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DIMENSIONS OF THE LEARNING ENVIRONMENT--THE SCHOOL OPINION SURVEY.

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THIS MONOGRAPH PRESENTS TECHNICAL AND STATISTICAL INFORMATION SUPPLEMENTAL TO PREVIOUS PUBLICATIONS CONCERNING THE GENERAL OUTLINE AND CHARACTERISTICS OF THE SCHOOL OPINION SURVEY (SOS), WHICH DELINEATES SIGNIFICANT PARAMETERS OF THE LEARNING ENVIRONMENT. THE INTRODUCTION INCLUDES THE GUIDANCE MODEL, THE NEED FOR THE SOS TO HELP PUPIL PERSONNEL SPECIALISTS EVALUATE OUTCOMES, AND PRELIMINARY DEVELOPMENTAL STEPS. THE RATIONALE FOR THE SOS DISCUSSES THE APPROACH, THE PURPOSES, THE LEARNING ENVIRONMENTAL MODEL (A CONTINUUM FROM EDUCATIONAL VALUES TO EDUCATIONAL OBJECTIVES TO EDUCATIONAL TECHNIQUES BETWEEN OPEN, FLEXIBLE AND CLOSED, RIGID SYSTEMS), AND PRACTICAL APPLICATIONS OF THE SOS. THE SOS STRUCTURE INVOLVED THE ITEM POOL PREPARATION, FORM A TREATMENT, FACTOR ANALYSIS OUTCOMES, FACTOR STRUCTURE OF FORM B ITEMS FOR 10 SCALES (HUMANISM, TRADITIONALISM, RELATIVISM, INDIVIDUAL ATTENTION, GROUP ACTIVITIES, ANCILLARY SERVICES, NON-ACADEMIC, ACADEMIC, SCIENTIFIC OBJECTIVITY, AND STRICT CONTROL), THE SCALES' RELIABILITY, TEST-RETEST RELIABILITY OF SCALES AND ITEMS, AND INTERGROUP DIFFERENCES ON THE FORM B SCALES WITH DATA DRAWN FROM PROFESSIONAL STAFFS AND 10TH GRADE STUDENTS IN ANTIOCK, OROVILLE, AND GRIDLEY, CALIFORNIA. THE SUMMARY DISCUSSED THE RELEVANCE OF THE INITIAL ASSUMPTIONS, USES OF THE INVENTORY, AND FUTURE DIRECTIONS.
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**Dimensions of the
Learning Environment:
The School Opinion Survey**

Monograph #4

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WESTERN REGIONAL CENTER
OF THE INTERPROFESSIONAL RESEARCH
COMMISSION ON PUPIL PERSONNEL SERVICES

CHICO STATE COLLEGE
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**Dimensions of the Learning Environment:
The School Opinion Survey**

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December, 1967

Preface and Acknowledgements

The School Opinion Survey was originally developed by John K. Tuel and the senior author of this publication. A general outline of its development and a description of its characteristics have been published elsewhere (Tuel and Shaw, 1967). The purpose of this monograph is to present additional information, which it was not possible to present in the shorter article, that the more technically inclined reader will find to be of value. In addition, more data has been analyzed since the appearance of the original journal publication which adds to further understanding of the instrument.

Thanks are due to many individuals for services rendered in connection with the development of this School Opinion Survey. Without this assistance, it would not have been possible to produce it. The data to be analyzed was provided by the professional staffs and tenth grade students of high schools in Antioch, Oroville and Gridley, California. In addition, parents in the Antioch district responded to the initial 250 item questionnaire. All of the extensive data analysis procedures were carried out through the medium of the Health Sciences Computing Facility located on the campus of the University of California at Los Angeles. Without this assistance, the data analysis could not have been accomplished.

Individuals who have contributed greatly to the development of the SOS are many. All of the staff of the Western Regional Center of the Interprofessional Research Commission on Pupil Personnel Services, both at Chico State College and UCLA, have been involved in some way

with the development of this device. It is not possible to name them all in this brief summary, but special mention should be made of the services of Mrs. Donna K. Lewis, Dr. Clarence Mahler, Mrs. Rosemary Wursten, Mr. Rodney Pickup and Mr. James Bruno. Without their attention to a seemingly infinite number of details, the work could not have been completed.

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Chapter 1

Introduction

In February, 1963, the Interprofessional Research Commission on Pupil Personnel Services extended invitations to a large number of colleges and universities in the United States to apply for designation as research centers to be recognized and financed by the Commission. A committee representing the Commission subsequently selected four centers from those which applied. Each of the centers had submitted proposals independently, and each center embarked upon research quite divergent from that of the others. The single element of similarity among the four centers lay in the fact that the central research problem involved the general area of pupil personnel services.

The proposal of the Western Regional Center, located originally at the University of California, Los Angeles, but now at Chico State College in Chico, California, involved development of a model for the rendering of pupil personnel services, particularly those services which are considered to be within the province of the behaviorally oriented pupil personnel specialties, such as counseling, school psychology and school social work. This model is delineated in greater detail in other places (Shaw and Tuel, 1964) (Shaw and Tuel, 1966). Actual research to conduct at least a partial empirical test of the model was actively begun in the Fall of 1963. The first year was primarily utilized in planning and in site development. In addition, the initial steps in the development of the School Opinion Survey were undertaken. These initial steps followed serious attempts to utilize other, already existing, models and instruments relevant to the concept

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of educational environment. Only when it had been demonstrated that existing ideas and materials would not suffice were steps taken to develop a new model and a new measuring device. In the Fall of 1964 data collection relevant to the purposes of the Western Regional Center was begun. By this time, extensive data on significant educational role groups had been collected with Form A of the School Opinion Survey, and the revised Form B came into use. Form C has since been created and is now in the process of further testing.

The Guidance Model

In order to understand the purpose and need for the School Opinion Survey, it is necessary to briefly delineate the major aspects of the guidance model tested by the Western Regional Center. It was assumed that public education has at least three general purposes. The first of these purposes is the transmittal of knowledge and skills. A second purpose is that of preparing the learner to actively and effectively appropriate new knowledge and skills. The third assumed purpose is that the school should enable the learner to effectively apply his knowledge and skills to problem solving or to new learning situations. Thus, the school is seen as responsible not only for being the dispenser of knowledge, but also for creating the conditions under which knowledge and skills can be effectively learned and for enabling the learner to make effective use of his knowledge. More succinctly stated, it was assumed that the overall responsibility of public education was to provide a situation in which the skills and knowledges deemed important to learn can indeed be adequately learned in such a way that the student can put his learning to use. It is easy to see

that given these assumptions, the concept of the "educational environment" or the "learning environment" takes on profound importance.

It is further assumed that the class room teacher has the primary responsibility for transmittal of knowledge and skills and that the pupil personnel specialist has the primary responsibility for helping to create a situation in which each child can learn most effectively and, further, can learn to utilize his learning most effectively. While these roles are not seen as exclusive to either the teacher or the personnel worker, they are viewed as primary to each of these groups.

The Need for the School Opinion Survey

If the pupil personnel specialist is to have the responsibility delineated above, it is necessary for him to have devices available which will enable him to evaluate the outcomes of his work. Examination of the current literature on the evaluation of guidance programs proves quite instructive. This literature demonstrates clearly that the major problem in the evaluation of personnel programs is the fact that most such programs either do not have clearly defined objectives to begin with, or that they have objectives which are incapable of evaluation. This has been commented on by others, most clearly perhaps by Hill (1963).

In addition to this insurmountable handicap, such evaluations nearly always make use of either ready-made devices not relevant to a particular situation or of naive homemade devices of questionable reliability and validity. Construction of the School Opinion Survey was carried out in order to avoid these pitfalls.

Interest in the concept of educational environment is not new.

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Much has appeared in the literature, and a part of this literature will be reviewed in a subsequent chapter. The necessity for the construction of a new instrument for the particular purposes of the present research became apparent on two counts. The first is that most existing instruments are not based on any specified model of the educational environment. The second is that such instruments are usually designed for use with only a limited segment of the total number of significant educational role groups. For example, the Organizational Climate Description Questionnaire conceived and developed by Halpin and Croft (1963) can be used only with administrators and teachers. The impact of other significant role groups, such as children or parents, on the learning environment cannot be assessed with this device. The same is true of other assessment techniques developed by those interested in the educational environment. Thus, the lack of an adequate theoretical structure relevant to the present research and the lack of already existing devices capable of use with a wide range of educational role groups mandated the construction of a new instrument.

Preliminary Steps in the Development of the School Opinion Survey

It was necessary that the new instrument should reflect not only the salient characteristics of the learning environment, but also should be capable of reflecting changes in a given environment which might come about as a result of the intervention of pupil personnel specialists. It was hoped at the outset that the literature on already existing "schools" of philosophy would be helpful in the construction of items, and a variety of the various philosophies of education was examined. Because of the complex and confused state of affairs which this

study revealed, no attempt was made to construct items reflecting particular educational philosophies, rather an attempt was made to include items which would reflect both a wide spectrum of attitudes with respect to educational matters and also a wide range of behaviors with respect to educational practice. Thus, appropriate statistical treatment of data would permit the "schools" to be derived empirically rather than requiring prior judgments about whether a given response to certain items reflected one school of philosophical thought or another.

As already indicated, one class of items reflected definite attitudinal kinds of responses. Included within the broad definition of attitude are beliefs about the purposes and objectives of education and questions on personal values as they relate to education. The behaviorally oriented items reflect behaviors associated primarily with the school, for example, with respect to homework, the practice of classroom testing or the provision of special classes of one kind or another.

No assumptions about a causal relationship between attitude and behavior were made, although a reciprocal relationship was assumed. It was our belief that factor analysis would result in constellations of attitudinal and behavioral items in the same clusters and, further, it was assumed that the factors thus derived would constitute the description of a particular "school" of thought. It will be seen subsequently that the former assumption was not borne out, although the latter was, at least in a limited way.

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Chapter 1

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Chapter 2

Rationale for the School Opinion Survey

Within the past twenty years it has become abundantly clear that the relationship between academic aptitude and school performance is far from perfect. As this development has occurred, educators and behavioral scientists have turned their attention to the quest for the other variables which influence the school performance of children. As this search has matured, the concept of the "educational environment" or the "learning environment" has gained more and more prominence. The earliest systematic studies of the learning environment date from approximately 1945 when H. H. Anderson and his associates began their studies of the effects of teacher behavior on the behavior of children in their classes. These studies were concerned primarily with the differential effects of "dominative" and "integrative" behavior of teachers on children. (Anderson and Brewer, 1945) (Anderson and Brewer, 1946) (Anderson and Reed, 1946) This approach was preceded by the now historic work of Lewin, Lippitt and White (1943) which utilized an experimental approach to determine the effect of different social structures on child behavior. These investigators were able to demonstrate significant behavior differences among groups exposed to leader behavior defined as democratic, authoritarian and laissez-faire.

Research developments in the general area of "learning environment" followed rapidly after this time. Withall (1949) developed a means for assessing the social-emotional climate of the classroom. Cogan (1953) utilized a paper and pencil device to assess the relationship between

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teacher behavior and pupil productivity. His findings supported those of Anderson relative to the existence of dominative and integrative patterns of teacher behavior.

Some of the most extended and important work in this area has been carried out by Flanders, who has completed a series of studies of teacher influence on pupil attitudes, both in the United States and in New Zealand. It is impossible to do justice to Flanders' work in the present context. Briefly, however, he has demonstrated that a sustained dominative pattern of teacher behavior produced anxiety, reduced the ability of students to recall material previously studied and was consciously disliked (1951). He has also developed a system for analyzing classroom interaction and through a sophisticated series of experiments utilizing this technique, has demonstrated that students learn more from flexible teachers who influence the class indirectly than from less flexible teachers who maintain direct control regardless of the personality characteristics of the student or of the subject matter being taught.

A somewhat different approach was taken by Gordon, Adler and McNeil (1963). These investigators explored the relationship between certain dimensions of teacher leadership and their effects on pupils. They were able to demonstrate interrelationships among three dimensions of teacher behavior, including the task dimension, the authority dimension and the expressive dimension and certain aspects of student behavior, including productivity, pupil morale, pupil compliance, amount of volunteer work and classroom order.

Still a different approach was taken by Halpin and Croft (1963),

who studied the nature of the relationship between the attitudes and behaviors of school administrators on the one hand, and the attitudes and behaviors of their teaching faculty on the other. In this important study the emphasis was on interrelationships between administrators and teachers, with the effects on pupils generally ignored. The study did reveal the feasibility of differentiating among different schools in terms of a generalized climate, and further indicated that the school administrator was the significant figure in determining what the character of this climate would be. The significance of parents and children in determining the school behavior and performance of children has been generally neglected except from the introspective point of view.

A Different Approach

This brief review of research indicates clearly that serious, sophisticated and significant work has been done on the general topic of what, for want of a better label, might be termed the educational environment. Certain kinds of interrelationships between the behavior of authority figures (in this case, teachers) and children have been clearly demonstrated. It has also been clearly demonstrated that generalized "climates" can be described.

All of these studies, however, have one characteristic in common: they fail to take into account the fact that any student or any teacher is not only a product of more than one "environment" but may, in fact, be operating in more than one environment at the same time. Thus, a student may find himself in a classroom where a teacher is demanding a certain kind of academic performance and at the same time

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be in a peer culture which does not value the kind of performance demanded by the teacher (Coleman, 1961).

The picture is further complicated if the psychological environment of the home from which the student comes makes still a third set of differing demands on the child. Previous studies have investigated the interaction between students and teachers and between administrators and teachers. No attempt has as yet been made to assess the climate created by all of the significant educational role groups to whose authority the child is subjected.

Purpose of the School Opinion Survey

The purpose of developing the School Opinion Survey was to construct a device which could be used with all significant educational role groups, including parents, teachers, administrators, pupil personnel specialists and students. An additional purpose was to develop an instrument which would reflect the significant parameters of the educational environment. It was assumed that it would be more appropriate to derive these parameters empirically rather than on a priori basis.

For purposes of instrument development, the educational environment was considered to be that part of the total environment which directly influences a student's academic learning. It is considered to be comprised primarily of the attitudes and behaviors of the significant persons in the student's environment. Physical aspects of the environment, such as the school plant, the dwelling in which the child resides or educational materials available are recognized as constituting a part of the environment, but are considered to be of secondary importance. It is the human beings in the child's environment who are

assumed to be of the greatest significance in influencing their learning behavior.

The role groups central to the child's phenomenal field are considered of most importance in determining the extent to which the child is able to learn and to utilize his learning. The specific educational role groups considered to be most important in the final determination of the nature of a given environment are parents, teachers, peers, administrators and pupil personnel specialists. This is not to say that the events which take place outside of these groups are unimportant, but only to indicate that they are generally of less importance to his learning environment. Thus, a school board might conceivably mandate a particular reading program for a particular district, but the extent to which board recommendation is implemented in the classroom will depend upon the attitudes and behaviors of educational role groups which operate in closer psychological contact with the children of that district.

Several assumptions underlie this attempt to define and assess the educational environment. The first, obviously, is that it is possible to measure and describe the important dimensions of this environment. Some support is lent to this assumption by the findings of Halpin and Croft. The second assumption is that certain attitudes and behaviors on the part of those comprising the child's educational environment (including other children) play an important part in determining the extent to which any individual child learns and is able to utilize his learning. A further assumption is that different role groups in the same environment may display different attitudes contri-

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buting to the existence of an essentially conflicted environment for the child. It is also assumed that identical role groups, for example, teachers, at different places or at different academic levels may display different attitudes and behaviors. Finally, it is assumed that the influence exerted by significant groups on the individuals who comprise them is transmitted through both attitudes and behaviors.

The difficulty of distinguishing clearly between "attitudes" on the one hand and "behavior" on the other has already been mentioned. It would be simpler to regard the attitude-behavior difference as a continuum rather than as a dichotomy. This particular continuum moves from the abstract or covert on the one hand to the concrete or overt on the other. Another way of looking at the continuum is to regard behavior as the outward manifestation of attitudes and values. Thus, at one end of the continuum are the values which presumably determine the goals of the individual or system. The goals or objectives are themselves in turn the determinants of the means or behaviors used to achieve the goals which have been endorsed, and which are found at the opposite end of the continuum.

As previously suggested, it appeared desirable to operate from a distinct and specifiable frame of reference. Therefore, initial efforts were directed to an examination of existing models with respect to their potential for application to the aims of the Guidance Research Project. A variety of such ready-made models were examined, but none proved to have the necessary range and flexibility which seemed necessary in the present instance. Even some models not specifically designated as applicable to the school learning situation were investigated.

For example, Riesman's inner-directed, other-directed dichotomy, together with the self-actualizing dimension added by Shostrom, was examined as a possibility (Riesman, 1953) (Shostrom, 1964). However, this system did not seem broad enough for present purposes and, further, the terms have not been empirically defined. In addition, a causal relationship appeared to be assumed between attitude and behavior (with behavior considered a direct resultant of attitude) which present investigators were unwilling to make.

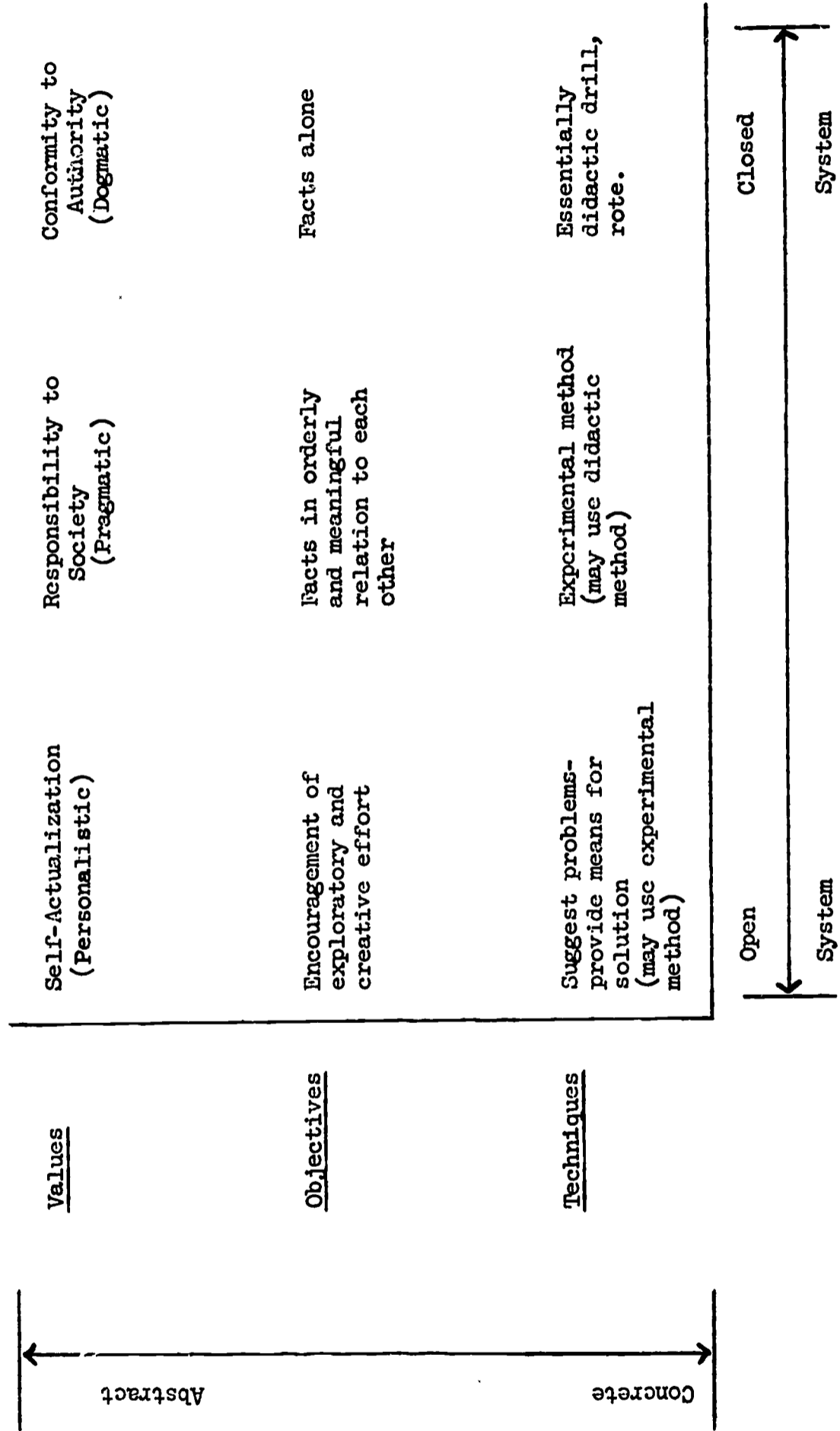
Another approach taken prior to the development of the present School Opinion Survey was that of appropriating currently existing schools of philosophical thought, such as progressivism or experimentalism, and attempting to construct items reflecting these particular points of view. A search of the literature revealed, however, that essential differences among the adherents of each point of view were so great that it would probably be impossible to obtain agreement with respect to whether or not any given item did, in fact, reflect a particular "school." In addition, data reflecting the extent to which the basic postulants of any particular school of thought were empirically verifiable simply did not exist. Therefore, this approach had to be discarded.

A Model of the Learning Environment

Figure 1 suggests the two major hypothesized dimensions of the School Opinion Survey and serves to illustrate the hypothetical model upon which it is based. The vertical axis represents the abstract at one end and the concrete at the other. Stated in different terms, it represents different levels of behavior from the more passive and less

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FIGURE 1
Hypothesized Structure of the Educational Environment



observable at one extreme, to the more active and more easily observable at the other. The continuum is assumed to move from educational value systems (which may not have been consciously arrived at) to educational objectives. The next step toward concretization involves the educational techniques which are endorsed to achieve certain objectives. The final step can be observed in the overt behavior of an individual. While a causal relationship is not being assumed, it was anticipated that strong associative relationships would, and from a logical point of view should, exist among values, objectives and behaviors.

The specific characteristics of any classroom, school or school system are probably influenced most by five subcultures. These include children, parents, teachers, administrators and pupil personnel specialists. While it is possible to argue that other groups are also important, for example, the school board and the general public, it is assumed for present purposes that such groups are either too distant from the actual school situation to have much effect upon children, or are represented in one of the four subcultures delineated above.

It is, of course, possible to reduce each of these five educational role groups still further. For example, the teacher could be differentiated by the level at which he is working, by sex or by subject matter area. Similar differentiations could be made for each of the other groups when appropriate. In some cases it is actually possible to divide one of these significant role groups by profession. In the case of administrators, for example, building principals can logically be differentiated from supervisors. In the area of pupil personnel

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services, a wide variety of similar professional distinctions can be made.

It was the belief at the outset that it would probably be simpler for most individuals to specify the educational techniques which they endorse and the values they deemed most important than it would be to specify the goals which the means were intended to reach or which were encompassed by their values. It was assumed that most individuals probably make a direct transition from values to means, with the objectives or goals essentially being ignored.

The horizontal axis of Figure 1 represents a continuum from flexibility to rigidity, or from openness to new experience to closed mindedness. Although only three points on the scale are described, it should be understood that a continuum is assumed to exist. Individuals who appear toward the left end of the horizontal axis are characterized by a value system which emphasizes creativity and self-actualization. The emphasis here is on the individual and the ability of the individual to free himself from "facts." Such persons may use the scientific method or they may not in their approach to the solution of problems. A personalistic philosophy is probably most characteristic of these individuals.

Individuals appearing toward the center of the distribution emphasize the responsibility of the individual to society. They also emphasize being independent, the ability to utilize knowledge (but not necessarily in original ways) and the ability to organize facts in relationship to one another. They are quite likely to depend rather exclusively on the scientific method or on some retrospective form

of the scientific method as used in the non-scientific disciplines. They are more likely to be characterized by a pragmatic philosophy.

Individuals appearing toward the right hand side of the horizontal axis emphasize conformity for the sake of conformity. In the field of education they emphasize the learning of facts. These facts are often in isolation and not related to other events. Such persons tend to be dogmatic in their approach and to be skeptical of the capability of others, particularly younger persons, to direct their own behavior adequately. Emphasis in teaching is on doing what you are told. There is a tendency to be closed to new experiences and to use primarily the didactic method of teaching.

Each of the five sub-cultures which has a direct impact on the school environment can be studied from the frame of reference provided by this model. Thus, it should be possible to determine where teachers, children or any other of the groups in a given school situation will fall on this matrix. The extent to which the data supported this hypothetical model will be examined in the following chapters.

Practical Applications of the School Opinion Survey

The circumstances surrounding the need for development of the School Opinion Survey have already been delineated. In addition to attempting to define the major parameters of the educational environment as it is perceived by all significant education role groups, it was intended to be used as a measure of change following the provision of certain guidance services on an experimental basis. The instrument would appear to have utility beyond this, however; each of the major sub-cultures having a direct impact on the school environment can be

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studied from the frame of reference provided by the School Opinion Survey. Certain hypotheses of real significance suggest themselves. The first is, the greater the degree of congruence among significant role groups in a given situation, the more effectively will the endorsed goals in that system be achieved. It can also be hypothesized that when the major educational role groups fall at the right hand end of the continuum, little provision will be made for individual differences, there will be a higher ratio of learning difficulties, students will find it more difficult to make future use of present learning and students will not be encouraged to utilize present learning in productive and original ways.

It can be further hypothesized that when disagreement between teachers and other significant role groups is high, there will be more serious problems of teacher morale and a higher incidence of teacher turnover, teacher absenteeism and student behavior problems in the classroom. When there is strong lack of agreement between the student sub-group and other educational role groups, it can be hypothesized that there will be a higher incidence of student problems, including tardiness, absenteeism, learning and behavior difficulties. When there is a lack of congruence between the parent sub-group and the other role groups, it can be hypothesized that there will be poorer support of public schools and education generally, as reflected in failure of bond issues, tax elections, and conflicts between educators and the public.

Chapter 2

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Chapter 3

Structure of the School Opinion Survey

This chapter will outline the procedural steps followed in the development of the School Opinion Survey, including discussion of the preparation of the item pool and description of the factor analysis procedures utilized.

Preparation of the Item Pool

The initial step in the development of the item pool was to ask a large number of graduate students in education, most of whom were experienced educators, to list at least five educational objectives which were of significance in descending order of importance. At the same time they were asked to list a technique which might be used to obtain each of these goals. In addition, they were asked to list the fundamental values which they felt should underlie education. Responses to these items covered an extremely wide range of value, objective and technique categories, and numerous additions were made to these by the project staff. These responses were used as the basis for the construction of a pool of approximately 300 items.

The initial item pool was divided almost equally between items reflecting specific behaviors (techniques) and items reflecting attitudes (values and goals). A relatively complete range of educationally related attitudes and behaviors was represented by these items which were arranged as an objective scale. A respondent was asked to react to attitudinal items by indicating his personal preference on a five-point scale ranging from "disagree strongly" to "agree

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strongly." On the behavioral items respondents were asked to rate each item on a five-point scale according to the degree to which they believed the technique should be emphasized. The five-point scale ranged from "much less than now" to "much more than now." Each behavior item thus required a judgment about how much the activity was now emphasized in school, and concurrently a judgment about whether certain specific practices should be increased, decreased or are currently just right in emphasis.

Following assembly of the initial item pool, it was pretested on graduate students in education. Again it should be emphasized that these graduate students were comprised heavily of experienced educators. On the basis of this pretesting, fifty items were discarded because they failed to differentiate among the respondents. Other items were edited when questions about their clarity were raised. This reduced the number of items to 250. One hundred fifty of these items remained in the attitude section of the item pool, and 100 remained in the behavior section of the item pool.

Treatment of Form A of the School Opinion Survey

This initial group of 250 items of the School Opinion Survey was designated Form A. This form appears in Appendix A. It was administered to all teachers, principals, counselors and tenth grade students and their parents in a Northern California community of 26,000. Responses were obtained from over 90% of all groups except parents. Forms were administered to parents through the mail, and a return of 19% was received. The total number of respondents in all groups was 723.

Factor analysis of individual items was utilized because no a priori attempts to structure scales had been made, and because it was desirable to test the hypothesis that certain value-objective-technique clusters would result from the factor analysis. Three separate analyses were carried out in order to derive Form B of the School Opinion Survey. Each factor analysis involved utilization of a principle components solution followed by a varimax rotation of items with eigenvalues over one. The first factor analysis was of the 100 "technique" or "endorsed behavior" items. The second factor analysis was done of 150 "values-objectives" type of items, while the final factor analysis was made of the 150 items drawn from those comprising the strongest factors from each of the two preceding factor analyses. This procedure was followed because there was no factor analysis program available at that time to handle over 150 items. Ten scales of ten items each comprised Form B of the School Opinion Survey.

Outcomes of Factor Analysis Procedures

The hypothesis that final factors would be comprised of combinations of value-objective-technique items was not sustained. Instead, separate clusters of value and technique items were found, while items reflecting the broad goals of education tended to drop out. For example, items like "equal education for all is a basic concept of democracy" tended to drop out. Items related to "hours spent in school," "use of teaching machines," (both technique items) and "truth is relative; it is never absolute" (a value item) tended to remain in the final factors, although they did not load in the

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same factors.

The final 100 items comprising Form B will be found in Appendix B in the form in which they were arranged on the optical scanner sheets for research use. The 33 items on the front side represent the "value-objective" category of items, while the 67 on the reverse side are technique-centered items. Three "value" items, Nos. 17, 21 and 25 on the form, loaded in factor 10, a "technique" factor. These are the only value types of items which loaded into a technique scale. No technique items were found in the value scales.

Form B of the Survey is comprised of ten scales of ten items each. This particular grouping of scales and items is not as artificial as the round numbers of the ten scales of ten items each might lead one to believe. Perusal of Table 1 will reveal item loadings of .30 or higher are attained in the case of all but twelve items on the rotated factor analyses of the final 150 items, and these twelve items are restricted to four of the ten scales (Scales 6, 7, 8 and 9). In all cases, items used in Form B represent items which bear negligible relationships to any other factor.

Factor Structure of Final 100 Items Comprising Form B

Before the final 100 items could be factored it was necessary to have Form B made up a bit prematurely due to the time pressures of the fall school testing program deadlines of the research project. While Form B was being given in the schools, the 100 items remaining from the 250 item tests were refactored. The correlation matrix for this factor analysis will be found in Appendix C. The unrotated and rotated factor matrices resulting from the factor analysis of

TABLE 1

Means, Standard Deviations, Alpha Coefficients and Rotated Factor Loadings of 150 Item Analysis of Form A and Final 100 Item Factor Analysis (Form B)

		S C A L E O N E: Humanism						
Item Number on SOS Form A	Item Number on SOS Form B Side 1	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B			
5-47	1	4.11	0.83	-.59	-.4305			
						The most important task of the school is to help children to understand the world in which they live.		
5-36	4	3.89	0.83	-.57	-.3933	Education is essentially a process in which the teacher helps the student realize his potential self.		
5-37	7	3.58	0.87	-.57	-.3881	The real value of the curriculum depends on the changes it brings about in the behavior and lives of the students.		
5-43	10	3.91	0.85	-.57	-.3531	The best discipline is for the child to be brought to realize the natural consequences of his behavior.		
5-39	13	3.67	0.83	-.56	-.4838	An individual's feelings of adequacy about himself will be directly reflected in the effectiveness of his behavior.		
5-07	16	3.61	0.79	-.50	-.4865	Enjoyment of learning for the sake of learning is an important educational goal.		
5-24	20	3.79	0.75	-.49	-.4426	Teachers should concentrate on developing skills, especially critical thinking.		
4-50	24	3.52	0.93	-.44	-.4121	The teacher's primary job is to help each child achieve his own potential.		
5-32	28	3.78	0.81	-.41	-.4574	A good education is a broad education.		
5-40	31	3.73	0.89	-.39	-.4296	Schools exist primarily for the purpose of helping children realize their own individual potential.		
						Scale Mean	Scale S.D.	Alpha Coefficient
						36.90	5.69	.8681

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S C A L E T W O: Traditionalism

Item Number on SOS Form A	Item Number on SOS Form B Side 1	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
5-45	2	The individual desires and interests of students should in no way affect the construction of the curriculum.	2.42	1.05	-.50	-.3636
4-34	5	The power of judgment is by nature equal in all men.	2.54	1.31	-.50	-.3780
4-37	8	Controversial issues should not be discussed in the classroom.	2.46	1.00	-.48	-.5379
4-03	11	The only objective of the school is intellectual development.	1.80	0.94	-.48	-.4475
4-07	14	It is best to ignore feelings and let the facts speak for themselves.	2.09	1.03	-.44	-.4680
4-43	18	Differences among human beings are usually superficial.	2.59	1.08	-.43	-.4648
3-05	22	The teacher should not have to be concerned about motivation.	2.31	1.06	-.41	-.5054
3-15	26	A child's interest in a subject is unrelated to how well he does in it.	2.84	0.96	-.38	-.3893
4-06	29	A child's feelings have no bearing on his learning.	2.77	1.14	-.37	-.3944
5-25	32	It is best not to make exceptions to the rules for individual cases.	2.48	0.99	-.36	-.4718
					Scale Mean	Alpha Coefficient
					23.93	5.33 .6703

S C A L E T H R E E: Relativism

Item Number on SOS Form A	Item Number on SOS Form B Side 1	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
4-20	3	Facts are not fixed, but can change with the situation. (Moral laws have a divine origin.)	3.14	1.11	-.50	.3700
5-26	6	The objective-scientific method is the best road to truth. (We live in a God-centered universe.)	3.51	1.00	-.48	.3609
3-41	9	Teachers should suggest problems and encourage pupils to find for themselves solutions which will work. (Education need not be religiously oriented to be sound.)	2.72	1.07	+41	.5607
4-41	12	Knowledge and truth are relative, not absolute.	3.03	1.16	+40	.4543
5-31	15	The main purpose of education is to turn out active people who DO things. (There is a Supreme Being.)	3.29	0.95	-.40	.3845
5-18	19	Schools should teach, not just known facts, but ways to discover new facts. (Moral laws are universal and unchanging.)	2.91	1.13	+33	.4757
5-27	23	Facts change as new knowledge is developed. (Moral law can be safely grounded only in religion.)	3.17	1.10	-.32	.4330
4-39	27	There are really NO principles which are universal and unchanging. (All moral laws have grown out of human experience and thus are manmade.)	2.58	1.10	+30	.4904
4-47	30	The most important objective of education is to teach effective problem solving skills. (Moral laws should change as social conditions change.)	3.27	1.00	+30	.3699
3-16	33	Truth is relative; it is never absolute	2.10	1.16	-.30	.5037
			Scale Mean	Scale S.D.	Alpha Coefficient	
			30.16	5.48	.6426	

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S C A L E F O U R: Individual Attention

Item Number on SOS Form A	Item Number on SOS Form B Side 2	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
2-11	1	Individual counseling of pupils.	3.85	0.90	-.66	.6998
2-28	8	Counseling on personal problems.	3.61	1.04	-.60	.5258
2-31	15	Attention to individuality of pupils.	3.75	0.90	-.53	.4666
2-35	22	Interest by parents in school matters.	3.67	1.01	-.53	.4157
2-2	29	Parent-teacher conferences.	3.19	0.97	-.47	.3392
2-29	36	Orientation for parents of new pupils.	3.44	0.89	-.47	.3639
2-41	43	Extent of counselor education.	3.54	0.82	-.45	.5942
2-3	49	Encouragement of creativity.	3.89	0.82	-.43	.4393
1-26	55	School social workers.	3.27	0.99	-.39	.2722
1-43	61	Home visits by teachers.	2.77	1.14	-.35	.2091
			Scale Mean	Scale S.D.	Alpha Coefficient	
			34.52	5.73	.8031	

S C A L E F I V E: Group Activities

Item Number on Form A	Item Number on Form B Side 2	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
1-25	2	Competitive sports.	3.15	0.99	-.70	.5953
2-24	9	Team sports.	2.75	1.01	-.67	.2603
1-6	16	Extra-curricular activities.	2.81	0.96	-.56	.3670
1-38	23	Time allotted to outdoor play.	3.37	0.94	-.41	.2946
1-14	30	P.T.A. activities.	3.22	1.26	-.37	.2516
1-20	37	Grading on the curve.	3.26	1.05	-.36	.7358
1-27	44	Field trips.	4.00	0.96	-.36	.3571
2-46	50	Co-educational physical education.	3.32	0.95	-.35	.3531
1-19	56	Group projects.	3.41	0.95	-.32	.6985
1-7	62	Autonomy of local school boards.	3.32	1.11	-.30	.3599

Scale Mean	Scale S.D.	Alpha Coefficient
32.02	6.13	.8016

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S C A L E S I X: Ancillary Services

Item Number on SOS Form A	Item Number on SOS Form B Side 2	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
1-11	3	Pay for administrators.	3.13	0.83	-.49	-.1930
1-16	10	Clerical help for teachers.	4.14	0.94	-.49	-.2946
1-8	17	Pay for teachers.	3.83	0.92	-.48	-.5692
1-5	24	Help for emotionally disturbed pupils.	3.59	1.02	-.36	-.1932
1-32	31	Educational research.	3.18	0.88	-.34	-.5136
1-33	38	School psychologists.	3.56	0.95	-.31	-.5713
2-5	45	Teaching of abstract ideas.	3.31	1.17	-.28	-.2780
1-3	51	Large school districts.	3.55	0.85	-.27	-.2697
1-10	57	Summer school for acceleration.	3.31	1.08	-.26	-.2846
1-21	63	Attention given to gifted children.	3.23	1.01	-.25	-.2262

Scale Mean	Scale S.D.	Alpha Coefficient
33.36	5.32	.7403

S C A L E S E V E N: Non-Academic

Item Number on SOS Form A	Item Number on SOS Form B Side 2	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
2-47	4	Student government.	3.44	0.94	+ .57	-.2107
2-48	11	Shop and crafts classes.	3.24	0.88	+ .51	-.1577
2-30	18	Student organizations.	3.77	0.85	+ .40	-.1165
2-39	25	Books in library.	4.18	0.87	+ .32	-.0486
2-50	32	Methods courses for teachers.	3.37	0.67	+ .32	-.0309
2-42	39	Efforts to prevent school dropouts.	3.12	0.91	+ .30	-.0430
2-49	46	Consumer education.	3.32	0.83	+ .30	-.3665
2-45	52	Incidental expenses of education paid by the school.	3.56	0.84	+ .29	-.5406
2-43	58	Lighting of classrooms.	3.47	0.77	+ .27	-.4327
2-7	64	Training in art and music.	3.26	0.91	+ .20	-.2610

Scale Mean Scale S.D. Alpha Coefficient

34.18 4.85 .7208

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S C A L E E I G H T: Academic

Item Number on SOS Form A	Item Number on SOS Form B Side 2	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
1-2	5	Hours spent in school.	2.92	0.66	+ .56	.6004
1-12	12	Weeks in the school year.	2.69	0.77	+ .56	.6387
1-45	19	Emphasis on great literature.	3.84	0.96	+ .55	.0261
2-20	26	Longer class periods.	2.92	1.22	- .43	.1789
2-40	33	Free periods.	3.10	1.12	+ .39	.2215
1-40	40	Individual attention for each pupil.	2.99	1.08	+ .38	.2251
2-15	47	Writing of themes.	2.97	0.93	+ .37	.1922
2-16	53	Emphasis on social studies.	2.61	0.98	+ .30	.5150
1-46	59	Group discussions with parents.	3.43	1.00	+ .26	.1922
2-34	65	Foreign language courses.	2.47	0.94	- .56	.4427
			Scale Mean	Scale S.D.	Alpha Coefficient	
			29.65	4.99	.6697	

S C A L E N I N E: Scientific Objectivity

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Item Number on SOS Form A	Item Number on SOS Form B Side 1	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
1-36	6	Use of teaching machines.	3.05	0.89	-.45	.4678
1-37	13	Personality testing.	2.95	0.82	-.45	.1697
1-44	20	Use of IQ tests.	3.08	1.21	-.41	.3183
2-6	27	Use of standardized tests.	3.35	1.12	-.41	.3424
1-31	34	State regulation of education.	3.12	1.11	-.30	.4634
1-18	41	Use of objective tests.	3.47	1.00	-.30	.1769
2-4	48	Child-study training.	3.07	1.06	-.29	.4796
1-39	54	Free medical care for students.	3.38	0.98	-.28	.3232
1-34	60	Team teaching.	3.52	0.86	-.26	.2660
1-50	66	Stress on mathematics.	3.02	0.90	-.25	.4130
			Scale Mean	Scale S.D.	Alpha Coefficient	
			31.36	5.46	.7358	

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S C A L E T E N: Strict Control

Item Number on SOS Form A	Item Number on SOS Form B Sides 1 & 2	Item Description	Item Mean	Item S.D.	Rotated Factor Loadings from 150 Item Analysis of Form A	Rotated Factor Loadings of Final 100 Items Comprising Form B
3-9	17-1	Teachers need the right to administer corporal punishment to maintain discipline.	3.32	1.08	-.64	-.6027
4-21	21-1	It is not the teacher's job to determine guilt or give out punishment.	3.62	1.10	-.63	-.3166
3-42	25-1	Punishment seldom produces the educational results it is intended to produce.	3.83	0.93	-.02	-.3513
2-12	34-1	School should give students more training in self-discipline.	3.35	0.95	-.52	-.4866
2-38	7-2	Strict enforcement of school rules.	3.31	1.04	-.43	-.3588
1-13	14-2	Strictness of discipline.	2.75	1.36	-.43	-.6320
2-19	21-2	Spanking of misbehaving pupils.	3.41	1.08	-.32	-.6072
2-17	28-2	Stringent laws against truancy.	2.95	1.30	-.54	-.5809
1-48	35-2	Teaching of morals in school.	2.53	1.05	+.45	-.4541
2-18	42-2	Closer home-school relationships.	2.95	1.14	+.40	-.5376
					Scale Mean	Alpha Coefficient
					31.85	4.85 .5278

the final 100 items used on Form B are included in Appendices D and E. Although fifteen factors were rotated to make certain that as much variance as possible could be accounted for, only ten factors had eigenvalues greater than one. These ten factors accounted for approximately 80 per cent of the total variance. Table 1 indicates the items selected for inclusion in specific scales prior to the final factor analysis. In this case 28 out of the 100 items had loadings of less than .30, but the bulk of these are to be found on three scales (6, 7 and 8). Since the low loadings of these 28 items was discovered after Form B was being tested in the schools, it may be necessary to either eliminate or rewrite some of them after further analysis of Form B.

As has been previously indicated, clustering of value, objective and behavior types of items in the same factor did not occur. Rather, three of the factors appear to represent broad value positions with respect to education, while the remaining seven factors represent specific techniques for implementing the educational process.

Factor 1 contained items chiefly concerned with individual differences, individual personal development and humanistic objectives, as opposed to strictly intellectual or subject matter oriented objectives. Educational values stressing self realization, personal enjoyment of learning, development of critical thinking and breadth of curriculum tended to fall into this factor. Because of its clearly humanistic emphasis, it has been labeled the Humanism Scale. Table 1 reports the item numbers, item content and individual loadings for each question in this scale.

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Factor 2 stresses intellectual development, attention to "objective facts," avoidance of controversial issues and the irrelevance to education of individual differences in feelings, interests and motivations. These values appear to embrace a traditionalist position with respect to education, and this scale has therefore been labeled the Traditionalism Scale. It is known among project staff as the 3 R's scale. Table 1, Scale Two, reports the items and loadings relevant to this scale.

Factor 3 is comprised of two kinds of items. Five of the items are essentially relativistic and stress the changing nature of "truth," the irrelevance of religion to education and the belief that moral law is of social derivation. The other five items all negatively correlated with the first five, delineate an absolutist point of view, emphasizing the omnipotence of God as the source of truth and moral law. The scale has been labeled the Relativism Scale. Table 1, Scale Three, reports appropriate items and loadings.

Beginning with Factor 4, all remaining factors reflect specific educational techniques. It is important to note that no technique items loaded significantly into any philosophical factor, although it has been indicated three value items did load into one of the technique factors. This suggests that the educational techniques which people endorse bear little relationship to the value system and to the objectives of education which they espouse. Certainly this suggestion is worth further study.

The first of the technique factors, Scale 4, stresses individual attention and closer home-school relationships. Specifically

advocated are individual counseling on personal problems, individual attention to pupils, encouragement of creativity, parent orientation, parent-teacher conferences, home visits by teachers, school social workers and the better training of counselors. Common to all of these is the concept of increased attention by school staff to individual students in the school class room and home environments. Factor 4 is therefore labeled the Individual Attention Scale. Table 1, Scale Four, reports items and loadings relevant to this scale.

Factor 5 contains items emphasizing the importance of competitive and team sports, coeducational physical education, outdoor play, field trips, extracurricular activities, group projects, grading on a curve, PTA activities and local school board autonomy. The small group emphasis appears to be the central factor in this cluster of items, and Factor 5 was therefore labeled the Group Activities Scale. Table 1, Scale Five, reports item content and loadings.

Factor 6 is comprised of items advocating larger school districts and those aspects of staff professionalization usually associated with them: higher salaries for teachers and administrators, clerical help for teachers, educational research, school psychologists, and program of individual attention to assist the emotionally disturbed and gifted pupil. It was designated the Ancillary Services Scale. Table 1, Scale Six, reflects the item content and loadings of this scale.

Factor 7 was found to be comprised of items stressing essentially non-academic pursuits and extracurricular activities. This includes emphasis on student government, shop and craft classes, art and music

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classes, consumer education, and other techniques aimed at preventing dropouts and retaining the interests of poorly motivated or non-academically oriented students, such as better lighting, better library facilities and having the incidental expenses of education assumed by the school. It was called the Non-Academic Scale. Table 1, Scale Seven, reports the item content and loadings.

The items in Factor 8 indicate endorsement of spending increased time in studying, more hours in the school day, more weeks in the school year, longer class periods and less free time. Also stressed was the importance of "solid" college preparatory type subjects, such as foreign language, social studies, writing of themes and emphasis on great literature. It was labeled the Academic Scale, but is more familiarly known as the "grind" scale. Table 1, Scale Eight, reports items and loadings relevant to this factor.

Factor 9 is comprised of items concerned with relatively impersonal teaching methods and the utilization of objective information in the making of educational decisions. These include the use of teaching machines, use of personality, I.Q., standardized and objective tests, stress on mathematics and team teaching. Also included are items endorsing state regulation of education, free medical care for students and child study training. Since the predominant element in this factor resides in the endorsement of impersonal, scientific, educational methods, it was designated the Scientific Objectivity Scale. Table 1, Scale Nine, reports items and loadings appropriate to this scale.

The tenth factor emphasizes strict discipline and moral training.

Endorsed behaviors include strict enforcement of school rules, strictness of discipline, spanking of misbehaving pupils, stringent laws against truancy, the teaching of morals and self discipline in the school. The belief is expressed that punishment usually produces the desired results. This is the only factor in which there was any crossover of behavioral items and attitudinal items. Three attitudinal items loaded strongly into this scale. There was little difficulty in naming this factor the Strict Control Scale. Table 1, Scale Ten, reports the item content and loadings.

Reliability of the Scales

The reliability of the scales of Form B was determined in two different ways. The first was the determination of coefficient Alpha for each of the scales. The second was the computation of test-retest reliabilities for both the scales and the items. Coefficient Alpha provides an estimate of the lower bound of reliability (internal consistency) of a test and involves assumptions closely related to those "--originally adopted by Kuder and Richardson in the derivation of their Formula 20." (Novick and Lewis, May, 1966). These results are reported for each scale in Table 1. Coefficients range from .87 on Scale One to .53 on Scale Ten. Only two scales had Alpha coefficients below .65, and three scales were .80 or higher. The internal consistency of these scales is generally high, offering additional evidence in support of the strength of the scales.

Test-Retest Reliability of the Scales

The School Opinion Survey was administered to the teachers and

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tenth grade students in three high schools. The interval between pre and post-test for all groups was precisely two weeks. Specific directions utilized in carrying out the reliability study will be found in Appendix F.

Test-retest reliability of the ten scales was computed for all teachers in the three schools as a single group. The total number of teachers was 102. Scale reliabilities were computed for the students in each of the three schools separately. The coefficient of stability for each scale for each of the four groups is reported in Table 2.

These results indicate somewhat higher scale stability among teachers than among any of the student groups, although there are two scales in which one or more of the reliabilities obtained on student populations exceeded those obtained on the teacher group. Generally speaking, the difference between teachers and students is small, and the differences among the three student groups appear to be negligible.

The generally low reliabilities among students on Scales 1, 3 and 4 suggest the need for reexamination of the vocabulary level of these scales. All scales, however, appear to be stable enough for use in the description of learning environments or in research.

Test-Retest Reliability of the Items

The test-retest reliability of items is reported for all teachers and all students as two separate groups in Table 3. In addition, item reliabilities for students were computed for each school separately. These results can be found in Appendix C.

TABLE 2
School Opinion Test-Retest Reliability by Scale

Scale	Coefficient of Stability for Teachers (N=102)	Coefficient of Stability for School #1 (N=122)	Coefficient of Stability for School #2 (N=179)	Coefficient of Stability for School #3 (N=250)
1	.7689	.5544	.4178	.6277
2	.7798	.7583	.7140	.7215
3	.7774	.4450	.3142	.4449
4	.6281	.5646	.5845	.4154
5	.7715	.6537	.7529	.7429
6	.8383	.7030	.7642	.6822
7	.7631	.6869	.6918	.6406
8	.7348	.7399	.7796	.6769
9	.6735	.6205	.7246	.6937
10	.8436	.7351	.7896	.7333

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TABLE 3

Item Reliability (Coefficient of Stability)
for School Opinion Survey - Side One

Teacher Sample = 102

Student Sample = 551

Total Sample = 653

Item #	Coeff. for Teachers	Coeff. for Students	Coeff. for Total
1.	.6146	.4597	.4880
2.	.4593	.5281	.5271
3.	.5825	.3670	.4042
4.	.6242	.3637	.4047
5.	.4635	.5330	.5631
6.	.5920	.4266	.4557
7.	.5439	.2820	.3290
8.	.4981	.4005	.4089
9.	.1802	.4171	.3907
10.	.5338	.3204	.3487
11.	.5363	.3680	.3980
12.	.5264	.2318	.2762
13.	.6345	.2864	.3347
14.	.3765	.4351	.4290
15.	.6190	.4557	.4911
16.	.5931	.4677	.4932
17.	.7107	.5763	.5959
18.	.5001	.3939	.4380
19.	.3352	.3590	.3560
20.	.3312	.4160	.4201
21.	.5324	.3878	.4340
22.	.5667	.3871	.4292
23.	.6924	.3622	.4266
24.	.5532	.3099	.3408
25.	.5159	.4075	.4363
26.	.1457	.4146	.3879
27.	.5748	.2488	.3017
28.	.3604	.5113	.4965
29.	.4718	.2863	.3098
30.	.3556	.3529	.3513
31.	.4322	.3053	.3242
32.	.5607	.4290	.4472
33.	.6040	.3888	.4240
34.	.5228	.4124	.4310

Structure of the School 43
Opinion Survey

Item Reliability (Coefficient of Stability)
for School Opinion Survey - Side Two

Item #	Coeff. for Teachers	Coeff. for Students	Coeff. for Total
1.	.6539	.4912	.5411
2.	.8665	.6544	.7292
3.	.7391	.5249	.5561
4.	.6173	.5571	.5767
5.	.3911	.5897	.5768
6.	.7773	.5790	.5943
7.	.6476	.6425	.6697
8.	.6723	.5292	.5611
9.	.5653	.6080	.6513
10.	.6649	.4334	.4886
11.	.6419	.5885	.6008
12.	.6587	.5575	.5926
13.	.6784	.5854	.6025
14.	.7352	.6392	.6761
15.	.6299	.4891	.5068
16.	.5873	.4231	.5034
17.	.5723	.6098	.6377
18.	.5557	.5044	.5563
19.	.6368	.6840	.6926
20.	.4511	.5657	.5579
21.	.2701	.5720	.5729
22.	.6467	.5620	.5729
23.	.3457	.6087	.6039
24.	.5449	.4969	.5077
25.	.7226	.4537	.4834
26.	.6425	.5489	.5658
27.	.3941	.5339	.5151
28.	.5802	.5127	.5292
29.	.7456	.5847	.6037
30.	.6093	.5493	.5829
31.	.5779	.4238	.4514
32.	.8133	.4313	.5692
33.	.5414	.5601	.5579

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The School Opinion Survey

Item Reliability (Coefficient of Stability)
for School Opinion Survey - Side Two (contd.)

Item #	Coeff. for Teachers	Coeff. for Students	Coeff. for Total
34.	.6754	.3660	.4369
35.	.7540	.5691	.5992
36.	.5687	.3477	.3799
37.	.6369	.6970	.7021
38.	.6884	.5189	.5561
39.	.6399	.5512	.6096
40.	.4815	.5895	.5749
41.	.7079	.4393	.4750
42.	.5035	.5436	.5524
43.	.5912	.3152	.3638
44.	.6617	.5830	.6208
45.	.5826	.6024	.6047
46.	.5900	.3278	.3775
47.	.6355	.5878	.6306
48.	.5121	.3781	.3932
49.	.5427	.5915	.5905
50.	.4851	.6074	.6023
51.	.7819	.5100	.5556
52.	.3933	.2259	.2604
53.	.5726	.5443	.5458
54.	.3230	.4118	.4233
55.	.6860	.5502	.5805
56.	.5159	.4380	.4868
57.	.5744	.5676	.5687
58.	.6055	.5104	.5214
59.	.5636	.5525	.5561
60.	.7562	.4316	.4822
61.	.5936	.5998	.6101
62.	.6311	.2246	.3282
63.	.6273	.6331	.6447
64.	.4576	.5933	.5852
65.	.7421	.6471	.6575
66.	.7410	.6829	.6860

As was true in the case of scale reliability, the teacher sample has generally higher coefficients, item by item, than the student population. This is not uniform, however, since in 27 out of 100 cases the student coefficient exceeded that of the teachers. Item reliabilities are satisfactory, as might be inferred from the full scale reliabilities.

In general, it appears reasonable to state that both the internal consistency and the stability of the scales are satisfactorily high, at least for further research and descriptive use of the instruments. Item stability is likewise satisfactory, with a few items needing some modification. Certain differences in scale stability between students and teachers suggest that either vocabulary level or the firmness with which beliefs are held (maturity?) are possible contributing factors to somewhat lower reliabilities among students.

Intergroup Differences on the Scales of Form B of the School Opinion Survey

One of the initially perceived uses of the SOS was the determination of fundamental differences among significant educational role groups. The material presented here reflects findings based on the data originally collected in order to derive the factors which comprise the instrument. Each of the five educational role groups, students, parents, teachers, administrators and counselors, is compared with every other group on each of the scales in Table 4 and Figure 2.

By far, the greatest differences involved comparisons of students with each of the four adult groups. Administrators and students are the polar opposites on five of the ten scales. Administrators are highest on the Humanism, Ancillary Services and Academic Scales, while

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The School Opinion Survey

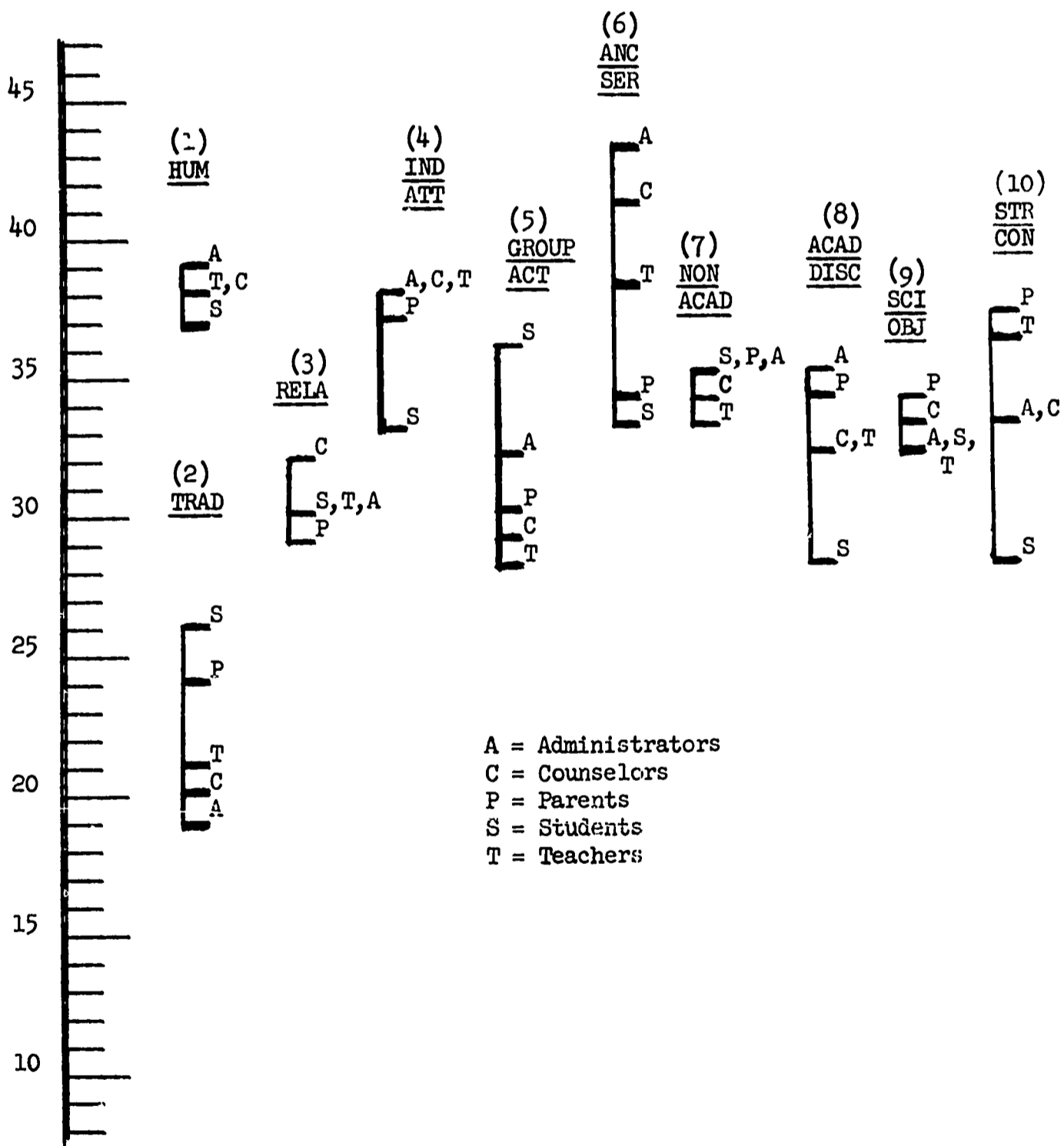
TABLE 4

School Opinion Survey Mean Scores by Educational Role Groups

Scale		Students	Parents	Teachers	Counselors	Administrators
1 Humanism	\bar{X}	36.60	38.57	38.15	37.90	38.66
	S.D.	3.66	3.86	3.82	3.79	3.87
2 Traditionalism	\bar{X}	25.84	24.11	20.84	20.15	18.66
	S.D.	2.58	2.41	2.08	2.02	1.87
3 Relativism	\bar{X}	29.97	29.18	29.87	31.50	29.84
	S.D.	3.22	3.49	3.29	3.74	3.35
4 Individual Attention	\bar{X}	32.90	37.39	37.72	38.06	38.33
	S.D.	3.29	3.74	3.77	3.81	3.83
5 Group Activities	\bar{X}	35.64	30.30	27.67	28.98	31.83
	S.D.	3.56	3.03	2.77	2.90	3.18
6 Ancillary Services	\bar{X}	33.46	34.21	38.47	40.78	42.65
	S.D.	3.35	3.42	3.85	4.08	4.27
7 Non-Academic	\bar{X}	35.04	35.22	33.38	33.95	34.65
	S.D.	3.51	3.52	3.34	3.40	3.47
8 Academic	\bar{X}	28.12	33.65	31.59	31.90	34.83
	S.D.	4.90	4.40	3.80	2.90	2.21
9 Scientific Objectivity	\bar{X}	31.56	34.12	31.59	32.65	31.51
	S.D.	3.16	3.41	3.16	3.27	3.15
10 Strict Control	\bar{X}	28.28	37.37	35.76	32.69	33.10
	S.D.	5.90	6.20	4.50	5.23	2.74

FIGURE 2

Relative Positions of Criterion Groups on Scales of the School Opinion Survey



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The School Opinion Survey

students are lowest. Students are highest on the Traditionalism Scale, and administrators are lowest. Administrators, along with counselors and teachers, are highest on Individual Attention, and students are lowest. Students and parents show the greatest disparity on the Strict Control Scale, with parents being the highest scoring group and students the lowest scoring group. Students and teachers show the greatest disparity on the Group Activities Scale, with students scoring highest and teachers lowest on this scale. Teachers and students also show considerable disparity on the Strict Control, Academic, Ancillary Services, Individual Attention, Traditionalism and Humanism Scales. Counselors and students show considerable disparity, with students considerably higher on Traditionalism and Group Activities and lower on Individual Attention, Ancillary Services and Strict Control Scales.

Administrators show the greatest disparity with the other groups on the Ancillary Services and Academic Scales. Counselors and administrators are quite similar in their scale scores except for the two previously mentioned scales, Ancillary Services and Academic, although even on these scales counselors are as close to the position of administrators on the scale as any of the other groups.

The scales which seem to do the best job of discriminating between the groups are the Traditionalism, Individual Attention, Group Activities, Ancillary Services, Academic and Strict Control. Those scales showing much more homogeneity in the mean score differences are Humanism, Relativism, Non-Academic and Scientific Objectivity.

The most striking feature of these findings lies in the consistent

differences found between all adult groups and the student sample. On seven of the ten scales the students were either higher than all of the adult groups or lower than all of the adult groups. Only on the Relativism Scale did the students fall between any of the adult groups, and in this case fell between counselors and parents but had the same relative score as teachers and administrators. This sample of students quite clearly endorses, more strongly than the adult groups, an educational value system which ignores individual differences and emphasizes an educational regimen stressing intellectual development and attention to "objective facts," while at the same time they fail to endorse the educational techniques which would appear to lead to these ends.

Next to differences between adult groups and children generally, the greatest differences were discovered between parents and the three professional education groups, administrators, counselors and teachers. Generally speaking, the parent group endorsed more strongly an educational philosophy which tended to disregard individual differences and they, like their children, were inconsistent in endorsing educational techniques consistent with this philosophy. One is led to speculate: (1) that children say what their parents say, and (2) that neither group makes a very clear connection between an educational "philosophy" and the implementation of that philosophy.

Students generally endorse what might be considered "tougher" educational philosophies to a greater extent than the other groups, but at the same time endorse techniques which could not achieve the purposes of their stated philosophies. Differences between parents

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The School Opinion Survey

and counselors are of such a nature as to suggest that parents might view counselors as being "soft" in their approach to education. Differences between parents and the educational groups indicate a greater endorsement, on the part of the parents, of philosophies which do not provide for individual differences, and of techniques inconsistent with this philosophy. Agreement among professional groups is marked.

The technique utilized in this study appears to have real possibilities for both intergroup and interdistrict comparison. These findings may signify the existence of disagreement between the home and the teaching staff with respect to both educational values and the implementation of these values. The inconsistency found between student values and implementation of their endorsed values suggests that they have not matured to the extent where they are able to bring their behavior into phase with their stated values.

In summary, it appears reasonable to say that in this sample students show the most gross differences from all other groups on the scales of the School Opinion Survey. Of the adult groups, the parents show the greatest deviation from the other groups, with the professional educator groups being generally quite similar to each other. Because comparisons with other school districts are not yet available, it is impossible to say whether the differences found in the present sample would remain consistent. The discovery of different kinds of patterns in different school districts would have definite implications for such factors as morale, effectiveness of the educational program, and student attitudes toward learning.

Chapter 3

References

Novick, M. R., & Lewis, C. Coefficient alpha and the reliability of composite measurements. Technical Report No. 1, Office of Naval Research Contract 3866 (00), Princeton, New Jersey, Educational Testing Service, April, 1966.

Chapter 4

A Summary

The initial impetus for the development of the School Opinion Survey which has been described came from the need to evaluate change as the result of utilizing guidance workers as agents of environmental modification within the school system. In the absence of any existing instrument which specified the parameters of the learning environment, it became necessary to develop one. In this process it appears that an instrument with wider general use has been developed and that some of the attitudes and behaviors which structure the learning environment have been delineated.

The concept of the "learning environment" is not a new one. Others have utilized this concept in their own experimentation. However, previous concepts of the learning environment have been limited primarily to what takes place within the school building itself, and in most cases have been limited to the actual class room situation. In addition, there has been some tendency to regard the learning environment as being structured primarily by professional educators. These concepts have failed to take into account the fact that the peer culture can profoundly modify much of what the educator is attempting to accomplish and further, have ignored the fact that children come from homes where there may be parental attitudes towards both the process and aims of education which are in sharp conflict with those of professional educators. It thus appeared highly relevant, both from the point of view of the specific research project being undertaken and from a more general point of view, to attempt to

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The School Opinion Survey

develop an instrument which would reflect these defined parameters.

Thus, one of the original purposes in developing this instrument was to delineate significant parameters of the learning environment, with learning environment being broadly defined to include not only the school and what takes place in it, but also those attitudes held by the significant persons outside of the school which potentially influenced what happened in the school. This goal appears to have been at least partially accomplished. No pretense is made that all significant parameters have been defined, nor that additional ones might not be discovered. It does appear, however, that certain constructs useful in further study of the learning environment have been demonstrated.

Relevance of Initial Assumptions

One initial assumption was that factors resulting from analysis of data collected by means of the School Opinion Survey would reflect certain identifiable "philosophies" of education. This assumption appears to have been borne out, and three different attitudinal points of view with respect to the goals and values of education have been delineated. In the present setting they have been labeled the humanist, traditionalist and relativist positions. These three factors appear to be essentially orthogonal.

On the other hand, whether the assumptions implicit in the vertical axis of Figure 1 relevant to the relationship among values, objectives and techniques has been demonstrated is a moot question. The fact that this remains an open question is due partially to the fact that another assumption, namely, that factors would be comprised of com-

2

binations of value, objective and technique items, was not borne out empirically. The meaning of this finding is difficult to assess, but the most parsimonious explanation would appear to be that what individuals see as the goals of education and the techniques which they endorse are essentially unrelated. It also appears appropriate in the light of present findings to take the position that attitudes do not, even in the general population, always result in behaviors which will fulfill the outcomes anticipated by the attitudes.

It is apparent from the present data that serious differences, both in philosophy and endorsed educational techniques do exist among the significant educational role groups. The greatest disparity exists between children and the adult groups, but it should not be overlooked that serious differences also exist between teachers and parents as well. Existing unpublished data further suggest that significant differences are to be found between elementary and secondary teachers, although differences among different schools on the same level have not yet been demonstrated.

Uses of the Inventory

The initial purpose in constructing the survey was not only to delineate the dimensions of a specific learning environment, but also to utilize the instrument in determining the extent to which these dimensions could be altered through the intervention of a professional guidance specialist. Current evidence suggests that the ten scales of the survey are exceedingly stable. This would imply that changes in response to the scales would be difficult to bring about. Since the scale may not be sensitive to minor changes, it may have only

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The School Opinion Survey

limited usefulness in change studies. This is advanced as a hypothesis and not a conclusion, however.

The scale does seem to have real promise as an instrument to be utilized in studying differences among the various educational role groups and for the study of differences existing within these groups. It may also have some utility for studying differences between schools or school districts, but this question must await further testing.

It has been demonstrated that what appear to be characteristic differences exist between educational and lay groups, but the magnitude of such discrepancies in different settings remains undiscovered. Such a study in communities where there is both strong and weak support of education might be revealing.

The Future

Further experimentation is necessary in order to determine whether additional scales should be added to the existing survey. In addition, further investigation will be made of educational values, objectives and techniques, possibly through asking people to specify which of the three general attitude positions they can endorse and then asking them to delineate the means they would approve for achieving these goals. Experimentation with the placement of the most highly correlated attitude and behavior scales in the same scale also might prove illuminating.

Further utilization of the survey as a measure of administrative effectiveness, teacher morale and public support of education will be made. In addition, the achievement patterns of children in different schools and at different levels where different general kinds

of responses are received from the significant educational role groups will also be carried out. Generally speaking, this instrument appears to have a positive potential for understanding further the social systems which are operative in the schools.

APPENDICES

A TO G

APPENDIX A
SCHOOL OPINION SURVEY

UCLA

Instructions

1. Included with these materials is a special IBM electrographic pencil. Please use only THIS PENCIL in blackening the spaces on the Answer Cards. It is necessary to completely blacken a space with this pencil (while not going outside the space) or the computer may misread your answer.
2. NOW PLEASE TAKE ANSWER CARD 1 (white). Please indicate by blackening the appropriate spaces on the Answer Card what CHANGES, if any, you believe should be made to improve public education. Take number 1 (homework) for example: If you believe there should be much less homework than now, you should blacken A next to 1 like this / ; if you believe there should be a little less than now, you should blacken B; if just the same as now, blacken C; if a little more than now, blacken D, and if much more than now, E. To help you remember the five options for each item, they will be repeated at the top of each page. You may now begin.

PLEASE TRY TO ANSWER ALL QUESTIONS

	(A)	(B)	(C)	(D)	(E)
	Much Less Than Now	A Little Less Than Now	Just The Same As Now	A Little More Than Now	Much More Than Now
1 Homework (in high school)					
2 Hours spent in school					
3 Large school districts					
4 Emphasis on "solid" subjects					
5 Help for emotionally disturbed pupils					
6 Extra-curricular activities					
7 Autonomy of local school boards					
8 Pay for teachers					
9 Group discussion					
10 Summer school for acceleration					
11 Pay for administrators					
12 Weeks in school year					
13 Strictness of discipline					
14 P.T.A. activities					
15 Work credit towards graduation					
16 Clerical help for teachers					
17 Emphasis on tool subjects					
18 Use of objective tests					
19 Group projects					
20 Grading on the curve					
21 Attention given to gifted children					
22 Rote memorization and drill					
23 Variety of subjects offered					
24 Laboratory experimentation					
25 Competitive sports					
				26 School social workers	
				27 Field trips	
				28 Help for mentally retarded children	
				29 Years of training teachers	
				30 Use of audio-visual (TV, films, tapes)	
				31. State regulation of education	
				32 Educational research	
				33 School psychologists	
				34 "Team teaching"	
				35 Federal aid to education	
				36 Use of teaching machines	
				37 Personality testing	
				38 Time allotted to outdoor play	
				39 Free medical care for students	
				40 Individual attention for each pupil	
				41 Lecture	
				42 Practical and vocational instruction	
				43 Home visits by teachers	
				44 Use of IQ tests	
				45 Emphasis on great literature	
				46 Group discussions with parents	
				47 Vocational counseling	
				48 Teaching of morals in school	
				49 Freedom of self-expression	
				50 Stress on mathematics	

GO TO RIGHT HAND COLUMN

END OF ANSWER CARD 1
Please turn page

(A) Disagree Strongly	(B) Disagree	(C) Indifferent	(D) Agree	(E) Agree Strongly
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(A)	(B)	(C)	(D)	(E)
Disagree Strongly	Disagree	Indifferent	Agree	Agree Strongly

- 41 Education need not be religiously oriented to be sound.
 42 Punishment seldom produces the educational results it is intended to produce.
 43 Teaching methods are as much a part of the curriculum as is subject matter.
 44 Freedom and equality are incompatible.
 45 It is never right for the state to force consolidation upon a community.
- 46 Art is primarily a means of self-expression.
 47 Not all children are educatable.
 48 Children should be taught to respect property.
 49 The school should take its direction from both human nature and society.
 50 All reality is found in experience.

END OF ANSWER CARD 3

Now please take ANSWER CARD 4 (red) and begin with item 1.

- 1 The moral act is always the intelligent act.
 2 The external world exists independently of man's perception of it.
 3 The only objective of the school is intellectual development.
 4 To maintain academic standards it is necessary to fail incompetent students.
 5 A teacher should be permitted to freely select materials used in his class.
- 6 A child's feelings have no bearing on his learning.
 7 It is best to ignore feelings and let the facts speak for themselves.
 8 There is no such thing as an "over-achiever."
 9 When a person interacts with his environment, both are changed.
 10 Students should all be graded on a single standard.
- 11 Many experiences are valuable for their own sake.
 12 Letter grade report cards should be replaced by informal letters or conferences.
 13 Morality can best be taught by appealing to enlightened self-interest.
 14 When cheating occurs it is because too much pressure has been placed on a child.
 15 All men are fundamentally alike and equal.
- 16 The proportion of electives in the high school curriculum should be reduced.
 17 By "curriculum" is meant subject matter.
 18 A person both changes and maintains his self identity.
 19 Students should be promoted or failed on the basis of objective examinations.
 20 Moral laws have a divine origin.
- 21 It is not the teacher's job to determine guilt or mete out punishment.
 22 The child is father to the man.
 23 It is the teacher training institutions that most influence public education.
 24 Scientific method can be applied to all social and personal problems.
 25 The teaching of morality is one of the main tasks of the school.
- 26 Children should spend most of their time with those of similar age or intelligence.
 27 The ends or objectives of education are not subject matter.
 28 Reality exists outside of the person.
 29 Ability grouping should not be practiced.
 30 Personal change is not an important part of the educative process.

(A) Disagree Strongly	(B) Disagree	(C) Indifferent	(D) Agree	(E) Agree Strongly
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- 31 Essay examinations are the best measure of achievement.
32 Since man cannot change the world he should seek to understand and adjust to it.
33 Within 50 years nearly all American children will complete college.
34 The power of judgment is by nature equal in all men.
35 The best examinations are objective in form.
- 36 Man's rights are absolute, universal, and unchanging.
37 Controversial issues should not be discussed in the classroom.
38 A child should be taught to respect the rights of others.
39 All moral laws have grown out of human experience and are thus man-made.
40 Religion should not be taught in the public schools.
- 41 Knowledge and truth are relative, not absolute.
42 It is the school's job to teach children values.
43 Differences among human beings are usually superficial.
44 The teacher's primary concern should be to promote academic learning.
45 Reality is composed primarily of ideas or mind.
- 46 Learning does not have to increase earning power in order to be practical.
47 Moral laws should change as social conditions change.
48 Self-realization is the aim of life.
49 Most moral choices are choices between competing goods.
50 The teacher's primary job is to help each child achieve his own potential.

END OF ANSWER CARD 4

Now please take ANSWER CARD 5 (brown) and begin with item 1.

- 1 Children need to be with those who differ from them in ability.
2 All reality is in some sense personal.
3 Most social institutions and moral laws have a human origin.
4 The teacher's main function is the transmittal of subject matter.
5 A single standard for all children can be most damaging.
- 6 Objects are unaffected by man's perception of them.
7 Enjoyment of learning for the sake of learning is an important educational goal.
8 The primary aim of education is to promote personal growth.
9 Religion can be separated from a particular doctrine of God.
10 There is no such thing as an absolute fact.
- 11 There is no way of knowing a person's actual potential.
12 Children should learn to compete in school.
13 Examinations should be carefully proctored so as to prevent cheating.
14 If a child is performing below standards, he should be frankly told this.
15 There is a need for more school activities tailored to the better students.
- 16 Man doesn't make moral laws; he simply discovers them.
17 Each student should be graded in terms of his own ability.
18 Moral laws are universal and unchanging.
19 The cultural tradition should be the heart of the school curriculum.
20 The teacher is constantly redirecting attitudes which are already in existence.

(6)

- | (A)
Disagree
Strongly | (B)
Disagree | (C)
Indifferent | (D)
Agree | (E)
Agree
Strongly |
|-----------------------------|-----------------|--------------------|--------------|--------------------------|
|-----------------------------|-----------------|--------------------|--------------|--------------------------|
- 21 It is rarely beneficial to a child to repeat a grade.
22 All men share a common human nature.
23 The primary task of the school is to pass on the cultural heritage.
24 Teachers should concentrate on developing skills, especially critical thinking.
25 It is best not to make exceptions to the rules for individual cases.
- 26 We live in a God-centered universe.
27 Moral law can be safely grounded only in religion.
28 That government is best which governs least.
29 The aims of education should stem from society rather than the child's nature.
30 Freedom is the absence of restraints and restrictions.
- 31 There is a Supreme Being.
32 A good education is a broad education.
33 Participation in student government should be only for those who get good grades.
34 Man may be said to "know" when he can accurately predict the consequences of acting.
35 Personal growth should be emphasized in early grades, achievement in later ones.
- 36 Education is essentially a process in which the teacher helps the student realize his potential self.
37 The real value of the curriculum depends on the changes it brings about in the behavior and lives of the students.
38 The child learns best when he can relate that which is being taught to his own interests, goals, and purposes.
39 An individual's feelings of adequacy about himself will be directly reflected in the effectiveness of his behavior.
40 Schools exist primarily for the purpose of helping children perceive and realize their own individual potential.
- 41 Because of their professional preparation and experience, teachers are the best qualified to decide what should be taught in the schools.
42 Children's personalities are shaped by their environment and they are, thus, not responsible for them.
43 The best discipline is for a child to be brought to realize the natural consequences of his behavior.
44 A prime function of the school is to help children learn to participate in reaching decisions acceptable to all members of the group.
45 The individual desires and interests of students should in no way affect the construction of the curriculum.
- 46 Schools should concentrate on developing basic skills, knowledge, and critical thinking.
47 The most important task of the school is to help children understand the world in which they live.
48 It is more important for a child to break the habit of tattling than to acquire more information about history.
49 Specialization may actually reduce a person's ability to make sound value judgments where his specialty is concerned.
50 The teacher needs to know a great deal about those whom he would teach.

END OF ANSWER CARD 5

Now please place all five cards and the special pencil in the envelope provided and seal it. Thank you very much for sharing your ideas.

APPENDIX B

SCHOOL OPINION SURVEY

GRP 7641

John K. Tuel and Merville C. Shaw

U.C.L.A. Guidance Project

The purpose of this survey is to determine the opinions of individuals with respect to a variety of factors that relate to how public schools operate. You may feel that you do not have adequate knowledge of all of the questions asked, but please answer all questions on the basis of the opinions you have formed at this time.

Mark your answers with a soft black pencil. If you change your mind about an answer after you have already marked it be sure to erase your first answer completely.

In this section read each item then blacken one of the answer spaces to that question. Blacken A if you Disagree strongly, B if you Disagree (mildly), C if you are Indifferent, D if you Agree (mildly) or E if you Agree strongly.

NAME _____

Sex → Male Female

Disagree strongly
Disagree
Indifferent
Agree
Agree strongly

Section One

- | | | | | | |
|---|---|---|---|---|---|
| 1. The most important task of the school is to help children to understand the world in which they live. | A | B | C | D | E |
| 2. The individual desires and interests of students should in no way affect the construction of the curriculum. | A | B | C | D | E |
| 3. Moral laws have a divine origin. | A | B | C | D | E |
| 4. Education is essentially a process in which the teacher helps the student realize his potential self. | A | B | C | D | E |
| 5. The power of judgment is by nature equal in all men. | A | B | C | D | E |
| 6. We live in a God-centered universe. | A | B | C | D | E |
| 7. The real value of the curriculum depends on the changes it brings about in the behavior and lives of the students. | A | B | C | D | E |
| 8. Controversial issues should not be discussed in the classroom. | A | B | C | D | E |
| 9. Education need not be religiously oriented to be sound. | A | B | C | D | E |
| 10. The best discipline is for a child to be brought to realize the natural consequences of his behavior. | A | B | C | D | E |
| 11. The only objective of the school is intellectual development. | A | B | C | D | E |
| 12. Knowledge and truth are relative not absolute. | A | B | C | D | E |
| 13. An individual's feelings of adequacy about himself will be directly reflected in the effectiveness of his behavior. | A | B | C | D | E |
| 14. It is best to ignore feelings and let the facts speak for themselves. | A | B | C | D | E |
| 15. There is a Supreme Being. | A | B | C | D | E |
| 16. Enjoyment of learning for the sake of learning is an important educational goal. | A | B | C | D | E |
| 17. Teachers need the right to administer corporal punishment to maintain discipline. | A | B | C | D | E |
| 18. Differences among human beings are usually superficial. | A | B | C | D | E |
| 19. Truth is relative; it is never absolute. | A | B | C | D | E |
| 20. Teachers should concentrate on developing skills, especially critical thinking. | A | B | C | D | E |
| 21. It is not the teacher's job to determine guilt or give out punishment. | A | B | C | D | E |
| 22. The teacher should not have to be concerned about motivation. | A | B | C | D | E |
| 23. Moral law can be safely grounded only in religion. | A | B | C | D | E |
| 24. The teacher's primary job is to help each child achieve his own potential. | A | B | C | D | E |
| 25. Punishment seldom produces the educational results it is intended to produce. | A | B | C | D | E |
| 26. A child's interest in a subject is unrelated to how well he does in it. | A | B | C | D | E |
| 27. All moral laws have grown out of human experience and are thus man-made. | A | B | C | D | E |
| 28. A good education is a broad education. | A | B | C | D | E |
| 29. A child's feelings have no bearing on his learning. | A | B | C | D | E |
| 30. Moral laws should change as social conditions change. | A | B | C | D | E |
| 31. Schools exist primarily for the purpose of helping children realize their own individual potential. | A | B | C | D | E |
| 32. It is best not to make exceptions to the rules for individual cases. | A | B | C | D | E |
| 33. Moral laws are universal and unchanging. | A | B | C | D | E |

Section Two

In this section read each item and indicate by blackening one of the answer spaces what CHANGES, if any, you believe should be made to improve public education. Take number 1 (individual counseling of pupils) for example. If you believe there should be *Much Less* than now you should blacken A; if you believe there should be a *Little Less* than now, you should blacken B; if you believe it should be *Just the Same* as now, blacken C; if a *Little More* than now, blacken D; and if *Much More* than now, blacken E.

	Much Less	Less	Same	More	Much More		Much Less	Less	Same	More	Much More
1. Individual counseling of pupils.	A	B	C	D	E	34. State regulation of education.	A	B	C	D	E
2. Competitive sports.	A	B	C	D	E	35. Teaching of morals in school.	A	B	C	D	E
3. Pay for administrators.	A	B	C	D	E	36. Orientation for parents of new pupils.	A	B	C	D	E
4. Student government.	A	B	C	D	E	37. Grading on the curve.	A	B	C	D	E
5. Hours spent in school.	A	B	C	D	E	38. School psychologists.	A	B	C	D	E
6. Use of teaching machines.	A	B	C	D	E	39. Efforts to prevent school drop-outs.	A	B	C	D	E
7. Strict enforcement of school rules.	A	B	C	D	E	40. Individual attention for each pupil.	A	B	C	D	E
8. Counseling on personal problems.	A	B	C	D	E	41. Use of objective tests.	A	B	C	D	E
9. Team sports.	A	B	C	D	E	42. Closer home-school relationships.	A	B	C	D	E
10. Clerical help for teachers.	A	B	C	D	E	43. Extent of counselor education.	A	B	C	D	E
11. Shop and crafts classes.	A	B	C	D	E	44. Field trips.	A	B	C	D	E
12. Weeks in the school year.	A	B	C	D	E	45. Teaching of abstract ideas.	A	B	C	D	E
13. Personality testing.	A	B	C	D	E	46. Consumer education.	A	B	C	D	E
14. Strictness of discipline.	A	B	C	D	E	47. Writing of themes.	A	B	C	D	E
15. Attention to individuality of pupils.	A	B	C	D	E	48. Child-study training.	A	B	C	D	E
16. Extra-curricular activities.	A	B	C	D	E	49. Training in self-discipline.	A	B	C	D	E
17. Pay for teachers.	A	B	C	D	E	50. Encouragement of creativity.	A	B	C	D	E
18. Student organizations.	A	B	C	D	E	51. Co-educational physical education.	A	B	C	D	E
19. Emphasis on great literature.	A	B	C	D	E	52. Large school districts.	A	B	C	D	E
20. Use of IQ tests.	A	B	C	D	E	53. Incidental expenses of education paid by the school.	A	B	C	D	E
21. Spanking of misbehaving pupils.	A	B	C	D	E	54. Emphasis on social studies.	A	B	C	D	E
22. Interest by parents in school matters.	A	B	C	D	E	55. Free medical care for students.	A	B	C	D	E
23. Time allotted to outdoor play.	A	B	C	D	E	56. School social workers.	A	B	C	D	E
24. Help for emotionally disturbed pupils.	A	B	C	D	E	57. Group projects.	A	B	C	D	E
25. Books in library.	A	B	C	D	E	58. Summer school for acceleration.	A	B	C	D	E
26. Longer class periods.	A	B	C	D	E	59. Lighting of classrooms.	A	B	C	D	E
27. Use of standardized tests.	A	B	C	D	E	60. Group discussions with parents.	A	B	C	D	E
28. Stringent laws against truancy.	A	B	C	D	E	61. Team teaching.	A	B	C	D	E
29. Parent-teacher conferences.	A	B	C	D	E	62. Home visits by teachers.	A	B	C	D	E
30. P.T.A. activities.	A	B	C	D	E	63. Autonomy of local school boards.	A	B	C	D	E
31. Educational research.	A	B	C	D	E	64. Attention given to gifted children.	A	B	C	D	E
32. Methods courses for teachers.	A	B	C	D	E	65. Training in art and music.	A	B	C	D	E
33. Free periods.	A	B	C	D	E	66. Foreign language courses.	A	B	C	D	E
						67. Stress on mathematics.	A	B	C	D	E

APPENDIX C

Correlation Matrix of Final 100 Items Used to Comprise Form B of the School

Table with 100 columns and 100 rows, containing correlation coefficients between items. The diagonal elements are all 1.000. The table shows a dense matrix of values ranging from approximately -0.100 to 0.400.

APPENDIX D

Unrotated Factor Matrix of Final 100 Items Used to Comprise Form B of the School Opinion Survey

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
FACTOR:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LATENT															
ROOTS:	11.168	5.556	3.515	2.262	1.934	1.630	1.527	1.208	1.147	1.050	0.956	0.905	0.835	0.786	0.695
CUM. % OF															
TRACE:	28.967	43.377	52.495	58.360	63.378	67.606	71.567	74.699	77.673	80.397	82.878	85.225	87.392	89.431	91.232
VAR.:															
1	0.298	0.069	0.145	-0.109	-0.319	-0.087	0.075	-0.019	-0.057	0.065	-0.004	-0.058	-0.026	-0.064	-0.075
2	0.206	0.040	0.055	-0.083	-0.333	-0.026	0.017	0.068	0.047	0.132	0.016	0.043	0.179	-0.015	-0.040
3	0.243	0.021	0.105	0.043	-0.308	-0.055	-0.025	-0.143	-0.030	0.086	0.138	0.086	-0.029	0.056	0.223
4	0.278	0.073	0.052	-0.132	-0.232	-0.032	0.023	-0.079	-0.129	0.163	0.070	0.214	0.042	-0.006	0.005
5	0.330	-0.089	0.093	-0.087	-0.370	-0.138	-0.019	-0.147	-0.064	-0.025	0.016	-0.111	-0.107	-0.011	0.006
6	0.320	0.007	0.088	-0.124	-0.373	-0.031	0.024	-0.021	0.062	0.027	0.026	-0.175	0.095	0.034	0.019
7	0.340	0.021	0.169	-0.187	-0.289	0.023	-0.006	-0.005	0.064	-0.043	0.077	-0.104	0.159	0.102	-0.048
8	0.224	-0.046	0.096	-0.106	-0.344	-0.004	-0.039	-0.098	-0.013	0.054	0.020	-0.107	-0.192	0.077	0.027
9	0.239	-0.026	0.035	-0.106	-0.389	0.016	0.020	-0.052	-0.012	-0.061	-0.023	0.015	0.130	0.071	-0.161
10	0.038	0.103	-0.032	-0.041	-0.415	-0.120	-0.038	-0.072	-0.068	-0.021	0.044	0.018	0.092	0.027	0.004
11	-0.317	0.090	-0.189	0.092	-0.088	0.049	-0.111	-0.046	-0.068	-0.055	0.049	0.196	0.064	-0.108	-0.003
12	-0.217	0.154	-0.171	0.217	-0.087	0.073	-0.066	0.010	0.018	-0.129	-0.022	0.017	-0.025	-0.011	0.020
13	-0.422	0.157	-0.222	0.222	-0.198	0.037	-0.142	-0.013	0.000	-0.165	-0.019	0.095	0.019	0.017	-0.022
14	-0.152	-0.052	-0.236	0.289	0.010	0.185	-0.117	-0.132	-0.100	-0.209	0.150	-0.033	0.093	0.065	0.041
15	-0.143	-0.072	-0.302	0.333	-0.071	0.145	-0.069	-0.078	-0.031	-0.145	0.092	-0.057	0.031	0.041	0.092
16	-0.316	0.196	-0.336	0.128	-0.159	0.059	0.059	-0.029	-0.117	-0.105	-0.102	0.011	-0.003	-0.003	-0.020
17	-0.284	0.059	-0.364	0.075	-0.114	0.215	-0.004	0.014	0.016	-0.194	-0.163	0.098	-0.109	0.027	-0.106
18	-0.112	0.162	-0.165	0.166	-0.244	0.142	0.004	-0.046	-0.061	-0.060	-0.046	0.065	0.006	0.074	0.067
19	-0.172	-0.031	-0.334	0.174	-0.131	0.011	-0.061	-0.027	-0.002	0.011	-0.103	0.118	-0.057	0.002	0.155
20	-0.298	0.079	-0.361	0.187	-0.047	0.061	-0.193	0.001	-0.027	-0.060	0.015	0.087	0.027	0.010	-0.029
21	-0.002	0.139	0.150	0.317	-0.250	-0.010	-0.061	0.035	-0.049	0.005	0.028	-0.064	-0.107	-0.067	-0.042
22	0.082	0.110	0.228	0.245	-0.017	-0.069	-0.014	0.066	-0.140	0.132	0.035	0.152	-0.061	0.008	0.003
23	-0.001	0.046	0.406	0.408	0.073	-0.057	-0.106	0.112	-0.055	-0.033	0.028	-0.084	0.084	0.038	-0.054
24	-0.007	0.179	0.138	0.357	-0.264	-0.028	-0.074	0.101	-0.129	0.019	-0.013	-0.022	0.070	-0.050	-0.088
25	0.126	0.103	0.219	0.290	-0.226	-0.040	-0.046	0.020	-0.035	0.089	0.033	0.035	0.003	0.035	-0.074
26	-0.148	0.242	0.128	0.387	-0.127	0.002	-0.052	0.081	-0.097	0.135	-0.039	-0.022	0.010	-0.013	0.009
27	0.064	0.121	0.269	0.204	0.106	-0.186	0.024	0.048	-0.148	0.226	-0.047	-0.087	0.210	0.007	-0.033
28	-0.067	0.077	0.311	0.385	0.145	-0.019	-0.013	0.119	-0.035	0.091	-0.043	-0.069	-0.037	-0.004	0.106
29	0.012	-0.003	0.215	0.230	0.139	-0.019	-0.046	0.208	-0.010	0.102	-0.038	-0.136	0.093	0.028	-0.047

APPENDIX D

(2)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
FACTOR:	11.168	5.556	3.515	2.261	1.934	1.630	1.527	1.208	1.147	1.050	0.956	0.904	0.835	0.786	0.695
LATENT ROOTS:	11.168	5.556	3.515	2.261	1.934	1.630	1.527	1.208	1.147	1.050	0.956	0.904	0.835	0.786	0.695
CUM. % OF TRACE:	28.967	43.377	52.495	58.360	63.378	67.606	71.567	74.699	77.673	80.397	82.878	82.225	87.391	89.431	91.232
VAR.:															
30	-0.223	0.105	0.167	0.466	0.105	0.021	-0.079	0.097	-0.052	0.034	0.005	-0.061	0.086	-0.031	0.015
31	0.526	0.334	0.049	-0.109	0.108	0.120	-0.172	0.122	-0.044	-0.053	-0.008	0.079	0.011	0.217	-0.139
32	0.496	0.261	-0.049	-0.030	0.029	0.222	-0.095	0.138	-0.024	-0.006	0.061	-0.040	-0.010	0.136	-0.092
33	0.463	0.322	0.227	-0.113	0.026	-0.096	0.125	0.028	-0.059	-0.027	-0.056	-0.038	-0.145	-0.021	-0.024
34	0.654	0.057	-0.071	-0.025	-0.035	-0.075	0.027	0.187	-0.195	-0.055	0.060	0.058	0.055	-0.007	0.072
35	0.644	0.016	-0.157	0.043	-0.000	-0.080	0.125	0.282	-0.106	-0.069	0.132	0.046	-0.069	0.017	0.085
36	0.502	0.166	0.044	0.028	0.032	0.026	-0.084	0.143	-0.118	-0.122	0.155	0.020	-0.124	-0.099	0.071
37	0.389	0.314	0.108	-0.079	0.129	0.021	-0.297	0.008	-0.048	-0.051	-0.025	0.101	0.072	0.135	0.073
38	0.548	0.277	0.163	-0.003	0.075	-0.094	-0.042	0.003	0.091	0.006	-0.037	0.046	-0.067	0.008	0.087
39	0.344	0.305	0.077	-0.028	-0.083	0.310	0.165	0.100	0.036	-0.174	0.001	-0.114	0.196	-0.134	0.023
40	0.586	-0.069	-0.169	0.064	-0.032	-0.042	0.098	0.175	0.082	-0.122	0.163	0.064	-0.134	-0.070	-0.080
41	-0.290	0.484	-0.216	-0.069	0.087	-0.095	0.272	-0.044	-0.043	0.064	-0.009	-0.025	0.090	0.059	-0.015
42	-0.125	0.148	-0.240	-0.016	-0.018	-0.041	0.079	0.001	-0.008	0.007	0.041	0.063	-0.040	0.018	-0.206
43	0.084	0.259	-0.212	-0.026	-0.011	-0.092	0.343	0.128	-0.092	-0.066	0.052	-0.001	0.015	-0.046	0.108
44	0.153	0.351	-0.158	0.092	0.093	-0.004	0.090	-0.017	0.152	0.045	0.142	-0.107	-0.129	0.097	0.068
45	-0.351	0.312	0.022	-0.047	0.010	0.098	0.116	0.042	-0.080	0.080	-0.015	0.070	0.091	0.036	0.166
46	-0.353	0.463	-0.358	0.003	0.118	-0.050	0.228	-0.096	-0.141	0.166	0.135	-0.112	0.011	0.136	-0.082
47	-0.280	0.525	0.009	-0.112	0.003	-0.069	0.097	0.119	0.015	-0.047	0.022	0.026	0.107	-0.057	0.085
48	-0.328	0.374	-0.095	-0.102	0.032	0.011	0.039	0.053	-0.045	0.035	0.089	-0.107	-0.101	-0.123	-0.011
49	-0.242	0.500	-0.308	-0.006	0.037	-0.054	0.160	-0.079	-0.199	0.122	0.144	-0.079	0.006	0.193	-0.089
50	-0.074	0.334	-0.099	0.050	0.054	-0.153	0.010	-0.011	-0.067	0.012	0.092	-0.140	-0.147	-0.116	-0.206
51	0.128	0.087	0.101	0.181	0.000	0.031	0.113	-0.100	0.017	0.026	-0.055	0.000	-0.128	0.192	-0.072
52	0.422	0.242	0.046	-0.083	0.079	0.190	0.075	-0.028	-0.072	-0.150	-0.118	-0.061	0.102	-0.057	-0.110
53	0.383	-0.010	0.240	-0.005	0.133	0.232	0.132	-0.284	-0.137	0.020	-0.131	-0.034	-0.068	-0.035	0.069
54	0.217	0.215	0.008	0.083	0.007	-0.060	0.161	-0.075	0.044	0.038	-0.096	0.025	-0.074	0.108	0.080
55	0.218	0.096	0.064	-0.004	0.031	0.249	0.291	-0.189	-0.154	0.001	-0.207	-0.089	0.027	-0.004	0.053
56	0.441	0.040	0.239	0.085	0.072	0.330	0.112	-0.179	-0.096	-0.041	-0.075	-0.043	-0.113	-0.040	0.106
57	0.347	0.044	0.149	0.117	0.017	0.070	0.011	-0.134	-0.042	0.052	0.028	-0.005	-0.059	-0.116	0.072
58	0.503	0.250	0.002	0.118	0.032	-0.017	0.077	-0.091	0.022	-0.078	-0.094	-0.093	-0.017	0.026	-0.029
59	0.447	0.303	0.056	0.026	0.011	0.281	0.138	0.090	0.057	-0.072	-0.059	-0.016	0.127	-0.042	-0.021
60	0.275	0.186	0.227	0.224	-0.014	0.033	0.071	-0.220	0.071	-0.016	0.145	0.071	-0.006	0.045	-0.050

(3)

APPENDIX D

FACTOR: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

LATENT ROOTS: 11.168 5.556 3.515 2.261 1.934 1.630 1.527 1.208 1.147 1.050 0.956 0.904 0.835 0.786 0.695

CUM. % OF TRACE: 28.967 43.377 52.495 58.360 63.378 67.606 71.565 74.699 77.673 80.397 82.878 82.225 87.391 89.431 91.232

VAR.:

61	0.240	0.250	0.079	0.000	0.100	0.067	-0.097	-0.123	0.149	-0.176	0.037	0.083	0.175	-0.065	-0.008
62	-0.068	0.501	-0.166	-0.024	0.021	-0.200	0.093	-0.103	-0.142	-0.036	0.024	-0.071	-0.050	0.036	0.086
63	0.185	0.359	0.027	-0.025	0.104	-0.302	-0.173	-0.115	-0.076	0.071	-0.122	0.111	0.039	-0.020	0.030
64	0.374	0.334	0.001	-0.135	0.065	-0.028	-0.210	0.064	-0.091	-0.054	-0.157	0.050	-0.010	0.131	-0.022
65	0.085	0.305	-0.148	-0.095	0.014	-0.072	-0.175	-0.066	-0.116	-0.047	-0.222	0.042	-0.129	-0.031	-0.023
66	0.067	0.300	-0.020	-0.069	-0.096	-0.114	-0.106	-0.041	0.027	-0.013	-0.177	-0.072	0.010	-0.317	-0.136
67	0.080	0.415	-0.077	0.005	0.035	-0.297	-0.085	-0.230	-0.021	-0.119	0.018	-0.141	-0.011	-0.112	0.039
68	0.072	0.278	-0.026	-0.009	0.128	-0.127	-0.340	-0.168	0.183	-0.091	0.167	-0.188	-0.035	0.062	0.088
69	0.369	0.152	0.018	0.036	0.056	-0.024	-0.263	-0.119	0.214	-0.084	0.202	-0.090	0.104	0.014	0.095
70	0.110	0.286	-0.297	-0.022	-0.053	-0.192	-0.088	0.111	0.150	-0.072	-0.029	-0.189	0.052	0.015	0.082
71	0.377	-0.178	-0.092	0.184	-0.055	-0.201	0.209	0.080	0.138	-0.091	-0.189	-0.002	-0.045	0.217	-0.026
72	0.428	-0.238	-0.112	0.224	-0.045	-0.192	0.198	0.073	0.142	-0.088	-0.230	-0.063	-0.042	0.151	-0.098
73	0.411	0.255	0.168	-0.074	0.050	0.048	-0.016	0.022	-0.035	-0.014	-0.078	0.026	-0.176	-0.027	-0.075
74	0.528	-0.072	0.045	0.140	0.023	-0.038	0.171	-0.263	0.092	-0.070	0.099	0.222	0.098	-0.105	0.019
75	0.635	-0.032	-0.171	0.077	0.006	-0.019	0.099	0.206	-0.041	-0.067	0.144	0.071	-0.134	-0.077	0.060
76	0.494	-0.108	-0.016	0.220	0.120	-0.074	0.139	-0.179	0.002	-0.043	0.054	0.109	0.025	-0.107	-0.102
77	0.415	-0.002	-0.082	0.184	0.065	-0.189	0.043	-0.230	0.043	-0.007	0.102	0.050	0.042	-0.075	-0.151
78	0.427	-0.321	-0.121	0.191	0.007	-0.181	0.164	0.055	0.192	-0.153	-0.089	-0.016	-0.002	-0.053	-0.038
79	0.367	0.135	-0.073	0.022	0.109	-0.191	0.112	-0.038	0.024	-0.026	-0.083	0.185	0.154	-0.078	0.028
80	0.225	-0.368	-0.223	0.114	-0.008	-0.189	0.137	0.050	0.115	-0.003	-0.041	-0.048	0.075	0.156	0.025
81	0.164	0.075	-0.227	0.035	-0.073	0.065	-0.098	0.003	0.184	0.344	-0.062	-0.011	0.127	-0.026	0.100
82	0.118	0.132	-0.272	0.150	0.029	-0.076	0.044	-0.043	0.065	-0.005	-0.198	-0.166	0.076	-0.083	0.129
83	0.236	0.187	-0.063	0.112	0.007	0.164	-0.026	-0.056	0.164	0.110	-0.056	0.019	-0.085	0.021	-0.037
84	0.102	0.281	-0.003	0.028	-0.165	0.188	-0.002	0.023	0.239	0.053	-0.104	-0.143	-0.095	-0.038	0.131
85	0.219	0.257	-0.143	-0.019	-0.045	0.278	0.029	0.036	0.234	0.183	0.089	-0.021	-0.012	0.043	0.008
86	-0.045	0.374	-0.093	-0.068	-0.010	0.076	-0.094	0.139	0.043	0.012	-0.107	-0.036	0.104	-0.165	-0.141
87	0.192	0.246	-0.252	0.021	0.064	0.145	0.021	-0.001	0.188	0.259	0.057	0.216	-0.024	-0.125	-0.065
88	0.207	0.064	-0.273	0.058	0.038	-0.087	-0.095	-0.077	0.146	0.222	-0.105	0.145	-0.120	-0.013	-0.043
89	0.421	0.334	-0.065	0.067	0.005	0.096	-0.036	-0.042	0.130	0.020	0.006	0.095	0.092	0.098	-0.088
90	0.103	0.079	-0.204	0.091	-0.070	0.111	-0.048	0.042	0.165	0.251	-0.027	-0.101	0.014	-0.126	0.027

(4)

APPENDIX D

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
FACTOR:	11.168	5.556	3.515	2.261	1.934	1.630	1.527	1.208	1.147	1.050	0.956	0.904	0.835	0.786	0.695
LATENT ROOTS:	11.168	5.556	3.515	2.261	1.934	1.630	1.527	1.208	1.147	1.050	0.956	0.904	0.835	0.786	0.695
CUM. % OF TRACE:	28.967	43.377	52.495	58.360	63.378	67.606	71.567	74.699	77.673	80.397	82.878	82.225	87.391	89.431	91.232
VAR.:	0.499	-0.367	-0.306	0.059	0.047	-0.014	-0.060	-0.038	-0.140	0.153	-0.161	-0.037	0.031	-0.010	0.062
91	0.518	0.026	-0.234	-0.079	0.026	0.048	-0.072	0.051	-0.090	0.077	-0.007	0.082	0.059	0.034	0.049
92	0.644	0.035	-0.071	-0.001	0.147	0.104	-0.145	0.003	-0.061	0.011	0.024	0.024	0.102	0.172	-0.020
93	0.420	-0.211	-0.332	-0.158	0.011	-0.105	-0.160	0.033	-0.163	-0.001	-0.086	-0.065	0.124	-0.036	0.158
94	0.637	-0.022	-0.230	0.003	-0.020	0.006	0.021	0.223	-0.100	-0.012	0.122	-0.023	-0.139	-0.136	0.057
95	0.450	-0.384	-0.272	0.062	0.030	0.129	-0.119	-0.050	-0.064	0.063	0.040	-0.154	-0.016	-0.103	-0.077
96	0.511	-0.283	-0.299	-0.022	-0.004	-0.009	-0.162	-0.011	-0.233	0.094	-0.088	-0.009	0.111	-0.018	0.023
97	0.313	-0.283	-0.320	0.070	-0.028	0.147	-0.081	-0.118	-0.156	0.127	-0.001	-0.151	-0.059	0.031	-0.111
98	0.106	-0.330	-0.229	0.029	0.098	0.030	-0.083	-0.069	-0.078	0.016	0.137	-0.125	0.081	-0.065	-0.074
99	0.384	-0.371	-0.094	-0.025	0.185	0.018	-0.025	-0.090	-0.065	0.063	0.160	-0.151	0.100	-0.002	-0.091
100															

APPENDIX E

Rotated Factor Matrix of Final 100 Items Used to Comprise Form B of the School Opinion Survey

FACTOR:	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
VAR.															
1	0.080	-0.017	0.170	0.039	-0.430	0.044	0.006	-0.091	0.044	0.020	0.006	0.029	-0.103	-0.121	-0.043
2	0.070	0.000	0.077	0.034	-0.393	0.104	-0.041	0.077	0.015	0.146	0.092	0.057	-0.020	-0.010	0.082
3	0.039	0.000	0.001	0.071	-0.388	-0.111	-0.070	-0.106	-0.023	0.058	-0.176	0.114	-0.125	0.150	0.091
4	0.160	-0.040	0.096	-0.030	-0.353	0.150	0.019	-0.045	-0.098	0.067	-0.130	0.170	-0.086	0.040	0.059
5	0.023	-0.136	0.096	-0.030	-0.484	-0.102	-0.090	-0.115	0.101	-0.073	-0.101	0.010	-0.096	-0.082	-0.054
6	0.070	-0.063	0.126	-0.019	-0.487	-0.090	-0.054	-0.059	0.097	0.080	0.125	-0.037	-0.043	-0.014	0.035
7	0.188	-0.026	0.174	-0.047	-0.443	-0.068	-0.093	-0.032	0.045	0.012	0.200	0.016	0.000	0.060	-0.009
8	0.129	-0.053	0.070	-0.038	-0.412	-0.081	-0.086	-0.123	0.038	0.030	-0.128	-0.117	-0.060	0.012	-0.123
9	0.115	-0.060	-0.021	-0.062	-0.457	0.098	-0.069	-0.006	0.085	-0.020	0.124	0.060	0.047	-0.021	-0.056
10	0.008	0.036	-0.134	0.010	-0.430	-0.016	0.075	0.078	-0.017	-0.033	-0.022	0.032	0.007	-0.046	0.060
11	-0.102	0.081	-0.264	-0.009	0.062	0.069	0.062	0.147	-0.208	-0.009	-0.044	0.081	0.043	-0.054	0.039
12	-0.042	0.102	-0.378	0.081	0.073	-0.054	0.075	0.042	-0.010	0.035	0.022	-0.035	0.003	-0.052	-0.025
13	-0.111	0.169	-0.538	0.071	0.031	-0.018	0.089	0.178	-0.074	-0.027	-0.013	-0.042	0.105	-0.062	-0.028
14	-0.064	-0.173	-0.448	0.054	0.122	-0.136	0.020	-0.021	-0.076	-0.086	0.102	0.053	0.037	0.151	-0.019
15	-0.139	-0.162	-0.468	0.063	0.084	-0.123	0.018	-0.008	0.027	0.018	0.054	-0.002	-0.021	0.117	0.006
16	-0.102	0.078	-0.465	-0.031	0.023	0.087	0.269	0.018	-0.009	0.000	0.010	-0.090	0.046	-0.109	0.022
17	-0.045	0.071	-0.505	-0.176	0.117	0.145	0.058	0.026	0.041	0.042	0.028	-0.123	0.052	-0.087	-0.129
18	0.009	0.083	-0.389	0.049	-0.121	0.040	0.092	-0.067	-0.012	0.069	-0.008	-0.040	0.010	0.036	0.025
19	-0.124	-0.031	-0.394	-0.045	0.040	0.033	0.020	0.063	0.060	0.112	-0.180	-0.045	-0.018	-0.005	0.121
20	-0.048	-0.042	-0.472	0.002	0.136	-0.008	0.102	0.205	-0.087	0.061	-0.044	-0.018	0.071	-0.030	-0.002
21	-0.034	0.075	-0.147	0.370	-0.177	-0.054	-0.019	-0.049	-0.004	0.021	-0.028	-0.018	-0.086	-0.092	-0.125
22	0.093	0.068	0.049	0.361	-0.034	0.093	-0.006	-0.038	-0.036	-0.014	-0.158	0.101	-0.093	0.046	-0.017
23	0.053	0.068	0.062	0.561	0.071	-0.089	-0.127	-0.012	0.027	-0.142	0.084	0.040	0.043	0.038	-0.044
24	0.005	0.071	-0.198	0.454	-0.180	0.050	0.030	0.035	-0.025	-0.013	0.049	0.003	-0.013	-0.099	-0.023
25	0.066	0.042	-0.030	0.385	-0.231	0.016	-0.051	-0.026	0.038	0.044	-0.039	0.087	-0.019	0.016	-0.082
26	-0.022	0.131	-0.175	0.476	-0.026	0.024	0.098	-0.018	-0.053	0.082	-0.044	-0.043	0.023	-0.044	0.014
27	0.053	-0.024	0.239	0.433	0.001	0.037	0.122	-0.013	0.009	-0.030	0.011	0.074	0.109	-0.028	0.159
28	-0.033	0.120	0.061	0.490	0.188	-0.057	-0.060	-0.102	0.025	-0.007	-0.040	-0.041	-0.022	0.041	0.038
29	0.034	-0.021	0.143	0.370	0.136	0.005	-0.055	0.041	0.057	0.011	0.109	-0.083	0.033	0.020	0.022
30	-0.085	0.080	-0.147	0.504	0.218	-0.050	0.004	0.012	-0.045	-0.013	0.053	0.001	0.061	0.014	0.027
31	0.700	-0.053	0.122	0.012	-0.077	-0.014	0.031	-0.057	0.026	0.089	0.072	0.037	-0.085	0.029	-0.097
32	0.526	-0.139	0.047	0.024	-0.099	-0.031	0.043	-0.109	0.018	0.193	0.151	-0.023	-0.169	0.056	-0.110

(2)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
VAR.															
33	0.467	0.045	0.264	0.092	-0.164	-0.138	0.009	-0.148	0.010	0.003	-0.079	0.023	-0.161	-0.196	-0.056
34	0.416	-0.264	0.138	0.018	-0.211	0.047	0.004	-0.066	0.148	-0.005	0.044	0.115	-0.404	0.009	0.150
35	0.339	-0.252	0.118	-0.001	-0.128	0.033	0.033	-0.031	0.257	0.054	0.040	0.086	-0.539	0.079	0.063
36	0.364	-0.108	0.067	0.081	-0.144	-0.108	-0.053	-0.106	-0.020	0.009	0.022	0.074	-0.429	-0.047	-0.032
37	0.594	0.006	0.085	0.050	-0.041	-0.157	-0.040	-0.042	-0.079	0.033	-0.048	0.073	-0.018	-0.001	0.100
38	0.439	0.044	0.245	0.083	-0.112	-0.166	-0.030	-0.163	0.137	0.135	-0.071	0.166	-0.192	-0.075	0.041
39	0.272	0.085	0.004	0.016	-0.147	-0.012	0.020	-0.284	-0.021	0.140	0.453	0.057	-0.192	-0.073	0.061
40	0.209	-0.261	0.111	-0.051	-0.122	0.017	-0.059	0.014	0.254	0.170	0.039	0.180	-0.448	0.015	-0.133
41	-0.013	0.266	-0.097	-0.061	0.106	0.037	0.595	0.011	-0.036	0.073	0.050	0.013	0.093	-0.059	0.091
42	-0.006	0.018	-0.142	-0.090	0.031	0.103	0.260	0.128	0.012	0.048	-0.001	0.046	0.018	-0.068	-0.142
43	0.029	0.093	-0.037	-0.076	-0.020	0.067	0.367	-0.060	0.120	0.022	0.095	0.042	-0.274	-0.022	0.138
44	0.155	0.067	-0.018	0.016	0.050	-0.237	0.295	-0.074	0.097	0.248	-0.003	0.035	-0.46	0.060	-0.084
45	-0.046	0.331	-0.112	0.041	0.085	0.087	0.252	-0.034	-0.216	0.041	0.021	-0.098	0.073	0.069	0.171
46	-0.067	0.091	-0.175	-0.027	0.146	0.002	0.736	0.037	-0.114	0.105	-0.010	-0.045	0.108	0.036	-0.032
47	0.070	0.441	-0.061	0.023	0.043	-0.034	0.357	0.091	-0.168	0.028	0.113	-0.033	-0.019	-0.120	0.142
48	-0.073	0.230	-0.078	-0.018	0.104	-0.058	0.353	0.052	-0.244	0.057	0.029	-0.143	-0.040	-0.156	-0.058
49	0.067	0.082	-0.185	0.005	0.032	-0.003	0.698	0.034	-0.117	0.058	-0.028	-0.046	0.075	0.051	-0.044
50	0.029	0.033	-0.015	0.101	0.048	-0.102	0.360	0.059	-0.060	0.009	-0.018	0.013	-0.065	-0.248	-0.196
51	0.099	0.041	0.003	0.145	-0.032	0.001	0.057	-0.193	0.176	0.032	-0.077	0.046	0.050	0.100	-0.162
52	0.397	-0.063	0.084	-0.045	-0.058	0.027	0.041	-0.295	0.037	0.027	0.254	0.099	-0.067	-0.147	-0.008
53	0.175	-0.137	0.191	0.019	-0.030	0.031	-0.097	-0.569	-0.029	-0.037	-0.031	0.113	0.000	0.015	0.000
54	0.158	0.094	0.040	0.049	-0.058	-0.038	0.144	-0.193	0.200	0.108	-0.094	0.084	-0.053	0.017	0.033
55	0.086	-0.039	0.041	-0.029	-0.045	0.124	0.088	-0.514	0.059	0.028	0.107	0.019	0.030	-0.012	0.066
56	0.221	-0.085	0.111	0.073	-0.045	-0.023	-0.166	-0.571	-0.003	0.052	0.047	0.082	-0.124	0.052	-0.053
57	0.120	-0.104	0.114	0.130	-0.086	-0.080	-0.094	-0.278	-0.016	0.081	-0.044	0.164	-0.133	-0.026	-0.005
58	0.346	-0.088	0.068	0.081	-0.110	-0.133	0.092	-0.270	0.240	0.100	0.061	0.154	-0.115	-0.111	-0.019
59	0.384	0.037	0.048	0.046	-0.080	0.040	0.013	-0.285	0.066	0.216	0.315	0.104	-0.163	-0.034	0.020
60	0.155	0.064	0.053	0.212	-0.125	-0.136	0.006	-0.226	0.035	0.58	0.007	0.324	-0.020	0.097	-0.147
61	0.286	0.095	0.039	-0.006	-0.015	-0.211	-0.019	-0.017	0.008	0.016	0.117	0.308	0.013	-0.104	0.062
62	0.129	0.165	-0.103	0.002	-0.021	-0.158	0.509	-0.051	-0.029	-0.030	-0.100	0.014	-0.052	-0.132	0.089
63	0.334	0.060	0.098	0.092	-0.032	-0.117	0.178	0.034	-0.009	0.003	-0.238	0.176	0.055	-0.227	0.166
64	0.578	-0.005	0.064	-0.015	-0.074	-0.049	0.060	-0.040	0.031	0.024	-0.063	-0.032	-0.031	-0.129	0.055
65	0.298	0.026	-0.115	-0.080	-0.004	-0.031	0.142	-0.045	-0.024	0.010	-0.186	-0.054	0.017	-0.291	0.028
66	0.104	0.071	0.004	0.020	-0.107	-0.049	0.086	0.002	-0.061	0.091	0.032	0.055	0.008	-0.487	0.013

(3)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
67	0.145	0.064	-0.027	0.022	-0.064	-0.356	0.315	-0.033	-0.006	-0.053	-0.082	0.153	-0.006	-0.297	0.066
68	0.213	0.017	-0.002	0.001	0.034	-0.541	0.082	0.088	-0.081	0.060	-0.051	0.034	0.066	-0.058	-0.039
69	0.289	-0.100	0.058	0.017	-0.090	-0.433	-0.091	0.018	-0.012	0.142	0.382	0.192	-0.054	0.030	0.022
70	0.161	0.005	-0.099	-0.067	-0.059	-0.261	0.227	0.173	0.174	0.157	0.069	-0.084	-0.094	-0.172	0.133
71	0.090	-0.123	0.044	0.015	-0.093	0.042	-0.066	-0.037	0.600	0.008	-0.031	0.068	-0.100	0.068	0.004
72	0.067	-0.220	0.055	0.037	-0.081	0.050	-0.104	-0.057	0.639	0.024	0.008	0.075	-0.092	-0.011	-0.031
73	0.393	0.042	0.195	0.043	-0.084	-0.008	-0.009	-0.217	0.026	0.063	-0.041	0.041	-0.158	-0.141	-0.128
74	0.125	-0.150	0.098	-0.029	-0.134	-0.037	-0.132	-0.234	0.179	0.060	0.006	0.542	-0.159	0.063	0.030
75	0.275	-0.273	0.081	-0.029	-0.092	0.010	-0.046	-0.071	0.222	0.111	0.016	0.143	-0.543	0.035	-0.013
76	0.114	-0.279	0.101	0.062	-0.014	-0.003	-0.067	-0.192	0.225	0.019	-0.004	0.435	-0.160	-0.015	-0.053
77	0.114	-0.263	0.073	0.055	-0.080	-0.113	0.052	-0.061	0.192	0.045	-0.043	0.424	-0.072	-0.071	-0.077
78	-0.028	-0.251	0.070	-0.037	-0.025	-0.021	-0.207	-0.013	0.515	0.015	0.066	0.204	-0.209	-0.044	0.005
79	0.237	-0.040	0.102	-0.031	-0.015	0.035	0.073	-0.038	0.192	0.053	-0.014	0.335	-0.116	-0.104	0.199
80	-0.104	-0.291	0.033	-0.081	-0.031	0.012	-0.073	0.103	0.443	0.015	-0.003	0.056	-0.051	0.151	0.092
81	0.059	-0.140	-0.017	-0.003	-0.080	-0.020	0.020	0.055	0.021	0.468	-0.041	0.008	0.049	-0.005	0.174
82	0.018	-0.106	-0.137	0.007	0.053	-0.131	0.144	-0.092	0.221	0.170	0.033	0.000	-0.022	-0.187	0.211
83	0.199	-0.011	-0.041	0.039	-0.008	-0.048	0.000	-0.146	0.070	0.318	-0.015	0.065	-0.016	-0.021	-0.107
84	0.091	0.187	-0.071	0.021	-0.120	-0.154	-0.004	-0.173	0.039	0.342	0.076	-0.139	-0.054	-0.092	-0.012
85	0.192	0.024	-0.019	-0.062	-0.065	-0.050	0.087	-0.086	-0.029	0.463	0.121	0.002	-0.076	0.092	-0.084
86	0.190	0.129	-0.079	0.025	0.030	0.041	0.154	0.088	-0.127	0.177	0.178	-0.050	0.024	-0.293	0.014
87	0.164	-0.017	-0.039	-0.080	0.064	0.092	0.118	0.014	-0.062	0.480	-0.043	0.214	-0.110	-0.042	-0.049
88	0.131	-0.139	-0.038	-0.075	0.028	0.011	0.041	0.061	0.138	0.323	-0.259	0.127	-0.007	-0.102	-0.019
89	0.440	-0.012	-0.016	0.034	-0.108	-0.060	0.082	-0.086	0.095	0.266	0.087	0.217	-0.032	0.006	-0.041
90	-0.026	-0.120	-0.051	0.038	-0.028	-0.035	0.029	0.007	0.007	0.413	0.031	-0.040	-0.040	-0.087	0.036
91	0.107	-0.603	0.042	-0.097	-0.045	0.093	-0.149	-0.103	0.242	0.118	-0.130	0.028	-0.105	-0.004	0.181
92	0.371	-0.317	0.044	-0.125	-0.107	0.048	0.003	-0.047	0.076	0.170	-0.028	0.085	-0.194	0.025	0.130
93	0.533	-0.351	0.123	-0.014	-0.061	-0.058	-0.072	-0.117	0.112	0.113	0.049	0.130	-0.100	0.123	0.040
94	0.181	-0.487	-0.014	-0.152	-0.085	-0.042	-0.074	0.033	0.141	0.012	-0.056	-0.012	-0.158	-0.062	0.302
95	0.282	-0.359	0.089	-0.059	-0.123	0.000	-0.023	-0.061	0.142	0.146	0.020	0.041	-0.540	-0.050	0.010
96	0.037	-0.632	0.015	-0.102	-0.040	-0.021	-0.200	-0.083	0.104	0.125	0.042	0.029	-0.140	-0.013	-0.051
97	0.222	-0.607	0.012	-0.106	-0.125	0.090	-0.121	-0.028	0.111	0.045	-0.075	0.038	-0.114	-0.027	0.196
98	0.030	-0.581	-0.082	-0.087	-0.074	0.042	-0.035	-0.117	0.080	0.114	-0.043	-0.048	-0.025	0.033	-0.091
99	-0.114	-0.454	-0.016	-0.096	0.067	-0.043	-0.063	0.061	-0.009	-0.024	0.067	0.047	-0.016	0.047	-0.015
100	0.022	-0.538	0.227	-0.088	0.018	-0.058	-0.110	-0.044	0.070	-0.017	0.092	0.122	-0.045	0.122	-0.029

VAR.

APPENDIX F

GENERAL DIRECTIONS FOR THE SCHOOL OPINION SURVEY RELIABILITY STUDY

U.C.L.A. Guidance Research Project

The basic purpose of administering the School Opinion Survey in your schools is to determine the reliability of this instrument on samples of teachers and tenth grade students. This will necessitate two administrations to the same groups with an intervening interval of exactly two weeks between administrations. Be sure to keep forms completed at the first administration separate from those completed at the second administration. In order to achieve an adequate reliability study, it is necessary to obtain the return of questionnaires from as close to 100% of your faculty and tenth grade students as is humanly possible.

The Teacher Sample

A. First Administration:

(1) The initial administration of the SOS should be made in a group session, such as a faculty meeting. It should be explained that the SOS is expected to have wide national usage and that this necessitates a careful check of its reliability. This must be done by administering the survey once now and then a second time after a two week interval.

(2) Each teacher should then be provided a copy of the SOS (stamped "FIRST ADMINISTRATION") and a blank envelope.

(3) Teachers should be told that the survey is not timed but that it usually takes approximately twenty minutes for completion. Instruct teachers when finished to place the SOS forms in the

envelope, seal it, PRINT THEIR NAMES ON THE ENVELOPE and return it to you. Emphasize that individual responses will not be seen at any time by school or district personnel, and that the responses of specific individuals are of no interest to research staff. Explain that the reason for writing their names on the envelope is to permit matching the pairs of forms which is necessary in order to compute the reliability.

(4) As the envelopes are returned, the examiner should ascertain that the name has been printed on it. Nameless envelopes will be useless. Envelopes may then be filed in an envelope box alphabetically.

B. Re-test Administration

(1) The second administration of the SOS should take place exactly two weeks after the first one. This should also be done in a group situation in order to insure prompt return of the greatest possible number of questionnaires. The procedure for group re-test administration is exactly the same as the procedure for the first administration, except that in the re-test only forms stamped "SECOND ADMINISTRATION" may be used.

(2) If it is impossible to carry out the second administration in the group setting, utilize whatever means of distribution most effective in insuring a high return. In any case, be sure to accompany each form with an envelope (provided by the Project) in which the form can be sealed and returned. AGAIN, TEACHERS MUST BE ASKED TO PRINT THEIR NAMES ON THE ENVELOPE. It will be necessary to provide some kind of check on who has or has not

returned forms. It might be possible to place a box in your office or in the main office with a list of teachers names on it. Teachers could be instructed to place a check mark next to their names at the time that they put the envelope containing their completed SOS form in the box. Personal follow up will be needed in order to obtain return of the highest possible percentage of teacher responses.

The Student Sample

- (1) Both the first and second administration of the SOS to tenth grade students should take place in a group situation.
- (2) The same group administration procedure as used with teachers should be employed. If they are not, students should be clearly instructed to PRINT THEIR NAMES on the FORM ITSELF during BOTH first and second administrations. It is not, however, imperative that individual envelopes be used by students.
- (3) Students should be told that the data collected on these forms will be used as a part of a national study of education. They must be asked to be frank and be clearly informed that neither their grades nor any other aspect of their school life will be affected by their responses.
- (4) As was true with teachers, the interval between first and second administration must be exactly two weeks.

After completion of all student and teacher forms, please return materials to Dr. Clarence Mahler, Professor of Psychology, Chico State College, attaching a completed "IDENTIFICATION FORM."

IMPORTANT! PLEASE FILL OUT AND ATTACH A COPY OF THIS FORM TO EACH PACKAGE OF COMPLETED QUESTIONNAIRES

**TO: Dr. Clarence A. Mahler
Professor of Psychology
Chico State College
Chico, California**

Attached are _____ pairs (both 1st and 2nd administration) of
School Opinion Survey forms completed by:

_____ Teachers

_____ Students

(Check appropriate space(s))

Re-test administration with teachers was

(Check one) _____ Done at a group meeting

_____ Given to teachers to complete on

their own at _____
(Name of School)

(Signed) _____

APPENDIX G

ITEM RELIABILITY (COEFFICIENT OF STABILITY) OF STUDENTS
BY SCHOOL FOR SCHOOL OPINION SURVEY - SIDE ONE

SCHOOL ONE SAMPLE = 122

SCHOOL TWO SAMPLE = 179

SCHOOL THREE SAMPLE = 250

ITEM	COEFF. FOR SCHOOL #1	COEFF. FOR SCHOOL #2	COEFF. FOR SCHOOL #3
1.	.385	.367	.543
2.	.545	.370	.624
3.	.386	.168	.456
4.	.237	.383	.373
5.	.558	.541	.516
6.	.514	.310	.462
7.	.284	.195	.342
8.	.429	.540	.283
9.	.413	.345	.453
10.	.366	.286	.323
11.	.560	.248	.358
12.	.098	.118	.369
13.	.243	.269	.293
14.	.518	.505	.347
15.	.608	.453	.384
16.	.550	.447	.429
17.	.614	.542	.571
18.	.357	.414	.408
19.	.311	.478	.277
20.	.591	.355	.385
21.	.352	.421	.386
22.	.377	.402	.375
23.	.276	.416	.334
24.	.373	.226	.340
25.	.355	.491	.372
26.	.409	.322	.477
27.	.264	.233	.241
28.	.567	.571	.451
29.	.278	.296	.261
30.	.273	.279	.438
31.	.354	.261	.306
32.	.486	.435	.395
33.	.364	.330	.446
34.	.347	.524	.346

ITEM RELIABILITY (COEFFICIENT OF STABILITY) OF STUDENTS
BY SCHOOL FOR SCHOOL OPINION SURVEY - SIDE TWO

ITEM #	COEFF. FOR SCHOOL #1	COEFF. FOR SCHOOL #2	COEFF. FOR SCHOOL #3
1.	.557	.367	.546
2.	.600	.638	.689
3.	.553	.371	.558
4.	.595	.522	.570
5.	.725	.616	.519
6.	.640	.557	.578
7.	.501	.688	.644
8.	.301	.525	.608
9.	.614	.525	.667
10.	.316	.417	.487
11.	.572	.506	.614
12.	.553	.644	.478
13.	.582	.579	.596
14.	.661	.573	.675
15.	.602	.452	.457
16.	.526	.323	.457
17.	.682	.625	.562
18.	.536	.437	.556
19.	.746	.629	.698
20.	.649	.523	.565
21.	.638	.547	.573
22.	.516	.556	.584
23.	.679	.599	.576
24.	.496	.464	.509
25.	.580	.420	.437
26.	.664	.583	.466
27.	.641	.457	.521
28.	.559	.468	.506
29.	.597	.720	.483
30.	.626	.534	.529
31.	.490	.438	.382
32.	.468	.400	.425
33.	.506	.631	.497

ITEM RELIABILITY (COEFFICIENT OF STABILITY) OF STUDENTS
BY SCHOOL FOR SCHOOL OPINION SURVEY - SIDE TWO (Contd.)

ITEM #	COEFF. FOR SCHOOL #1	COEFF. FOR SCHOOL #2	COEFF. FOR SCHOOL #3
34.	.130	.384	.418
35.	.566	.617	.517
36.	.221	.342	.387
37.	.583	.699	.707
38.	.630	.513	.478
39.	.725	.589	.534
40.	.562	.630	.551
41.	.404	.456	.439
42.	.634	.521	.544
43.	.242	.378	.312
44.	.504	.567	.609
45.	.588	.658	.583
46.	.263	.393	.308
47.	.630	.620	.563
48.	.281	.447	.357
49.	.507	.582	.621
50.	.620	.635	.577
51.	.532	.418	.552
52.	.501	.239	.144
53.	.570	.510	.558
54.	.397	.467	.383
55.	.548	.597	.513
56.	.428	.525	.390
57.	.634	.554	.549
58.	.600	.531	.429
59.	.519	.571	.553
60.	.385	.412	.463
61.	.687	.551	.599
62.	.110	.164	.321
63.	.714	.604	.618
64.	.656	.597	.568
65.	.689	.703	.573
66.	.633	.697	.687