearing in Harper's Magazine,[1] a best-selling novelist presents a succinct defense of public education. This article not only reveals the attitudes of many other persons outside of the teaching profession, but also indicates that the topic of the present study is still alive as the writing is completed.

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[1]Sloan Wilson, "Public Schools Are Better Than You Think," Harper's Magazine, CCXI (September, 1955), 29-33.

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APPENDIX

THE OPINIONNAIRE

A CHECKLIST TO OBTAIN OPINIONS OF PROFESSIONAL PEOPLE
TOWARDS CRITICISMS OF EDUCATION

INTRODUCTION: -- Part I

The purpose of this inquiry is to obtain opinions of physicians, lawyers, and college teachers in Oklahoma concerning a number of statements, both favorable and unfavorable, regarding PUBLIC EDUCATION in the United States. Similar statements have appeared in popular magazines and books as well as numerous educational publications over the past fifteen years. An expression of your agreement or disagreement with the statements will be appreciated. Such information will be of value to the educational profession in "seeing themselves as others see them," and, subsequently, make a contribution towards the improvement of the teaching profession and public education in general. It should not require more than approximately 20 minutes of your time.

You are asked NOT to sign your name. However, you are asked to MAKE SOME MARK FOR EVERY STATEMENT.

The questions in GENERAL INFORMATION: -- Part II are about yourself, so that the results from different groups of physicians, lawyers, and college professors can be compared.

GENERAL INFORMATION: -- Part II

DIRECTIONS: Answer each of the following questions by placing the number of the choice of alternative answers which correctly answers the question in the space provided before the question. Example:

__2__ The capital city of Oklahoma is...
(1.) Tulsa (2.) Oklahoma City (3.) Ardmore

_____1. My profession is...
(1.) Medicine (2.) Law (3.) College teaching in a department or college of Education (4.) College teaching in a department or college other than Education

_____2. Please indicate your sex.
(1.) Male (2.) Female

_____3. In which size city do you reside?
(1.) Under 9,999 (2.) 10,000 - 24,999 (3.) 25,000-49,999 (5.) 50,000 and over

_____4. Do you now, or have you in the past had children in elementary or secondary school?
(1.) Yes (2.) No

_____5. If you have children who are in school or were in school in the past, what type of school do/did they attend?
(1.) Public (2.) Private

_____6. In which of these categories is your age?
(1.) 20-35 (2.) 36-49 (3.) 50 and over

_____7. Have you ever taught in public elementary or secondary schools?
(1.) Yes (2.) No

_____8. Have you ever served on a school board or participated in parent-teacher association meetings?
(1.) Yes (2.) No

_____9. Have you ever served in the armed forces of the U.S.?
(1.) Yes (2.) No

____10. If you are a veteran, when did you serve? (List more than one number if you were on active duty more than one of the following times)
(1.) World War I (2.) World War II (3.) Korean Conflict (4.) Peacetime

____11. In how many civic organizations do you participate? (e.g. Rotary, Kiwanis, etc. Do not count church affiliations)
(1.) None (2.) 1 or 2 (3.) 3 or 4 (4.) 5 or more

12. Please indicate with a check (✓) which of the following periodicals you subscribe to and read regularly.

____1. America
____2. American Legion Magazine
____3. American Magazine
____4. American Mercury
____5. Atlantic Monthly
____6. Better Homes and Gardens
____7. Catholic World
____8. Christian Century
____9. Collier's
___10. Coronet
___11. Country Gentleman
___12. Fortune
___13. Good Housekeeping
____14. Harper's
____15. Ladies Home Journal
____16. Life
____17. McCall's
____18. Nation
____19. New Republic
____20. Newsweek
____21. Parents
____22. Reader's Digest
____23. Saturday Evening Post
____24. Saturday Review
____25. Time
____26. Woman's Home Companion

OPINIONNAIRE: -- Part III

DIRECTIONS: The following list contains both favorable and unfavorable statements pertaining to PUBLIC EDUCATION. Most of the statements apply to grades 1 through 12. Some, however, pertain to teacher training institutions. If you agree with a statement, check (✓) under "A" opposite the statement as an indication that you AGREE; if you disagree, check under "D" as an indication that you DISAGREE. In the case of some statements you will probably have no strong opinions either way; nevertheless, check either AGREE or DISAGREE according to the way in which you may be slightly inclined. In those cases where you have no opinion check "?" as an indication that you DO NOT KNOW. Example:

	A	?	D
Most highschool pupils should take a course in typewriting . .	✓		

	A	?	D
1. Schools are doing more than they did 30 or 40 years ago in discovering pupils' vocational interests.			
2. Today's schools are more effectively discovering pupils' talent than were schools 30 or 40 years ago			
3. Bright students are not being taught so that they achieve anywhere near that which they could be achieving			
4. Most educators are giving greater attention to personality development of pupils than did educators 30 or 40 years ago.			
5. Students with low academic abilities are not receiving adequate attention in the public schools today.			
6. Most schools are failing to teach students how to use their leisure time profitably			
7. One desirable practice in some present-day schools is that of assigning pupils for instruction in various subjects according to present levels of pupil achievement			
8. Most schools are failing to provide for the proper physical education of pupils.			
9. The "force-feeding" of information which pupils may never need is driving many students away from highschools today.			

		A	?	D
10.	The increased addition of trained counselors in many schools who help school age youth with all kinds of personal problems is a promising trend in present-day education	—	—	—
11.	Arithmetic is being taught as well or better in schools today than 30 or 40 years ago	—	—	—
12.	Foreign languages are not being taught to the extent which they should be taught in most schools today.	—	—	—
13.	As much or more "factual knowledge" is being acquired by pupils in schools today as 30 or 40 years ago	—	—	—
14.	Spelling is not being taught as effectively as it was 30 or 40 years ago	—	—	—
15.	Public schools are preparing pupils for college as well or better than 30 or 40 years ago	—	—	—
16.	Reading in today's schools is being taught as well or better than 30 or 40 years ago	—	—	—
17.	Writing is not being taught as effectively as it was 30 or 40 years ago	—	—	—
18.	Pupils today are receiving only enough education to be victimized by advertizing and propaganda.	—	—	—
19.	Schools today are teaching students to have greater poise and confidence in expressing themselves than they did 30 or 40 years ago	—	—	—
20.	As compared with schools 30 or 40 years ago, present-day schools are more effective in teaching children how to suspend judgments on issues until all available evidence can be obtained on which to base decisions	—	—	—
21.	In schools today too much emphasis is placed on meeting the "vocational" needs of students at the expense of much needed "intellectual" training	—	—	—
22.	Today's schools are producing wise citizens capable of bringing about improvements in American society	—	—	—

		A	?	D
23.	Teachers are giving pupils too much "pre-digested" subject-matter without referring them to original sources where they may see relationships on their own	—	—	—
24.	Topics which are more meaningful to pupils are being studied in schools today than was the case 30 or 40 years ago.	—	—	—
25.	Audio-visual materials are being used effectively in schools to promote better learning experiences for children	—	—	—
26.	Too much emphasis is being placed in the highschools on athletic games between schools	—	—	—
27.	Inefficient and easy methods of work have been substituted in today's schools for the time-tested methods of drill and recitation	—	—	—
28.	A desirable practice presently found in some highschools is that of providing longer class periods where problems relating to pupil interests are studied	—	—	—
29.	Public school educators are continually being swayed by fads in curriculum and methods of teaching	—	—	—
30.	The schools are wasting time on too many inconsequential subjects, especially in the social studies	—	—	—
31.	The older practice of teaching many separate subjects was less effective than the more recent attempts to combine two or more subjects for instructional purposes.	—	—	—
32.	Interesting learning experiences provided in today's schools make strict disciplinary measures more unnecessary than was the case 30 or 40 years ago.	—	—	—
33.	Today's classrooms are too often a chaos of undisciplined play programs defended by educators as "learning by doing". . . .	—	—	—
34.	The schools are developing respect for authority in pupils as well or better than they did 30 or 40 years ago.	—	—	—
35.	The policy in today's schools of passing a large percentage of pupils is unfair to the industrious pupil who finds that the rewards for his labors are the same as those for the lazy pupil	—	—	—

		A	?	D
36.	In those schools where pupils are given many opportunities to plan and direct their own activities, they are more eager to learn and show greater interest	—	—	—
37.	A desirable practice found in some schools is that of promoting a pupil on the basis of his achievement compared with his own ability rather than his achievement compared with other students	—	—	—
38.	Schools are effectively teaching pupils to forego many "immediate" rewards in order that they may seek to attain long-range goals.	—	—	—
39.	The policy in today's schools of passing a large percentage of students is enabling lazy students to get by without work . .	—	—	—
40.	Pupils are being trained to assume responsibilities of citizenship as well or better than 30 or 40 years ago	—	—	—
41.	Today's schools are over-emphasizing cooperative action at the expense of rugged individualism, thereby tending to undermine the free enterprise system.	—	—	—
42.	Today, racial tolerance is being taught more effectively than it was 30 or 40 years ago	—	—	—
43.	Currently, schools are producing citizens with better social-personal development for effective citizenship than did schools 30 or 40 years ago	—	—	—
44.	Present-day schools are more effective in developing pupil attitudes and skills of cooperativeness than were schools 30 or 40 years ago	—	—	—
45.	American history is being taught as well or better than it was 30 or 40 years ago	—	—	—
46.	Schools are significantly more effective in developing leadership abilities in pupils than were schools 30 or 40 years ago .	—	—	—
47.	Pupils are being trained as well or better in the common courtesies than students 30 or 40 years ago	—	—	—
48.	The modern school's emphasis upon "social learnings" is actually training the pupil for a collectivist state by subordinating him to the group	—	—	—

		A	?	D
49.	Too many teachers present the asserted virtues of foreign ideologies while giving too little praise to American achievements . .	—	—	—
50.	Some present-day textbooks contain statements which strike unfavorably at the foundations of American liberty	—	—	—
51.	The schools are providing too many "immediate" rewards for pupils	—	—	—
52.	In defending the constitutional provision for separation of church and state, the schools have caused pupils to consider religion unimportant	—	—	—
53.	Ethical principles such as "truth," honesty," and "justice" are being taught as well as they were 30 or 40 years ago . . .	—	—	—
54.	A considerable amount of the blame for juvenile delinquency today must be placed on the schools for their failure to teach moral and spiritual values	—	—	—
55.	A desirable situation exists in those communities where the patrons of the school have a clear understanding that the primary responsibility for teaching moral values resides in the homes and churches rather than the school	—	—	—
56.	Many promising candidates for the teaching profession are lost, because they choose to concentrate all their college work in other departments rather than taking the Education courses required for state certification	—	—	—
57.	Present-day schools of Education are producing large numbers of competent teachers with good backgrounds of general information and professional training	—	—	—
58.	In the majority of instances it is the average to below average college student who enters the teaching field	—	—	—
59.	Teachers today, as contrasted with teachers 30 or 40 years ago, are more concerned that pupils acquire knowledge which will be useful and help them live full and enriched lives.	—	—	—
60.	On the whole the training of public school administrators in work other than professional Education courses is adequate. . .	—	—	—

		A	?	D
61.	The fact that public school teachers take the major part of their graduate training in professional education courses rather than other areas of instruction is desirable	—		—
62.	Most teachers are receiving sufficient training in the subject-matter areas which they will teach.	—	—	—
63.	Increased educational effectiveness lies ahead if experimenters are given an opportunity to continue their research in Education	—	—	—
64.	There is no justification for having a school of Education in colleges and universities since the essentials for teachers can be taught in other departments	—	—	—
65.	Too many courses in schools of Education as now taught are shallow, meaningless, and non-sensical	—	—	—
66.	The increased requirements, by state teacher certificating agencies, that teachers take more courses in schools of Education has brought about a steady improvement in public education .	—	—	—
67.	Educators in general show a sincere respect for the taxpayer's opinions concerning school offerings and methods of teaching . .	—	—	—
68.	Teachers are doing an effective job of reporting to parents the comparative standing of pupils in their classes	—	—	—
69.	Without full public approval, public education has extended itself to include many aspects of the child's life not considered the province of the school 30 or 40 years ago	—	—	—
70.	A desirable trend in education is the attempt to make education available to all regardless of abilities, race, creed, or economic level	—	—	—
71.	Educators too often dominate school board members in local school situations	—	—	—
72.	Educators too often address lay patrons in elusive pedagogical terms that are not easily understood	—	—	—
73.	Teachers' salaries are not commensurate with their professional training and qualifications	—	—	—

		A	?	D
74.	There is no scarcity of study materials and attractive reference materials in most schools today	__	__	__
75.	Superintendents are generally thrifty in handling school finances	__	__	__
76.	When one considers the amount being spent on public education today, he must conclude that children are benefiting too little	__	__	__
77.	Most school buildings are better and safer than they were 30 or 40 years ago	__	__	__

(Use the remaining space to identify any other criticisms you would like to make about public education today, or for comment on any of the above items)