To the Graduate Council:

I am submitting herewith a thesis written by Delorice Sykes Bell entitled "A Comparison of Attitudes Toward School of Elementary Students in an Open-Space, Team-Teaching Organization and a Self-Contained Classroom Structure." I recommend that it be accepted in partial fulfillment of the requirements for Specialist in Education, with a major in Curriculum and Instruction.

A. M. Johnston, Major Professor

We have read this thesis and recommend its acceptance:

Accepted for the Council:

Vice Chancellor
Graduate Studies and Research

A COMPARISON OF ATTITUDES TOWARD SCHOOL OF ELEMENTARY STUDENTS IN AN OPEN-SPACE, TEAM-TEACHING ORGANIZATION AND A SELF-CONTAINED CLASSROOM STRUCTURE

A Thesis

Presented for the

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ABSTRACT

The purpose of this study was to analyze differences in attitudes toward school of ten and eleven-year-old students who have experienced the self-contained classroom and students of the same age group who have experienced the open-space, team-teaching situation.

A scale by Tenenbaum which measures student attitude toward school was administered by the researcher to the entire ten and eleven-year-old populations of Group B which was the experimental group of the study, and Group A which was the control group. The scores were tallied and raw data placed on chi-square contingency tables to be statistically analyzed. The chi-square test was used as the statistical test of significance of difference on the composite score and on subscores of attitude toward school in general, toward teachers, classmates, physical environment, and toward the method of evaluation and method of reporting to parents. The same test was used to analyze differences, if any, between the two open-space schools which make up the experimental group.

1. The hypothesis predicting no significant difference between the two experimental schools on any subscore on the attitude scale was accepted.

2. The null hypothesis was rejected that there would be no significant difference in the attitudes of students in the open-space group and the self-contained group toward school in general, toward the teachers, toward classmates, and toward the physical plant. The attitudes of the open-space students were more positive on all these variables.

3. However, the data supported the hypothesis that there would be no significant difference between the two types of school organizations on student attitude toward the method of evaluation used by teachers and the method of reporting to parents.

It was recommended that future studies be done to replicate this study, possibly in the same or different communities. It was also recommended that instruments be created to study attitudes and other social-emotional aspects of student personality. Educators, parents, and school planners should consider these and other findings when planning and building or renovating school facilities and developing programs. It was suggested that student opinion be considered on matters which have much impact on their life-style.

TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	Purpose of the Study	2
	Statement of the Problem	3
	Sources of Data	3
	Assumptions of the Study	4
	Limitations of the Study	4
	Hypotheses	4
	Definitions of Terms Used	5
	Procedures	7
	Overview	10
II.	REVIEW OF RELATED LITERATURE	12
	Literature Supporting the Need for the Study	13
	Environment	13
	Instruments for measuring attitudes toward school	16
	Some studies on student attitudes toward school	17
	Sister Josephina on environment and holistic view	19
	Motivation	22
	School as an extension of the home	25
	Review of Other Related Literature	29
	Academic achievement and school organization	30

CHAPTER PAGE

The teacher in the classroom environment 31

Classmates in the classroom environment 36

The dropout's perception of school 38

Student opinions of team-teaching 39

Summary 45

III. RESEARCH METHODOLOGY AND INSTRUMENT 49

Introduction 49

The Problem and Hypotheses 49

The Plan of Research 50

Description of School Programs 54

Experimental school programs 54

Control school program 56

The Research Instrument 57

Administration of the Instrument 59

Data Analysis Procedures 59

IV. ANALYSIS OF DATA 61

Population Data 62

Comparison of Experimental Schools 62

Composite score 62

Attitude toward school in general 65

Attitudes toward teachers 65

Attitudes toward classmates 68

Attitudes toward building 68

CHAPTER PAGE

Attitudes toward method of evaluation 68

Attitudes toward method of reporting to parents 72

Comparison of Experimental and Control Groups . . . 72

Composite score 74

Attitudes toward school in general 74

Attitudes toward teachers 77

Attitudes toward classmates 77

Attitudes toward building 80

Attitudes toward method of evaluation 80

Attitudes toward method of reporting to parents 83

V. CONCLUSIONS AND RECOMMENDATIONS 85

Hypotheses 85

Limitations 86

Conclusions 86

Recommendations 88

BIBLIOGRAPHY 90

APPENDIXES 95

Appendix A 96

Appendix B 98

VITA 105

LIST OF TABLES

TABLE		PAGE
I.	Summary of Population Data	63
II.	Contingency Table Showing Relationship Between Experimental Schools and Composite Scores on Attitude Scale	64
III.	Contingency Table Showing Relationship Between Experimental Schools and Attitudes Toward School in General	66
IV.	Contingency Table Showing Relationship Between Experimental Schools and Attitudes Toward Teachers	67
V.	Contingency Table Showing Relationship Between Experimental Schools and Attitudes Toward Classmates	69
VI.	Contingency Table Showing Relationship Between Experimental Schools and Attitudes Toward Building	70
VII.	Contingency Table Showing Relationship Between Experimental Schools and Attitudes Toward Method of Evaluation Used by Teachers	71
VIII.	Contingency Table Showing Relationship Between Experimental Schools and Attitudes Toward Method of Reporting to Parents	73
IX.	Contingency Table Showing Relationship Between Educational Environment and Composite Scores	75
X.	Contingency Table Showing Relationship Between Educational Environment and Student Attitudes Toward School in General	76
XI.	Contingency Table Showing Relationship Between Educational Environment and Student Attitudes Toward Teachers	78

TABLE PAGE

XII. Contingency Table Showing Relationship Between Educational Environment and Student Attitudes Toward Classmates 79

XIII. Contingency Table Showing Relationship Between Educational Environment and Student Attitudes Toward Building or Physical Plant 81

XIV. Contingency Table Showing Relationship Between Educational Environment and Student Attitudes Toward Method of Evaluation 82

XV. Contingency Table Showing Relationship Between Educational Environment and Student Attitudes Toward Method of Reporting to Parents 84

CHAPTER I

INTRODUCTION

Although the issue of children's attitudes toward school is one of great concern to educators, there has been relatively little published research concerning this aspect of school life. The possible educational significance of such attitudes has recently become the focus of systematic inquiry.[1]

The present study proceeded on the assumption that attitudes toward the school experience contribute significantly to academic success, the desire to continue an education, and good mental health. The study deals with three broad categories of the instructional environment: attitude toward school in general, attitude toward teachers, and attitude toward classmates. More specific points are investigated under the broad category of "school in general." They include, among others, the building (or physical plant), the method of evaluation, and the method of reporting to parents.

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[1]Laura E. Berk, Marion H. Rose, and Diane Stewart, "Attitudes of English and American Children Toward Their School Experience," Journal of Educational Psychology, 61 (February, 1970), p. 33; Oren Glick, "Sixth Graders Attitudes Toward School and Interpersonal Conditions in the Classroom," The Journal of Experimental Education, 38 (Summer, 1970), p. 17; Jeanne Pierson, "Student Opinion Toward Team-Teaching," California Journal of Educational Research, 22 (September, 1971), p. 156.

More than ever before educational literature has in recent years reflected a renewed interest in the problems of elementary school organization. Many school systems have developed modern open-spaced, team-teaching environments, but despite these attempts, the traditional self-contained classroom organization has continued to be dominant.[2]

The present study was an attempt to extend research in the area of student attitudes toward school by measuring the attitudes of ten and eleven-year-old students who attend open-spaced, team-teaching schools and the same age group who attend a school of the self-contained organization.

I. PURPOSE OF THE STUDY

Since the school systems involved in this study are changing from self-contained classrooms to new or renovated open-spaced physical plants which necessitate team-teaching, it seemed appropriate to conduct a study that could provide helpful information to be available to school personnel, parents, and the general public. Because programs will likely be conducted from time to time to inform the public of facts related to the advantages and disadvantages of the two types

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[2]Robert F. Carborne, "A Comparison of Graded and Non-graded Elementary Schools," Elementary School Journal, 82 (November, 1961), p. 82.

of school organization, it seemed imperative to have this type of information available.

II. STATEMENT OF THE PROBLEM

The purpose of this study was to analyze differences in attitudes toward school of 278 ten and eleven-year-old students who have experienced the self-contained classroom structure for at least three years (Group A) and 258 ten and eleven-year-old students who have experienced open-space, team-teaching situations for at least three years (Group B).

III. SOURCES OF DATA

Data were collected through an attitude scale which gave the students an opportunity to choose the term or statement that best described their attitude toward several particular aspects of the school environment. The descriptive terms could be grouped under three broad categories: attitude toward school in general, attitude toward teacher, and attitude toward classmates. Twenty-five main items pertaining to the total educational environment were included on the scale. Two of the main items were subdivided for statistical purposes to make a total of 37 points to be analyzed.

IV. ASSUMPTIONS OF THE STUDY

The importance of the present investigation was based on the assumption that the attitudes that elementary students have toward school have a great influence on their total educational adjustment, success, and future. The attitude scale was assumed to be adequate in measuring student attitudes toward the aspects of school that were included in the study.

V. LIMITATIONS OF THE STUDY

The study was limited to 278 fifth and sixth grade students in Group A. A total of 258 ten and eleven-year-old students made up Group B. The data were collected during a two-week period in the Spring of 1975.

VI. HYPOTHESES

The null hypothesis tested in the present study were:

A. There will be no significant difference on any variable dealing with attitudes toward school between the two open-space schools that form the experimental group of this study (Group B).

B. There will be no significant difference between Group B (open-space students) and Group A (self-contained students) on attitudes toward:

1. School in general
2. Teachers
3. Classmates
4. The building (or physical plant)
5. Method of evaluation
6. Method of reporting to parents

VII. DEFINITIONS OF TERMS USED

Team-teaching. Trump stated:

> . . . Team-teaching is an arrangement whereby two or more teachers and their aides, in order to take advantage of their respective competencies, plan, instruct, and evaluate, in one or more subject areas, a group of students equivalent in size, to two or more conventional classes.[3]

Attitudes. Insko maintains:

> . . . Attitudes are implicit responses oriented toward approaching or avoiding, reacting favorably or unfavorably toward an object or symbol. Both 'opinion' and 'attitude' are regarded as intervening variables between which there is a high degree of mutual interaction.[4]

Interage grouping. Students are grouped together within a chronological age range of two or three years instead of the traditional method of placing them with their exact

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[3]J. Lloyd Trump, "Discussion Guide: Organizing Team Teaching" (Washington: National Association of Secondary School Principals, 1959), p. 1. (Mimeographed.)

[4]Chester A. Insko, Theories of Attitude Change (New York: Meredith Publishing Co., 1967), p. 12.

agemates. The age of the students in the interage sample of this study ranged from ten to eleven-years old.

Self-contained classroom. Self-contained refers to a single teaching-learning space which is separated from other instructional areas by permanent walls. One teacher is responsible for the teaching of the majority of the subjects to primarily one group of students in this room.

Open-space areas. It seems necessary at this point to clarify this particular term in order that the reader is not misled in thinking reference is being made to open curriculum or open education. Many times these two terms are mistakenly confused as being synonymous. For the purpose of the present study, open-space areas refer to instructional areas which are larger than the single classroom and which have no permanent interior walls or permanent barriers. These areas can be used flexibly and therefore are convenient for the organization and implementation of an open curriculum but does not insure that this concept will be fulfilled. The two open-space schools in this study are making encouraging efforts in the direction of open curriculum but could not yet qualify for the definition as recently stated by A. Montgomery Johnston who has studied this concept in depth. He defines open curriculum as:

> . . . A school program in which the individual child is given choices of both what to learn and how to learn it. The curriculum also functionally

> integrates instruction of all subjects with each other and with the child's living. It seeks to develop the child not only intellectually and physically but socially and emotionally. Affective learnings are placed as a high priority, and the program is totally democratic, treating children's ideas and feelings as important and significant.[5]

VIII. PROCEDURES

Much time and effort was put forth to locate a recently devised attitude scale which could be used to test the hypothesis that among children aged ten and eleven-years-old, attitudes toward school would differ significantly between those children who attend modern open-spaced, team-teaching schools and those from conventional self-contained classrooms. Not being able to find a recent attitude scale which met all the criteria needed, it seemed imperative that revisions would have to be made in the scale that was chosen. The attitude scale which was selected was created by Tenenbaum, who has been given much credit for his wrok with attitudes. It was assumed that if additions were made using the same form as the other statements on the questionnaire the probability of reducing the reliability and validity of the original instrument would be minimal or null. The additions

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[5]A. Montgomery Johnston, "The Open Curriculum: A Definition" (unpublished paper, University of Tennessee, 1975), pp. 1-2.

which were made dealt with the building (or physical plant) (item XIV), method of evaluation (item XVI), reporting to parents (XVII), and subjects in school (XV). These are all aspects of school life which would be of interest to present-day educators and for that reason were included on the scale. Some minor changes were made in the arrangement of items, but no deletions were made from the original instrument. The revised scale consisted of 25 statements with which the child was asked to indicate the degree of positive or negative opinion on a two to five point scale. The most positive response received a maximum of 5 points while the most negative response received a minimum of 1 point. A middle response (if available) received 3 points with 4 and 2 points possible on a 5-point response item. A 2-point item was either positive, with 5 points, or negative, with the 1-point minimum.

The scale was administered to the students by the researcher in their own classrooms or large study area. The children were told that their answers were private and that only the researcher would see the completed questionnaires. They were instructed not to put their names on their papers. The classroom teacher was not present while the students were responding to the questionnaire. The attitude scale was administered during a two-week period in the Spring of 1975.

The papers were handscored and recorded. After raw data were compiled on composite scores, a chi square was used as the statistical test of significance. Chi square was also used as the statistical test of significance on the items dealing with attitude toward school in general, attitude toward teachers, attitude twoard classmates, attitude toward method of evaluation, and method of reporting to parents. The same test was used to analyze differences, if any, between the two open-space schools which comprised Group B.

Raw data were placed on 2 x 3 and 2 x 2 contingency tables to show the relationship between student attitudes and the type of school environment, self-contained or open-spaced, to which they were exposed. The 2 x 3 tables represented three cells: a low score, a medium score, and a high score. The 2 x 2 tables represented only two possible responses, a positive or high score, or a negative or low score.

When interpreting a 2 x 3 table with two degrees of freedom the obtained chi-square value must be greater than 5.99 to have a significant different at the .05 level of which was the chosen level of significance for this particular study. For a 2 x 2 table with one degree of freedom the obtained chi-square value must be greater than 3.84 in order to have a significant difference at the .05 level.

The attitude scale was administered by the researcher to 278 ten and eleven-year-old (fifth and sixth grade) students

in a self-contained classroom organization, and to 258 ten and eleven-year-old students who attend open-space schools. All pupils from this age level in all three schools responded, so this does not represent a limited or identified group but reports the opinions of the entire population of that age group in all schools represented. The sample included children largely representative of the middle class socio-economic levels in all three schools. All school populations included rural or semi-rural communities where both industrial and professional parent occupations were represented. (See pages 51-53.)

IX. OVERVIEW

Chapter I contains the introduction, purpose of the study, statement of the problem, sources of data, assumptions of the study, limitations, hypotheses, definitions of terms, procedures, and overview.

Chapter II reviews research comparing aspects of open-space, team-teaching educational environments (also includes information on nongraded organization) and traditionally organized schools. The literature was limited to material directly or indirectly related to attitudes and their importance. Also included were some research studies dealing specifically with attitudes of students concerning the various aspects of school life and techniques for measuring attitudes.

No research is cited which deals specifically with a comparison of attitudes of students from the two types of organizational programs being compared in this study. The researcher could find no studies using this exact approach. Chapter II has been divided into two sections: Literature Supporting the Need for the Study, and Review of Other Related Literature. These divisions were necessary because of the nature and purpose of the literature.

Chapter III describes the procedures used in the study.

Chapter IV is a presentation of the data collected.

Chapter V states the summary, conclusions, and implications of the study.

The Appendix includes a copy of the Attitude Scale and a copy of the questionnaire which was sent to the principals.

CHAPTER II

REVIEW OF RELATED LITERATURE

The research literature indicates that both experimental and descriptive studies have been used in examining many of the current innovational instructional programs as they are compared and contrasted to the more traditional types of organization. Many of these studies emphasize the comparison of achievement rather than attitudes. Although achievement data were not of importance in the present study, some of the studies on achievement have been included since this seems to be of great importance to most educators today. Since some research indicates a correlation between a positive attitude toward school and achievement in school, it seems that more emphasis should be placed upon attitudes. Despite the recent trend toward open-space schools, no studies were found dealing specifically with a comparison of attitudes between students in the two types of organizational environments as described in this study.

The present chapter will include some of the studies relevant to continuous progress, team-teaching, nongradedness and open-space environments as compared to the traditional, self-contained programs.

I. LITERATURE SUPPORTING THE NEED FOR THE STUDY

The recent tendency for educational systems to become more concerned with issues pertaining to the growth and development of the child should be noted with interest by educators. Since the school is a key institution affecting large masses of people at an early age, many studies should be conducted concerning the effects this institution has on young people and to try to discover methods of organization which would foster not only academic success on the part of students but also personal happiness.

Combs and Snygg propose the fundamental thesis that all behavior is a function of the individual's perceptions. The important thing to remember about the child in the classroom situation is that it is the perceived situation, the situation as it appears to the child, which influences behavior. Each child, then has his own individual way of perceiving and this perception determines his behavior.[6]

Environment

To understand the child from his own point of view, attention must be focused on the environment. This is where

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[6]A. W. Combs and D. Snygg, Individual Behavior: A Perceptual Approach to Behavior (New York: Harper and Brothers Publishers, 1959), pp. 78-87.

the child interacts with others and forms his perception of the world in which he lives.[7]

Concerns of elementary school children contribute significantly to an increasing force that is calling for adjustments and alterations in the school climate. An analysis of the perceptions of over 12,000 students from more than 100 elementary schools toward the nature of their educational environment reveals that there is an urgent need for principals, teachers, and other educational officials to create refreshing educational surroundings to meet the personal and academic needs of children. A number of schools are already designing programs that emphasize the total atmosphere of the school.[8]

Up to now, there has been considerable research on individual differences, but relatively little has been done to measure differences among environments with which individuals interact. Different environments affect children in different ways and to ignore variation in school climates is to limit understanding of the various ways students think and feel.

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[7]John Antes, Dan Anderson, and M. Vere DeVault, "Elementary Pupils' Perceptions of the Social-Emotional Environment of the Classroom," Psychology in the Schools, 1-2 (January, 1965), p. 41.

[8]Robert L. Sinclair, "Elementary School Educational Environments: Toward Schools that are Responsive to Students," The National Elementary Principal, 49 (April, 1970), p. 53.

Because so little is known at present about the major ways in which elementary school environments vary, it is difficult to determine explicitly how particular environmental conditions affect the development of specific characteristics in elementary school students. In order to increase the present understanding of how educational surroundings affect students, there is a need to discover new and different ways to describe and analyze the diversity of elementary school environments.[9]

The environment is recognized as a complex system of situational determinants that exert an influence upon participating individuals. These determinants may be factors of social, physical, and intellectual significance.[10] In an analysis of the role of environment in behavior, Anastasi defines such determinants as direct influences resulting in behavioral change.[11] Bloom and others also view environment as a powerful determinant of behavior. Bloom characterizes environment as follows:

> . . . We regard the environment as providing a network of forces and factors which surround, engulf, and play on the individual. Although some individuals may resist this network, it will

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[9]Ibid.

[10]Ibid., p. 54.

[11]Anne Anastasi, "Heredity, Environment, and the Question 'How?'" Psychological Review, 65 (July, 1958), pp. 196-207.

> only be the extreme and rare individuals who can completely avoid or escape from these forces. The environment is a shaping and reinforcing force which acts on the individual.[12]

The conceptualization of educational environment is based upon the assumption that behavior is a function of the transactional relationship between the individual and his school surroudings. Dewey, of course, maintained that learning is dependent upon experience. He further suggests that the nature and quality of educational experiences are largely determined by the characteristics of the learner's environment.[13]

Instruments for Measuring Attitudes Toward School

In order to make schools responsive to the needs of learners, it is necessary to tap the ideas and concerns of students in a sensitive and continual manner. The Elementary School Environment Survey (ESES) records students' perceptions by gathering responses to a number of statements about elementary school activities and conditions, statements about the instruction, the curricula, and other features of school life.[14]

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[12]Benjamin Bloom, Stability and Change in Human Characteristics (New York: John Wiley and Sons, Inc., 1964), p. 187.

[13]John Dewey, Experience and Education (New York: Macmillan Company, 1938), pp. 33-50.

[14]Robert L. Sinclair, "Elementary School Environment Survey." (Copyright, 1969) (Unpublished).

A technique was developed by Thurston for constructing scales to measure attitudes. In order to investigate the validity of such a procedure to assess the attitudes of children to school, a scale was devised and applied to several groups of primary and secondary children in Auckland, New Zealand, totaling 1,244. The results indicated clear six differences in the attitude scores, girls liking school more than boys. Secondary school students disliked school more than primary children. Children in the "brighter" divisions tended to like school more than those in the "duller" division this being specially marked with the boys. A comparison of primary school children in areas of "high" and "low" socio-economic status indicated a tendency toward more favorable attitude to school in the "high" area. This was more marked in the case of boys.[15]

Some Studies on Student Attitudes Toward School

Another study was conducted as an attempt to further research in this area by measuring the attitudes of 9-11-year-olf children toward school, assessing the relationship of these attributes to socio-economic status, ability, and sex, and at the same time replicating a study that had been

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[15]A. B. Fitt, "An Experimental STudy of Children's Attitude to School in Auckland, New Zealand," British Journal of Educational Psychology, 26 (February, 1956), p. 30.

carried out in England so that comparisons of English and American children could be made.[16]

A review of the findings of a study by Berk, Rose, and Stewart leads to the conclusion that ability and social class are much more important determiners of attitudes toward school among British than among American children. The findings of this study are in keeping with some previous investigations in demonstrating that an American child's sex, not his ability or social class origins, is the most influential factor in determining his attitudes toward school.[17]

Analysis of data from fourteen sixth grade classrooms in a midwestern metropolitan school system showed that:

1. Attitudes toward school were not related to friendship involvement but were affected in unexpected ways by sex and socio-economic status.

2. There was a positive relationship between "popularity" and school attitudes.

3. Interpersonal attraction and similarity of attitudes were generally positively related, particularly for girls. Two kinds of classroom peer influences on the individual pupil were suggested: (a) those emanating from direct interaction

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[16]Berk, et al., loc. cit.

[17]Ibid., p. 39.

with peers who tend to be of similar (favorable or unfavorable) school attitudes and (b) those modeling after high status peers who are likely to have favorable school attitudes.[18]

Sister Josephina on Environment and Holistic View

The entire body of literature in this study discloses a needed emphasis on a holistic view of the individual, particularly the child in the elementary grades. Since it is not only his brain which affects his behavior but all facets of his growth—physical, emotional, and social—the pupil, a complex macrocosm—demands on-going study by teachers, psychologists, and parents. Fear, anxiety, hatred, and the converse—courage, relaxation, and love—know no grade level boundaries. The ten-year-old experiences the above characteristics to a somewhat less degree than does the high school and college student.

Recognizing that only in a warm, friendly, and understanding atmosphere can true learning grow, teachers should strive to create with the pedagogical artistry characteristic of an effective leader, a learning climate where a positive attitude toward children prevails.[19]

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[18]Glick, loc. it.

[19]Sister Josephina, "A Study of Attitudes in the Elementary Grades," Journal of Educational Sociology, 33 (October, 1959), p. 56.

Attitudes are certain tendencies for or against people, things, concepts, and phenomena that make up a child's life. The self as it evolves is a composite of thoughts and feelings constituting his awareness of his existence and of those around him. The self is acquired and is characterized by an attudinal component, among other components. His feelings toward himself, his background, his present status, his success, and his failure figure significantly in an appraisal of self. Guidance services have repeatedly emphasized the need of self-understanding before any psychological development can be analyzed. Such is the task of educators: to appraise and help pupils appraise their feelings and attitudes in a more realistic manner.

Whenever and wherever pupils meet and mingle, attitudes are born, nurtured, or die because man is a social being having an affective life as well as a cognitive one. The school environment, then, is the breeding ground for both positive and negative attitude growth. If the outstanding attitudes of the world around the pupil have been hostile, unfriendly, or negative he will view his environment with similar attitudes. Many of these pupils develop attitudes, strategies, and mechanisms needed for self-protection.

Because of her interest in the importance of the study of attitudes, Sister Josephina used a scale which Tenenbaum constructed in 1941 to examine the attitudes of pupils in

grades 6 and 7 of three elementary schools in New York City. Without any change in the scale, nine hundred pupils in grades 5 through 8 in nine parochial schools were administered the scale.[20]

It was noted that girls showed a larger percent than boys in each grade for the statement, "I like my teacher very much." The grade level where the largest percent of both boys and girls who did not like their teacher appeared to be grade eight.[21]

It was in the area of subject preference that the personality of the teacher came into sharp focus. The teacher's knowledge of the subject and use of the techniques in presenting it had a significant influence upon the pupils' liking or disliking a specific subject. Therefore, the enthusiasm or indifference for, and the excellent or poor presentation of the daily lesson transfers in no small measure in building negative or positive attitudes toward a subject. Likewise, the success or failure in a learning situation bears much weight in forming pupil attitude for that subject and even for school in general.

Selecting the three "best liked" subjects for all grades, a pattern emerged consisting of spelling, arithmetic, and history.[22]

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[20]Ibid., p. 57.

[21]Ibid., p. 58.

[22]Ibid., p. 59.

The "least liked" column revealed arithmetic and English holding the first two positions. Sister Josephina contends that the element of drill and progressive difficulty connected with English and arithmetic may be the underlying cause. It was emphasized that research investigation of attitudes of students toward all aspects of school life is needed.

It is significant to note that girls exceeded the boys by a higher percentage in "Liking School" in general.[23]

A number of studies have demonstrated that the behavior of significant adults has an effect on children's emotional health and behavior, but few studies have collected data on ways in which children perceive these adults. As Combs and Snygg have said, "People do not behave according to the facts as others see them. They behave according to the facts as they see them. What governs behavior from the point of view of the individual himself are his unique perceptions of himself and the world in which he lives, the meanings things have for him."[24]

Motivation

Only relatively recently has it been recognized that cognitive as well as affective factors account for the differential affects of positive and negative attitudinal

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[23]Ibid., p. 60.

[24]Combs and Snygg, loc. cit.

bias on the learning of material.[25] This recognition was largely an outgrowth of Peak's theoretical formulation of attitude structure as consisting of an interrelated group of ideas organized around a conceptual nucleus and manifesting affective properties.[26] How the influence of the effective component of attitude is manifested is clear enough: when the learner's attitude toward school is favorable, he or she is more highly motivated to learn, and accordingly puts forth more vigorous, persistent, and concentrated learning effort. When, on the other hand, the learner's attitude toward school is unfavorable, both motivational and cognitive variables operate in precisely the opposite direction, and induce corresponding negative effects on learning.[27]

Creating a learning situation in which students learn involves at least some understanding of what it is that motivates young people to do good work in school. Some persons believe that motivation is essentially an inherent thing; that students come to school with their enrgies and enthusiasms for learning already a built-in part of their psychological framework. Others think that "the school"

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[25]David P. Ausubel, "Motivation and Classroom Learning," Education, 86 (April, 1966), p. 481.

[26]Helen Peak, "Attitude and Motivation," Nebraska Symposium on Motivation (Lincoln: University of Nebraska Press, 1955), pp. 149-188.

[27]Ausubel, op. cit., p. 482.

must attempt to do something to learners "to motivate them" so they will want to learn.[28]

Faced with the problem of trying to get a sharper picture of students' motivation, a group of interested principals, teachers, and parents posed the following question: "What motivates young people to try to do good work in school?"

To answer this question a simple Sentence Completion Test-type instrument was administered to approximately 1,050 students in 6 elementary, 6 junior high, and 6 senior high schools during the month of April of 1961. Approximately 400 fifth graders, 325 eighth graders, and 325 eleventh graders were asked to complete the following incomplete sentence: "I try to do good work in school when . . ."

Although the results indicated that no single factor accounted for a significant proportion of the total number of responses, five factors did account for approximately half of the responses: interest in the subject matter, liking the teacher and the subject, grades and other forms of recognition, status, and the physical factors in the classroom (light, temperature, and distraction). Of course, the reader immediately recognizes a display of attitudes toward the school and its environment.[29]

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[28]Jack R. Frymier, "A Study of Students' Motivation to Do Good Work in School," The Journal of Educational Research, 57 (January, 1964), p. 239.

[29]Ibid., p. 242.

School as an Extension of the Home

There is much to be done in developing and maintaining a constructive relationship between the student and his or her school. This is the degree to which the school, as a social system, fits the intellectual, social skills, and expectations of the child. If the school experience is viewed by the child as being strange, uncomfortable, and threatening it is obvious that the child will have more difficulty in using this experience creatively and enjoyably. Put it another way, if the school environment appears familiar and manageable to all children, a larger proportion of them will be able to respond constructively to it.

The child relates to the school through his own growing and constantly changing social and intellectual skills. The school will be most effective when it provides a setting and experience closely matched to the child's social readiness as well as intellectual readiness. His perception of school is necessarily based upon a comparison between the social environment of the classroom and other social environments with which he is familiar.[30] Viewed in this way it is clear that the child will best cope with the school experience if this experience closely resembles life outside of school.

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[30]Thomas Gladwin, "The School, Society, and the Child," Psychology in the Schools, 1-2 (April, 1964), p. 167.

Therefore, the environment should be made as homelike as possible.[31]

But the question is raised, which school environment is best? In which environment is the child more relaxed and satisfied? It seems appropriate that students be allowed to answer these questions. Individual or group discussions, surveys, interviews, questionnaires, inventories, and other related devices may be used for gathering this information. Students who are now attending elementary school or who have recently moved from an elementary school can provide many insights on how they feel about the school and how to improve the program and environment. Such information can provide constructive criticism of existing practices, a proving ground for new suggestions, and a fertile source of ideas for changes and improvements. They can be rich and exciting experiences for adults and students and it is very surprising that studies of this nature are so seldom used.[32]

Two children of equal intelligence enter first grade at the age of six. One learns quickly, continues through each grade level achieving success and finally is graduated from high school with high honors.

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[31] Ibid., p. 168.

[32] Ibid.

The other has immediate difficulty in learning. In the intermediate grades he cannot understand his lessons in science, social studies, and other fields of learning. He repeats several grades and at last drops out of school in the tenth grade to join the ranks of the unemployed. What factors make the difference between these two opposite types of school careers?[33]

It would be a rash assumption to point to any one circumstance as the determinant of success or failure in school. However, many educators agree that differences in attitude toward school are largely responsible for varying school achievement.[34]

Although the primary role of the school is to foster learning in order to prepare each rising generation for a productive life in this society, it seems appropriate and necessary at this time to introduce a broader consideration of the role of the school in the total social, psychological, and intellectual development of the child. There are two functions which school systems have been forced step by step to assume, whether or not they like it. The responsibilities schools have been forced to assume are, first, the duties of parents and, second, the determination of occupational fitness.

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[33]Marjorie Hunt Sutton, "Attitudes of Young Children Toward Reading," Education, 85 (December, 1964), p. 238.

[34]Ibid.

At present, the question which remains largely unexplored is identification of the ways in which the school experience can most effectively fit into the broader social development of the child, and thereby make the total school experience more constructive and enjoyable. Much time has passed since the days of the little red school house when a school had done its duty by providing the child with the basic intellectual tools for social and occupational adequacy, commonly expressed as the three R's. Now the school is in varying degrees expected to address itself to the child's ethics, morals, patriotism, self-discipline, physical health, social poise, and personality adjustment.[35]

The second function mentioned above was the determination of the occupational fitness of its students. What is being spoken of here is the increasing necessity for presenting a high school diploma in order to be considered for employment in any but the most menial of jobs.[36]

At the high school level, at a time when academic failure or lack of motivation usually means the end of schooling, programs are being developed to adapt the school experience more closely to the needs which the student perceives for himself. However, these programs are frequently too little

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[35]Gladwin, op. cit., p. 164.

[36]Ibid., p. 165.

and too late. The child has come to school with a poor attitude, behind, and essentially unprepared to succeed. Many of these children, whether or not their basic intelligence is adequate, have acquired a perception of themselves as scholastically inadequate and have developed the attitude that school is a waste of time and most teachers are either incompetent or hostile. The inadequacy of these children—and it does not matter whether it is attitude or intelligence—is brought with them into high school from the elementary school, and in time many of them become dropouts. The question which elementary school systems must ask themselves is this: What changes can be effected in the schools, whether it be program or plant, such that it will be a more positive and valuable experience for more of tis students?[37]

II. REVIEW OF OTHER RELATED LITERATURE

In 1958 Goodlad wrote, "Nongrading is supported by some plausible-sounding claims and theories rather than by research."[38] In 1959, with Anderson he wrote in regard to comparative achievement of pupils in graded and nongraded

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[37]Ibid., p. 166.

[38]John I. Goodlad, "Classroom Organization," Encyclopedia of Educational Research (New York: Macmillan Company, 1960), pp. 221-226.

schools, "There is no evidence to suggest anything. We have little more than inadequate first-hand impressions to go on."[39] From 1959 through 1965, eight comparative research studies were reported. The findings are summarized but no attempt has been made to evaluate the relative quality of the investigations.

Academic Achievement and School Organization

Six studies made comparisons in reading achievement primarily in grades 3, 4, 5, and 6. Four studies found the performance of the nongraded students significantly superior to that of the graded pupils; one found no difference, and one found the graded control group significantly better than the nongraded experimental group. Of five studies that compared the two kinds of organizations on arithmetic achievement, four found significant advantages in favor of non-grading; the findings of the other study favored graded classes. All three comparisons on spelling achievement favored the nongraded pupils.[40]

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[39]John I. Goodlad and Robert H. Anderson, The Nongraded Elementary School (New York: Harcourt, Brace, and World, 1959), p. 57.

[40]Louis T. DeLorenzo and Ruth Salter, "Co-operative Research on the Non-graded Primary," Elementary School Journal, 65 (February, 1965), pp. 273-274.

Much of the literature on the nongraded school consists of reports that there is an improved school atmosphere, that tensions in children are reduced, and that teachers are more aware of individual differences.[41]

The relationship between attitudes and academic achievement has been of increasing interest in educational circles. This interest led to the development of a predictive instrument by Rothman, which consisted of sixteen significantly discriminating diverse attitudinal statements. This scale was named the Multidimensional Achievement Orientation (Scale MAOS). A cross validation of this scale with 140 subjects, heterogeneous in comparison, ranging in age from 11 to 18, and ranging in grade from 6 through 12, yielded significant relationships between scores on the test and both scholastic averages and future academic aspirations.[42]

The Teacher in the Classroom Environment

A study was done to explore the concepts that elementary school children have of their teachers and some of the conditions that influence these concepts. The technique of exploration involved the use of the drawings that children

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[41]Wilmajean Williams, "Academic Achievement in a Graded School and in a Non-graded School," Elementary School Journal, 67 (December, 1966), p. 130.

[42]Harvey R. Austrin, "Cross Validation of an Attitude Scale for the Identification of High and Low Academic Achievers," The Journal of Educational Research, 58 (May, 1965), p. 426.

made of their classes and teachers collected under standardized conditions. The data were consistent with the hypothesis that boys are more rejecting of their teachers than girls, and that boys show no increase in rejection of their teachers as age increases, but that girls show an increasing rejection. Finally, the degree to which girls show a negative attitude toward their teacher depends to some extent upon the characteristics of the teacher.[43]

In a study by Frymier, younger students seemed to evidence greater personal initiative and inherent motivation while older students apparently assumed that teachers should make them want to learn.[44]

Rogers, on the basis of his theoretical framework of client-centered therapy, has formulated a conception which could provide an important vantage point for studying the teacher-pupil relationship and could provide the context of a sound theory from which one could hope for useful, relevant, and widely applicable findings. According to Rogers' conception, constructive growth and change come about only when the pupil perceives and experiences a certain psychological climate in the relationship with his teacher. There are feelings or attitudes which must be experienced by the teacher

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[43]Gayle F. Gregersen and Robert M. Travers, "A Study of the Child's Concept of the Teacher," The Journal of Educational Research, 61 (March, 1968), p. 224.

[44]Frymier, loc. cit.

and perceived by the pupil for an effective helping relationship. These attitudinal or experimental elements are:

1. Congruence. A person is what he is and his relationship with another person is genuine and without front or facade.

2. Empathy. A person is experiencing an accurate awareness of another person's world and is able to communicate some of the significant fragments of this understanding.

3. Positive regard. A person is experiencing positive attitudes toward another person. He is warm, accepting, and cares for the person in a nonpossessive way.

4. Unconditional regard. A person prizes another person in a total, rather than in a conditional, way.

In addition, the teacher is considered the most significant factor in setting the level of conditions in the relationship, though the pupil, too, has some influence on the quality of the relationship. Although the relationship may be used differently by different pupils, it is neither necessary nor helpful for the teacher to alter the relationship in specific ways for specific kinds of pupils. Thus, within theoretical formuations, the teacher is the primary variable in setting the conditions for the quality of the relationship.[45]

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[45]Carl Rogers, "The Characteristics of a Helping Relationship," Harvard Educational Review, 32 (1962), pp. 416-430.

The purpose of this particular study was to put to an empirical test one of Carl Rogers' theoretical conceptions regarding the quality of the inter-personal relationship between teachers and pupils.

The sample of subjects consisted of 452 pupils and 18 teachers in seventh and eigth grade, self-contained elementary school classrooms in Sanoma County, California.

All pupils in the sample were administered three instruments:

1. Relationship Inventory. This inventory is by Barrett-Lennard (1962) to test Rogers' conception of the necessary conditions for therapeutic change. It contains 64 items, which yield a total score and four subtest scores: empathy, congruence, level of regard, and unconditional regard.

2. Pupil Rating of the Teacher. This scale is based on the Stanford Teacher Confidence Appraisal Guide. The pupil rates the teacher on nine teaching tasks.

3. Social Distance Scale. (Scrier in 1962) Each pupil rates every other pupil.

Results indicated that within a school setting, pupils who are able to perform at a higher level in the academic area, or have a potential for doing well, perceive their teachers more favorably than pupils who do poorly in school or lack ability to do well. This is understandable, as

schools place so much emphasis upon academic achievement rather than the child and pupils who do well are rewarded not only by favorable report cards but in other subtle ways by teachers. This was further confirmed by the results which showed that pupils rated higher or lower by their teachers on achievement and behavior status, perceived their teachers differently on the helping relationship variable.[46]

A study was conducted by Antes who was interested in examining children's perceptions of certain aspects of the classroom social-emotional environment. In summarizing the results of the study as to sex differences, boys differed from girls in several ways. They saw their teachers as "directive" more frequently than did the girls. Girls, however, perceived teachers as more "relatable" and as more interested in a "factual orientation" than did the boys. Boys were perceived by girls differently than were girls; being more aggressive and less withdrawn than girls. It is interesting to note, however, that in terms of self concept, boys rated themselves as neither more aggressive nor less withdrawn than girls.[47]

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[46]Jack M. Thompson, "The Effect of Pupil Characteristics Upon Pupil Perception of the Teacher," Psychology in the Schools, 6 (April, 1969), pp. 206-207.

[47]Antes, loc. cit.

Girls' attitudes toward school were significantly more positive than were boys' attitudes.

It is interesting to note the decreased directiveness perceived by students in the upper grades. In other yet unpublished data of the project, the ideal teacher of primary grade pupils was found to be more directive than that of the intermediate grade pupils.[48]

In keeping with much that is known about the manner in which most school environments are designed for the middle achievement groups, the middle achievement pupils in this study were perceived by self and peers as less withdrawn than either the low or high achievement groups.

Finally, the question should be raised concerning the extent to which individual teachers recognize perception differences toward school among their pupils in their classes. When teachers are aware of these individual differences in their classes, how able are they to provide classroom social-emotional climates conducive to greater mental health on the part of all pupils.[49]

Classmates in the Classroom Environment

The hypothesis of a study done by Freedman and Suter was that the child, as he progresses through elementary school,

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[48] Ibid., p. 44.

[49] Ibid., p. 46.

may become increasingly separated from both his classmates and his role as a student as a result of certain aspects of the classroom environment.[50] Holt gave considerable evidence that the process of elementary education may serve to destroy the child's motivation to learn by making him afraid to experiment for fear of being wrong, by encouraging him to feel that the aim of all he does in school is nothing more than to get a good mark on a test, and by giving him boring tasks to which he need devote only a small part of his attention.[51] These tasks are often employed only to keep the child busy while others receive the teacher's attention. Such waiting is one of many frustrations which result from the fact that in most classrooms there is only one teacher for many students. In the case of classroom discussion, the delay is not only frustrating but often futile, for the child frequently is not recognized at all. He is subject to such conflicting demands as the expectation that he become intensely absorbed in the subject of the teaching session while still being able to shift his interest at the sound of a bell. In addition, there is a certain social distractibility that arises as a result of most classroom environments.

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[50]Robert Freedman and Kathryn Suter, "The Development of Feelings of Detachment in Elementary School Children," Psychology in the Schools, 6 (January, 1969), p. 83.

[51]John Holt, How Children Fail (New York: Pitman Publishing Corporation, 1964), pp. 167-170.

The pupil must learn to turn off his interest in the people around him in order to meet the requirements of classroom discipline.[52]

The Dropout's Perception of School

Since interest in the school dropout is running at an all-time high, it seems appropriate that some research on this subject should be presented. A review of the literature reveals that there is little in it wherein the dropout speaks for himself and presents his side of the story.

In the interest of learning first-hand how the dropout sees the situation of the school, two groups of impoverished, male, Negro dropouts were interviewed intensively. One group was composed of seven members and the other had nine. The boys were encouraged to interact with each other in pursuing the question: "Why is it that some boys drop out of school?"[53]

In the study, the focus was limited to the youth's perception of school personnel—the principal, the teacher, the counselor, and the school policeman.

The young men tended to define each class of school personnel in negative terms. From their perceptions it

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[52]Freedman and Suter, loc. cit.

[53]George H. Weber and Annabelle B. Motz, "School as Perceived by the Dropout," The Journal of Negro Education, 37 (Spring, 1968), p. 127.

appeared that there was a great deal of social distance between staff and students.[54]

Although the sample was very limited and the desire for peer social acceptability within the interview situation itself may have silenced any young man who conceivably had a more favorable perception of the school's personnel, there is little doubt that the school as a social institution is composed of a number of personnel who behave in ways to cause students to have a negative attitude toward school.

Two key terms that might summarize most of the comments in the preceding study are that the school is "indifference" and "punitive."[55]

Student Opinions of Team-Teaching

Turning attention to children's opinion of a team-teaching environment, a study was done to report the reactions of children who took part in a team-teaching project at Devonshire Elementary School in Skokie, Illinois, a suburb of Chicago.[56]

Most studies of team-teaching minimize pupils' opinions or give incomplete evidence of pupils' feelings. A review of articles on team-teaching in the elementary school, listed

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[54]Ibid., p. 133.

[55]Ibid., p. 134.

[56]Galen M. Jarvis and Roy C. Fleming, "Team-Teaching as Sixth-Graders See It," Elementary School Journal, 66 (October, 1965), p. 35.

in the Education Index, shows only an occasional reference to interviews of pupils and no transcript of their responses.

In the Devonshire study, after interviewing students who were randomly selected by asking them ten questions, the findings indicated that in the beginning the pupils were overwhelmed by the team-teaching situation, but they adjusted quickly.[57]

The pupils felt that the main advantage of team-teaching was the opportunity to be in small instructional groups and have different teachers.

The pupils felt that the main disadvantage of team-teaching was the "over-crowding" of 75 pupils in homerooms.

The pupils would choose team-teaching over a self-contained classroom. This report supports other studies which found that elementary school children have a high positive feeling about team-teaching.[58]

Due to the possibility that student's feelings and attitudes play an all-important role in learning, another study is being cited that was conducted to ascertain whether or not there was a difference in the feelings and attitudes of students in team-teaching and self-contained classes. To do this questions were devised to measure how each student felt about his social-self, interest in school, school achievement, teachers, and responsibility. In some areas

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[57] Ibid., p. 39.

[58] Ibid.

there were found to be significant differences in the feelings and attitudes of students in the two groups, while in others there was very little difference.[59]

One contributing factor to the lack of research in team-teaching lies in the fact that there is no precise definition of team-teaching. Therefore, team-teaching will vary from team to team, just as the definition and practice of non-gradedness, open space, and other innovative terms vary from one situation to the other.[60]

The purpose of this particular study was to gain a knowledge of opinions of students in the team-teaching program as compared to those in self-contained classes. They were asked questions concerning what they liked best and least about their class, their concept of themselves and their class and how improvement could be made, and how they used their free time in the classroom.

A questionnaire was given to 1,137 fourth, fifth, and sixth grade students in seven schools. There were 543 students in the team-teaching classrooms and 594 in self-contained classes. The economic area was low average to average.[61]

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[59] Pierson, loc. cit.

[60] Ibid.

[61] Ibid., p. 159.

The criteria for team-teaching was listed as follows:

1. Two or more teachers share the teaching responsibility for the same students.

2. Teachers planned together for the teaching of these students.

3. There was independent study and large and small group instruction.

4. Groups were flexible, meaning there were changes when changes were needed.

The determining factors for self-contained organization were the following:

1. Students were kept together as a group.

2. They were taught by the one teacher assigned to that class.

Questionnaires were administered by researchers with no classroom teacher present. Students were told that teachers would not see the papers. The subjects were requested not to put their names on the papers.

The findings reveal that:

-The self-contained students hold teachers in greatest esteem.

-The team-teaching students view classroom activities as more important.

-40 percent of the team-teaching students viewed their class as best.

-26 percent of the self-contained students viewed their class as best.

-Academic achievement was not greatly affected. There was a slight difference favoring team-teaching.

-The self-contained students revealed the greatest dependency upon teachers with team-teaching students being more self-reliant, self-directed, and independent.[62]

A common method used in "evaluating" pupil adjustment in team-teaching situations has been simply to ask the pupils if they enjoyed being taught by a team. Usually sampled student opinion was highly favorable in six studies quoted by Lambert's study.[63]

In a series of booklets called, Nongrading Extension Service, published by Science Research Associates, Inc., the following articles were presented under sections called, "A Child Speaks." The following were taken as direct quotes from children who were asked to tell how they felt about the nongraded, team-teaching program:

> I like this non-graded system because you get to see more teachers and get used to them. You also get to see more children and make more friends. Sometimes your classes are large, and sometimes small. You change classes and you work at your own level. In reading you get to pick the book you want to read and enjoy. I also like checking others

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[62] Ibid., p. 163.

[63] Philip Lambert, William L. Goodwin, and William Wiersma, "A Comparison of Pupil Adjustment in Team and Self-Contained Organizations," The Journal of Educational Research, 58 (March, 1965), p. 311.

who read that book. When you are checker you make cards of your own. When you do not know how to say a word, or do not know what it means, you look it up in the dictionary and put it on a piece of paper. After you finish reading the book you make questions.[64]

I think this system is good in many ways. I like special projects, reading at my own level, being allowed to go ahead to harder material, and all the different ways we do in class. I don't want the debates or group discussions changed in any way because I really learned a lot during these. They were terrific. I like the things we did because they were so well planned. Social Studies is interesting and lively. The unit on Current Problems probably had the biggest effect on me. We studied good units this year.[65]

I like the intermediate unit because you have different teachers for different subjects. I really do not know whether I would like to go back to the other system because I have been in classes like these since I was in second grade. One thing I do not like is that in most tests in my classes some fourth level and some sixth level people have the same tests and get marked the same way. One thing I like is that you get to know more people better if you are all together.[66]

Why I like the nongraded schools—I like the idea of picking the book of your choice to read.

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[64]Hope Danielson, "Implementing and Organizing a Nongraded School," Nongrading Extension Service (Chicago: Science Research Associates, Inc., 1968), p. 1.

[65]Nancy Swidler, "Non-grading the Social Studies," Nongrading Extension Service (Chicago: Science Research Associates, Inc., 1969), p. 1.

[66]Joseph M. Utka, "Application in the Intermediate Unit," Nongrading Extension Service (Chicago: Science Research Associates, Inc., 1968), p. 2.

> I also like having three very nice teachers and being able to go to each for a different subject.
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> Why I don't like nongraded schools—I don't have any reason at all.[67]

III. SUMMARY

Studies of both an experimental and a descriptive design have been used to examine current innovative educational programs compared to those of a more traditional organization. Many of these studies emphasize the comparison of achievement rather than attitudes of students toward school. Since some research indicates a correlation between a positive attitude toward school and achievement in school, it seems that more emphasis should be placed on attitudes.

The literature which supports the need for a comparative study of attitudes toward school places great emphasis upon the total environment because more than ever before students are voicing dissatisfactions with their educational environment. Many schools are already designing programs that emphasize the total atmosphere of the school.

Up to now there has been much research on individual differences but relatively little on the environments with which these individuals interact. There is a need to discover

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[67]Muriel Lundy, "Application in the Primary Unit," Nongrading Extension Service (Chicago: Science Research Associates, Inc., 1969), p. 1.

new and different ways to describe and analyze elementary school environments. Environment is considered to be the total situation which may have an influence upon the individual.

Thurston developed a technique which has been widely known for measuring attitudes.

Many studies indicate clear sex differences in attitude scores, girls liking school more than boys, primary scholars being more favorable than secondary, brighter students liking school more than duller, and "high" socio-economic students more favorable than "low."

The entire body of literature emphasizes a need for the holistic view of the student.

It has been recognized that when the learner's attitude toward school is favorable he is more highly motivated to learn.

When trying to discover what motivates young people to try to learn, a group of researchers discovered five major factors: interest in the subject, liking the teacher and the subject, grades and other forms of rewards, and physical factors in the classroom. If the school is viewed by the child as strange, uncomfortable, and threatening it is obvious that he will have difficulty using this experience effectively. If the school environment appears familiar, relaxed, and manageable, students will be able to respond

constructively. When the perception of school is comparable to life outside of school it is easier for the student to relate and to learn. When students lack motivation and have a poor attitude toward school they often become school dropouts. This fact alone should motivate educators to conduct more research on attitudes toward school and how these attitudes can be improved.

Many more related studies in the area of nongradedness and other innovative programs have been done by Goodlad, Anderson, and others.

Studies on attitudes toward the teacher have revealed that boys are more rejecting of their teachers than girls and that younger students seem to evidence greater personal initiative and inherent motivation than older students.

Rogers, in his child-centered therapy, has formulated a concept that growth and change comes when the pupil perceives and experiences a certain psychological climate in relationship with his teacher.

The hypothesis of a study done by Freedman and Suter was that the child, as he progresses through elementary school, may develop a poor attitude toward school because of certain aspects of the classroom environment and that the process of elementary education may serve to destroy the child's motivation to learn.

In studies of team-teaching situations the pupils would choose team-teaching over a self-contained classroom.

There is a lack of research on team-teaching, nongradedness, open space, and other innovative practices because of the difficulty in defining these aspects of education. Programs tend to vary from one situation to the other.

CHAPTER III

RESEARCH METHODOLOGY AND INSTRUMENT

I. INTRODUCTION

Chapter III contains a description of the research methodology and the instrument used in the study. Specific areas discussed are as follows:

1. An outline of the problems and a restatement of the hypotheses to be tested.
2. The plan of research.
3. A description of the school programs compared in the study.
4. The research instrument.
5. Administration of the instrument.
6. Data analysis procedures.

II. THE PROBLEM AND HYPOTHESES

The purpose of the study was to analyze differences in attitudes toward school of ten and eleven-year-old students who had experienced the self-contained classroom structure and the same age group who had experienced open-space, team-teaching situations. The stage for the study was set by formulation of these null hypotheses:

A. There will be no significant difference on any variable dealing with attitude toward school between the two open-space schools that form the experiment group of this study (Group B).

B. There will be no significant difference between Group B (open-space students) and Group A (self-contained students) on attitudes toward:

1. School in general
2. Teachers
3. Classmates
4. The building (or physical plant)
5. Method of evaluation
6. Method of reporting to parents

III. THE PLAN OF RESEARCH

One of the most difficult and time consuming tasks of the entire study was the location of an experimental and control group which could be considered parallel in respect to geographic location, economic level, the type of school organization heeded, sample size, and the availability of the desired age group.

All the sample schools could not come from the system which was originally selected for the study because by that time most students had been placed in open-space schools or the schools that remained self-contained were from completely

different socio-economic backgrounds which could not be comparable in such a study.

The next preferred choice could not be used because all the ten and eleven-year-old students were already experiencing the open-space concept in new middle schools.

A Florida school was considered as an experimental school since the open-space concept is a very common procedure in that area, but the idea was rejected because of the vast difference in geographic location which to some researchers could invalidate the comparative research of this nature.

Some other surrounding school systems were contacted but also rejected because of the extreme different in the socio-economic levels of the communities.

After weeks of searching via telephone calls and letters one of the two schools which formed the open-space experimental group was finally selected. Another school in a nearby county would serve as the self-contained control group. Both of these schools are located in college communities in a semi-rural area with relatively new and expensive subdivisions in the near or immediate area. Professional as well as industrial occupations were representative of the parents in both communities. However, to try to maintain a closer balance in the size and socio-economic level of the experimental and control groups it was decided to try to locate another open-space school to be combined with the one school already

selected to form the experimental group. The self-contained school, being a large elementary school, was going to be more than three times the sample size of the open-space school, which is the smallest elementary school in the system. It also has one of the highest economic levels of any school in the area, with only 12 percent low income students in the whole school. The control group has 24 percent low income students represented in the total school population. Therefore, the search began for a school which could be considered parallel and would in no way be significantly different from the experimental group already selected in order to be grouped to form the total experimental group for the study.

The second experimental school is located in an area very similar to the control school in an adjoining county. It is also of the open-space, team-teaching organization and also meeting the requirement of being in operation at least three years. The approximate 18 percent low income group at this school when combined with the other experimental population to form the total experimental group would be approximately 15 percent low income in the experimental population and 24 percent in the control group. When contacted by telephone Mr. Henry Gentry, Assistant Director of Tennessee Compensatory Education in Nashville, reported that on the state average this would mean that the control group borders as a low income school and that the experimental group borders as below average income for Title I purposes.

This is the only guideline as followed by Title I programs. There are many different methods of forming class systems to determine classification for individuals, communities, and schools. One common method is the consideration of the type of employment available in the general area. Following this guideline as a factor determine qualifications for parallel schools, all the school populations represented in this study include rural or semi-rural communities with both industrial and professional parent occupations represented. Both the first experimental school and the control school are college communities as well as industrial. Although the control school and the second experimental school are basically rural communities a great portion of their occupations are industrial. The community of the control group is also a zinc mining community. Because of these characteristics and since Mr. Gentry did not report either group as being extremely high or above average and the other extremely low, this researcher strongly feels that all things being considered the schools represent typical low to average middle-class working families. The fact that they border lower class and below average class on Title I is for identification for that particular program alone and does not prove a significant difference for the purposes of this research. It would almost be an impossibility to find two groups with the identical socio-economic figures and

description. However, to some researchers this could be considered a weakness of the sample groups used in the study.

After establishing the experimental and control groups and receiving permission not only from the principals of the schools involved but also the superintendents, arrangements were made for specific testing dates and times to be understood by the teachers who would not be present during the administration of the questionnaire.

IV. DESCRIPTION OF SCHOOL PROGRAMS

In order for the reader to be able to form a comparison of the school programs, the researcher compiled a brief questionnaire which was sent to all three principals who were requested to react to the checklist type form to describe their schools. The items covered on the questionnaire were: grades (or method of evaluation), method of reporting to parents, type of grouping procedure, size of groups, teaming, and method of presentation of material.

Experimental School Programs

The primary weakness of the sample, as viewed by the researcher, is the differences in some aspects of the school programs of the experimental school groups. The related research of this study reported that it is almost impossible to find two open-space, team-teaching, or nongraded schools

with the same program, and the sample schools in this study were no exceptions.

The first experimental school that was selected would probably more closely meet the requirements of a nongraded school since there is no form of number or letter grades used but rather teachers report to parents by using anecdotal-type notes on the parent-conference forms. The second experimental school does use number grades as a method of evaluation and reporting. The grade card is also used in addition to the parent conference, whereas the first school only uses the parent conference as a method of reporting to parents.

At Experimental School Number One students are placed in small homogeneous and heterogeneous groups, depending upon the need and purpose at that time. These groups change often. Homeroom groups are for a very short duration and are only for the purpose of administration. Experimental School Number Two utilizes the heterogeneous groups only which are larger and more permanent than the groups at School One. Both schools have teams of teachers of two to four on a team. Both school administrators report a wide variety of presentation of material by teachers including basal and supplementary texts, projects, and individualized instruction.

Although differences between the two experimental schools do exist, the researcher still maintains that there will not be enough difference to cause a significant difference in the

attitude of students toward school or on any other variable in the study. This was put into the form of a hypothesis for this study. Because any differences that may exist between the two experimental schools seem to be only minor and insignificant, the researcher is confident that no significant differences exist and that the experimental group is therefore considered a strong sample for this particular study.

Control School Program

The students of this school are housed in an old but very well-kept physical plant with self-contained classrooms rather than the open-space facilities at the experimental schools. One teacher is responsible for a basically permanent group which is primarily heterogeneous in nature. No team-teaching is practiced. Students receive letter and number grades, and parents receive reports in the form of grade cards, although conferences also serve as a supplement when needed. The method of presentation of material is primarily the lecture, demonstration, and textbook approach with the teacher serving as the director. Some student projects serve as a supplementary device.

The control school may present a strong sample school because it possibly meets the qualifications for a typical self-contained school.

V. THE RESEARCH INSTRUMENT

At the same time the search was being conducted for an appropriate experimental and control group, a similar and also very difficult search was being made by the researcher for an appropriate instrument to measure student attitudes toward school. Weeks went into the preparation of an original instrument which was abandoned because of the time and effort which would be required to prove its validity and reliability.

It became apparent to the researcher that it is very difficult to study attitudes because it is hard to create or locate an instrument that can capture a person's true feelings, particularly the age group in this study. It probably would have been better to use a verbal-type questionnaire where students would be able to honestly verbalize their feelings on the subject, but that too would have its weaknesses and limitations because students sometimes tend to say what they feel they are expected to say, it would be difficult to score that type of response, and the whole process would be so time consuming that it would be almost impossible.

Realizing the problems involved in this type of research, the researcher selected an instrument which was created by Tenenbaum who has been credited with doing much work in this particular field. The reliability and validity of this particular scale were proven before its original use. The

items comprising the questionnaire were divided into two groups and a coefficient of correlation was obtained between the two halves on the scores of one hundred cases which were selected at random. The self-correlation obtained, using the Pearson product-moment method, was r = .743. The Spearman-Brown correction formula was applied and the coefficient of correlation obtained was r = .853.[68]

Besides being able to obtain a composite score on student attitudes toward school the scale also provides the possibility of obtaining subscores on the other items needed in this study. To obtain student attitudes toward school in general the researcher compiled the responses to items I, II, III, V, VI, IX, X, XII, XIII, XIV, XV, XVI, XVII, XX, XXI, XXII, XXIII, XXIV, and XXV. For attitude toward teacher items VII, VIII, XI, and XVIII were compiled. The same thing was done to obtain student attitudes toward classmates. Only items IV and XIX were compiled to derive attitudes toward classmates. To obtain the student's attitude toward the building or physical plant only item XIV was analyzed, and the single item XIV was analyzed for the student's attitude toward the teacher's method of evaluation. Item XVII reveals

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[68] Samuel Tenenbaum, "A Test to Measure a Child's Attitude Toward School, Teachers, and Classmates," Educational Administration and Supervision, 26 (March, 1940), pp. 176-188.

the student's attitude toward the method of reporting to parents.

VI. ADMINISTRATION OF THE INSTRUMENT

The attitude scale was administered by the researcher to 278 ten and eleven-year-old (fifth and sixth grade) students of the control group and to 258 ten and eleven-year-olds from the two schools which comprised the experimental group. All pupils from this age level in all three schools responded so this reports the opinions of the total population of that age group in all the schools represented. The sample included largely children representative of the middle class socio-economic levels.

VII. DATA ANALYSIS PROCEDURES

The papers were hand-scored and recorded. The raw data were compiled and placed on 2 x 3 and 2 x 2 contingency tables to show the relationship between student attitudes toward school and the type of school environment, self-contained or open-space, to which the students were exposed. The 2 x 3 tables represented three cells: a low score, a medium score, and a high score. The 2 x 2 tables represented only two possible scores, a positive or high score, and a negative or low score.

The chi-square test was used as the statistical method to test for significance of difference on the composite score to compare student attitudes toward school as revealed from the entire scale. The chi-square test was also used as the statistical test of significance of difference on the items dealing with attitude toward school in general, attitude toward teachers, attitude toward classmates, attitude toward the building, attitude toward the method of evaluation and the method of reporting to parents. The same test was also used to analyze differences, if any, between the two open-space schools which comprised the experimental group. The chi-square formula was taken from Spiegel's book.[69]

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[69]Spiegel, Murray R. Theory and Problems of Statistics (New York: Schaum Publishing Company, 1961), pp. 203-204.

CHAPTER IV

ANALYSIS OF DATA

The purpose of the present study was to analyze differences in attitudes toward school of ten and eleven-year-old students who have experienced the self-contained classroom organization and ten and eleven-year-old students who have attended a school of the open-space, team-teaching concept.

Tables for illustration are included in this chapter to show analysis of the composite scores for the total questionnaire, student attitude toward school in general, attitude toward teachers, classmates, the building, method of evaluation, and reporting to parents. Also included is the analysis of the attitudes of students of the two experimental schools which form the experimental group. This was done to establish the fact that there was no significant differences between these two schools.

The statistical analysis for all these findings are included with the tables in this chapter. In each table the obtained frequency is represented by the number contained in the parentheses, and the expected frequency is indicated by the number preceding the parentheses.

When interpreting a 2 x 3 table with two degrees of freedom the obtained chi-square value must be greater than 5.99 to have a significant difference at the .02 level. For

a 2 x 2 table with one degree of freedom the obtained chi-square value must be greater than 3.84 in order to have a significant difference at the .05 level.

I. POPULATION DATA

A test by Samuel Tenenbaum to measure student attitude toward school was administered to the total ten and eleven-year-old school populations of the experimental and control groups. Table I shows the total population to receive the questionnaire in the Spring of 1975.

II. COMPARISON OF EXPERIMENTAL SCHOOLS

Rather than just assume there was no difference between the two schools which comprise the experimental group, the researcher chose to put this into the form of a hypothesis and statistically prove the assumption.

Composite Score

The data in Table II show the total or composite score (a possible 185 points) of the experimental group. The hypothesis was that there would be no significant difference between these two schools on the total or composite score of the attitude scale.

Table II shows that the hypothesis that there would be no significant difference between the experimental schools on

TABLE I

SUMMARY OF POPULATION DATA

School	Number of Students Questioned
Total Control Group	278
Experimental Group Number One	78
Experimental Group Number Two	180
Total Experimental Group	258

TABLE II

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EXPERIMENTAL SCHOOLS AND COMPOSITE SCORES ON ATTITUDE SCALE

Composite Scores	Experimental Schools (open-space) Number One	Number Two	Totals
High (Positive) 137-185	31.7 (31)	73.3 (74)	105
Middle 87-136	36.9 (41)	85.1 (81)	122
Low (Negative) 37-86	9.4 (6)	21.6 (25)	31
Totals	78	180	258

$X^2 = 2.42$

No significant difference at .05 level.

the total composite score was accepted at the .05 level of significance.

Attitude Toward School in General

Table III shows that attitudes toward school in general of the ten and eleven-year-old students that made up the experimental group. This reports data on the following items from the attitude scale: I, II, III, V, VI, IX, X, XII, XIII, XIV, XV, XVI, XVII, XX, XXI, XXII, XXIII, XXIV, and XXV. There was a possible 130 points on this subscore.

The hypothesis that there would be no significant difference between the two experimental schools on attitude toward school in general was accepted.

Attitudes Toward Teachers

Table IV shows the attitudes toward teachers of the same group of students of the experimental schools. The items on the attitude scale dealing with teachers were items VII, VIII, XI, and XVIII. There was a high possibility of 45 points on this section.

The hypothesis for Table IV was again that there would be no significant difference on attitude toward teachers between the two schools that comprise the experimental group of the study. This hypothesis was also accepted at the .05 level of significance.

TABLE III

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EXPERIMENTAL SCHOOLS AND ATTITUDES TOWARD SCHOOL IN GENERAL

Attitude Class Interval Scores	Experimental Schools (open-space) Number One	Number Two	Totals
High (Positive) 97-130	26.6 (28)	61.4 (60)	88
Middle 61-96	40.2 (39)	92.8 (94)	133
Low (Negative) 26-60	11.2 (11)	25.8 (26)	37
Totals	78	180	258

$x^2 = .16155$

No significant difference at .05 level.

TABLE IV

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EXPERIMENTAL SCHOOLS AND ATTITUDES TOWARD TEACHERS

Attitude Toward Teachers	Experimental Schools (open-space) Number One	Number Two	Totals
High (Positive) 33-45	45.4 (42)	104.6 (108)	150
Middle 21-32	18.7 (23)	43.3 (39)	62
Low (Negative) 9-20	13.9 (13)	32.1 (33)	46
Totals	78	180	258

$X^2 = 1.083$

No significant difference at .05 level.

Attitudes Toward Classmates

Table V shows the attitudes toward classmates of the experimental students. These were items IV and XIX on the attitude scale. The highest possibility on these two items combined was ten points.

The hypothesis was that there would be no significant difference in attitudes toward classmates between students from the two experimental groups was accepted at the .05 level of significance.

Attitudes Toward Building

Table VI shows the attitudes toward the building or physical plant of the students from the experimental schools. These data were from item XIV on the attitude scale. This was a 2 x 2 table showing either a positive or negative response.

The hypothesis for Table VI is the same as all the others concerning the comparison of the experimental schools, that there would be no significant difference.

The results as displayed on Table VI report that the hypothesis which stated that there would be no significant difference between attitudes of the experimental groups toward the building was accepted at the .05 level of significance.

Attitudes Toward Method of Evaluation

Table VII shows the attitudes toward the method of evaluation used by teachers of students from the experimental

TABLE V

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EXPERIMENTAL SCHOOLS AND ATTITUDES TOWARD CLASSMATES

Attitude Toward Classmates	Experimental Schools (open-space) Number One	Number Two	Totals
High (Positive) 8-10	72.9 (73)	168.1 (168)	241
Middle 5-7	4.5 (5)	10.5 (10)	15
Low (Negative) 2-4	.6 (0)	1.40 (2)	2
Totals	78	180	258

$X^2 = .9301$

No significant difference at .05 level.

TABLE VI

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EXPERIMENTAL SCHOOLS AND ATTITUDES TOWARD BUILDING

Attitude Toward Building	Experimental Schools (open-space) Number One	Number Two	Totals
High (Positive)	38.09 (43)	87.91 (83)	126
Low (Negative)	39.91 (35)	92.09 (97)	132
Totals	78	180	258

$X^2 = 1.77$

No significant difference at .05 level.

TABLE VII

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EXPERIMENTAL SCHOOLS AND ATTITUDES TOWARD METHOD OF EVALUATION USED BY TEACHERS

Attitude Toward Evaluation	Experimental Schools (open-space)		Totals
	Number One	Number Two	
High (Positive)	50.93 (45)	119.067 (125)	170
Low (Negative)	26.07 (32)	60.93 (55)	87
Totals	77 (one didn't respond)	180	257

$X^2 = .4898$

No significant difference at .05 level.

schools. This is for item XVI on the attitude scale with a possibility of a positive or a negative response. The hypothesis for Table VII, page 71, also was that there would be no significant difference shown.

The results as shown on Table VII, page 71, reveal that the hypothesis that there would be no significance in attitudes toward the method of evaluation between the students in the experimental schools was accepted at the .05 level.

Attitudes Toward Method of Reporting to Parents

Table VIII shows the atttiudes toward the method of reporting to parents used by teachers of the students of the experimental group. This information is from item XVII on the attitude scale. The hypothesis that there would be no significant difference on attitudes toward the method of reporting to parents between students of the two experimental groups was accepted at the .05 level.

III. COMPARISON OF EXPERIMENTAL AND CONTROL GROUPS

Having shown that there was no significant difference on any variable between the attitudes of students of the experimental group of this study, data are now presented to compare the results of the experimental group with that of the control group.

TABLE VIII

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EXPERIMENTAL SCHOOLS AND ATTITUDES TOWARD METHOD OF REPORTING TO PARENTS

Attitude Toward Reporting	Experimental Schools (open-space)		Totals
	Number One	Number Two	
High (Positive)	44.816 (48)	104.18 (101)	149
Low (Negative)	32.18 (29)	74.82 (78)	107
Totals	77 (one didn't respond)	179 (one didn't respond)	256

$X^2 = .155$

No significant difference at .05 level.

Composite Score

The data in Table IX show the composite scores, with a possibility of 185 points, of the experimental group in the open-space, team-teaching environment and the control group from the self-contained classroom environment.

The null hypothesis for Table IX was that there would be no significant difference toward school as revealed by the total score of the scale of students in the open-space educational environment than those in the self-contained. Table IX reveals that the hypothesis was rejected at the .05 level. Students in the open-space group had a more positive attitude toward school than those in the self-contained classroom.

Attitudes Toward School in General

Table X contains the data of student attitudes toward the items on the attitude scale dealing only with school in general between students in an open-space educational environment and a self-contained classroom. These were items I, II, III, V, VI, IX, X, XII, XIII, XIV, XV, XVI, XVII, XX, XXI, XXII, XXIII, XXIV, and XXV. A possible 130 points is represented on that subscore.

The hypothesis was that there would be no significant difference in attitude toward school in general of students in an open-space educational environment. The hypothesis was rejected at the .05 level of significance. Here again,

TABLE IX

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EDUCATIONAL ENVIRONMENT AND COMPOSITE SCORES

Composite Scores	Educational Environment		Totals
	Open-Space	Self-Contained	
High (Positive) 137-185	72.3 (105)	77.8 (45)	150
Middle 87-136	127.0 (122)	136.9 (142)	264
Low (Negative) 37-86	58.7 (31)	63.3 (91)	122
Totals	258	278	536

$X^2 = 54.350$

Significant difference at .05 level.

TABLE X

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EDUCATIONAL ENVIRONMENT AND STUDENT ATTITUDES TOWARD SCHOOL IN GENERAL

Attitude Class Interval Scores	Educational Environment		Totals
	Open-Space	Self-Contained	
High (Positive) 97-130	56.3 (88)	60.7 (29)	117
Middle 61-96	140.1 (133)	150.9 (158)	291
Low (Negative) 26-60	61.6 (37)	66.4 (91)	128
Totals	258	278	536

$X^2 = 54.016$

Significant difference at .05 level.

student attitudes toward school in general were more positive in the open-space environment.

Attitudes Toward Teachers

Table XI shows the attitude toward teachers between students in an open-space educational environment and a self-contained classroom. This represents data from items VII, VIII, XI, and XVIII on the questionnaire. There was a possibility of 45 points on this section.

The hypothesis was that there would be no significant difference between attitudes of students in an open-space, team-teaching environment and those of students in a self-contained classroom.

The null hypothesis for Table XI was rejected at the .05 level. Therefore, this study reveals that students in an open-space, team-teaching educational environment have a more positive attitude toward teachers than do students in a self-contained classroom environment.

Attitudes Toward Classmates

Table XII shows attitudes toward classmates between students in an open-space school and those in a self-contained environment. These were items IV and XIX on the questionnaire. The highest possibility on this subscore was 10 points.

The hypothesis that there would be no significant difference in attitudes toward classmates of students in the

TABLE XI

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EDUCATIONAL ENVIRONMENT AND STUDENT ATTITUDES TOWARD TEACHERS

Attitude Toward Teachers	Educational Environment		Totals
	Open-Space	Self-Contained	
High (Positive) 33-45	122.7 (150)	132.3 (105)	255
Middle 21-32	53.9 (62)	58.1 (50)	112
Low (Negative) 9-20	81.4 (46)	87.6 (123)	169
Totals	258	278	536

$X^2 = 43.624$

Significant difference at .05 level.

TABLE XII

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EDUCATIONAL ENVIRONMENT AND STUDENT ATTITUDES TOWARD CLASSMATES

Attitude Toward Classmates	Educational Environment		Totals
	Open-Space	Self-Contained	
High (Positive) 8-10	224.3 (241)	241.7 (225)	466
Middle 5-7	24.1 (15)	25.9 (35)	50
Low (Negative) 2-4	9.6 (2)	10.4 (18)	20
Totals	258	278	536

$X^2 = 20.634$

Significant different at .05 level.

open-space environment and the self-contained classroom was also rejected. This reveals that the experimental or open-space group shows a more positive attitude toward classmates than do students in the self-contained classroom environment.

Attitudes Toward Building

Table XIII shows the attitudes toward the building or physical plant between the students from an open-space educational environment and those who attend classes in a self-contained classroom. These data were from item XIV on the attitude scale. There was a choice of either a positive or negative response.

The hypothesis was that there would be no significant difference in attitudes toward the physical facility of students in the open-space educational environment and attitudes of those students in the self-contained classroom. The hypothesis was rejected at the .05 level of significance because data indicated that students in the open-space organization had a more positive attitude toward the physical facility than the students in the self-contained classroom situation.

Attitudes Toward Method of Evaluation

Table XIV shows the attitudes toward the method of evaluation used by teachers of students in an open-space environment and those in the self-contained. This was

TABLE XIII

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EDUCATIONAL ENVIRONMENT AND STUDENT ATTITUDES TOWARD BUILDING OR PHYSICAL PLANT

Attitude Toward Building	Educational Environment		Totals
	Open-Space	Self-Contained	
High (Positive)	71.164 (126)	76.110 (21)	147
Low (Negative)	187.84 (132)	200.889 (256)	388
Totals	258	277	535

$X^2 = 113.85$

Significant difference at .05 level.

TABLE XIV

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EDUCATIONAL ENVIRONMENT AND STUDENT ATTITUDES TOWARD METHOD OF EVALUATION

Attitude Toward Evaluation	Educational Environment		Totals
	Open-Space	Self-Contained	
High (Positive)	151.88 (169)	166.119 (148)	317
Low (Negative)	104.119 (87)	113.88 (130)	217
Totals	256 (two didn't respond)	278	534

$X^2 = .529$

No significant difference at .05 level.

item XVI on the attitude questionnaire and required a positive or negative response.

The hypothesis was that there would be no significant difference between the attitudes of students in the open-space educational environment and those in the self-contained classroom toward the method of evaluation used by teachers. The results on Table XIV, page 82, show that the hypothesis was accepted at the .05 level.

Attitudes Toward Method of Reporting to Parents

Table XV shows the attitudes toward the method of reporting to parents used by teachers of students in the open-space school and the self-contained environment. This represents item XVII on the questionnaire with either a positive or negative response.

The null hypothesis was again that there would be no significant difference between the attitudes of students in the open-space school and those in the self-contained classroom on attitudes toward the method of reporting to parents. This hypothesis was also accepted at the .05 level.

TABLE XV

CONTINGENCY TABLE SHOWING RELATIONSHIP BETWEEN EDUCATIONAL ENVIRONMENT AND STUDENT ATTITUDES TOWARD METHOD OF REPORTING TO PARENTS

Attitude Toward Reporting	Educational Environment		Totals
	Open-Space	Self-Contained	
High (Positive)	122.97 (149)	133.02 (107)	256
Low (Negative)	134.02 (108)	144.98 (171)	279
Totals	257 (one didn't respond)	278	535

$X^2 = .710$

No significant difference at .05 level.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The concluding chapter presents a restatement of the hypotheses, conclusions of the study, and recommendations for further research.

I. HYPOTHESES

This study was made to analyze differences in attitudes toward school of students who have experienced the self-contained classroom structure and students who have experienced open-space, team-teaching situations. The null hypotheses which were established at the beginning of this study are as follows:

A. There will be no significant difference on any variable dealing with attitudes toward school between the two open-space schools that form the experimental group of this study (Group B).

B. There will be no significant difference between Group B (open-space students) and Group A (self-contained students) on attitudes toward:

1. School in general
2. Teachers
3. Classmates
4. The building (or physical plant)

5. The method of evaluation
6. Method of reporting to parents

II. LIMITATIONS

The study was limited to 278 fifth and sixth grade students in the control group (A). There were a total of 258 ten and eleven-year-old students which formed the experimental group (B). The data were collected during a two-week period in the Spring of 1975.

III. CONCLUSIONS

All the ten and eleven-year-old students of the three schools in this study responded to a scale which recorded their attitude toward various aspects of school life. These opinions were then tallied and the data placed on contingency tables to be statistically analyzed.

The conclusions are based on the findings which show that on the overall attitude scale those students who attend a school of the open-space, team-teaching concept have a more positive attitude toward school than do students who have attended a school of the self-contained organizational structure.

Becoming more specific and concentrating on certain items on the scale dealing only with remarks about school in general it was further concluded that student attitudes

toward school in general are more positive in the open-space school than in the school which is self-contained.

The data also rejected the hypothesis that there would be no significant difference in student attitudes toward teachers in the open-space, team-teaching school and in the single-teacher, self-contained classroom organization. The data indicated that student attitudes toward teachers are more positive in the open-space school than in the self-contained.

Students in an open-space school have a more positive attitude toward the physical facility (or building) where they are required to spend so much of their time than do the students in the more traditional physical structure.

However, this study did not reject the hypothesis that there would be no significant difference in attitudes toward the method of evaluation used by teachers or toward the method of reporting to their parents. The data showed that there was no significant difference between the attitudes of the experimental and control groups on these two variables.

Also, the hypothesis was not supported that there would be no significant difference in student attitude toward classmates in the open-space and self-contained situations. The data revealed that students in the open-space school have a more positive attitude toward classmates than do students in the self-contained classroom.

From the findings it was also concluded that on no point tested was there a significant difference between the two open-space schools which formed the experimental group of this study.

IV. RECOMMENDATIONS

Because a significant difference was found in the fact that students who attend a school of the open-space, team-teaching concept have a more positive attitude toward school than those students whose school experience has been primarily spent in a self-contained classroom, educators, parents, political leaders, and school planners should take a closer look at the educational environment that has so much impact on student's lives.

Some educators need to be more open-minded and receptive of the need for change as has been demonstrated by the expressed feelings of the students in this study. These educators need to be more cooperative of research, accepting the fact that only through research can the need for improvements be discovered. Even during the planning stages of this study it was discovered that some educators will not cooperate with research possibly out of fear of the facts that might be revealed. Because of this lack of cooperation an almost perfect parallel school could not be used because of lack of cooperation on the part of the administrator. Therefore,

a recommendation is made for replication of this study in order to test more schools of the same description as the two groups presented here. An ideal study would be to choose an experimental group which is completely nongraded and a control group from a very closely matched socio-economic background.

This study points out the need for an up-to-date and improved instrument for measuring student attitudes toward school.

While it is hoped that the impact of modern educational facilities will increase the academic achievement of students, measures of other aspects of growth need expansion and refinement. More study needs to be done of emotional and social growth, self-concept, creativity, and motivation.

Since students spend so much of their awake hours in school we need to seek more methods of capturing how they feel and the changes they deem necessary.

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APPENDIXES

APPENDIX A

TO: Principals

FROM: Delorice Sykes Bell

PLEASE CHECK BELOW THE DESCRIPTIVE TERMS THAT COULD APPLY TO YOUR PARTICULAR SCHOOL ORGANIZATION:

GRADES

_____Letter Grades

_____Number Grades

_____Anecdotal Type Notes or Conference Forms

_____Any other Form, Please Briefly Describe:

REPORTING TO PARENTS

_____Grade Cards

_____Regularly Scheduled Parent Conference

_____Both of the Above

_____Any other Method, Describe:

TYPE OF GROUPING PROCEDURES

_____Homogeneous

_____Heterogeneous

_____Homerooms—If so, based upon which of the above methods?

How long in homerooms?

_____Any other Method

SIZE OF PERMANENT GROUPS

_____Large Groups (25-40, etc.)

_____Small Groups (12-15, etc.)

_____Individualized Instruction

_____Combination of the Above, If so Please Describe:

TEAMING

_____Team of Two

_____Team of Four or More (If more, how many?)

_____No Teams

_____Other method of Teaming:

MAIN METHOD OF PRESENTATION OF MATERIAL BY TEACHERS:

_____Textbooks

_____Primarily basal text

_____Use of other texts and material as reference

_____Lecture

_____Projects

_____Combination of Above—Please Describe:

APPENDIX B

STUDENT ATTITUDE SCALE

This is not a test. We are simply trying to find out how you feel about school. We want to find out so that we can change things to make school better. That's why it's so important that you say just exactly what you think. Don't be afraid that what you think doesn't sound right. Do not spend too much time thinking about your answers. Remember, there are no right or wrong answers. Each one should put down what he thinks. Your principal and teachers will not see this. No one will see this whom you know. You do not have to put your name on this paper. But if you are not absolutely honest and say exactly what you think, the whole plan will be spoiled. Once you understand this, I am sure you will help us.

Here is a sample question:

I am happy in school

_____1. All the time. _____3. Most of the time.

_____2. Most of the time. _____4. Hardly ever.

_____5. Never.

I want you to forget all about school being a place where you learn things. Think of it for a moment as a place where you like or do not like to be. If you never have a sad moment in school, where would you place your check? Of course, next to No. L, "All the time." If you are always sad in school, where would you then place your check? Yes, next to No. 5, "Never." If you hardly ever have sad moments in school, where would you place your check? Yes, next to No. 2, "Most of the time." If you have sad moments, but still are pretty happy in school, where would you place your check? Of course, next to No. 3, "Pretty often." But if you are sad most of the time, where would you put your check? Of course, next to No. 4, "Hardly ever."

You will find many other questions like this one. Please try to answer them in the same way.

You will find other questions that may be answered by either "Yes" or "No." Place a check next to either "Yes" or "No" for each of those.

Remember, your answers cannot be wrong since there is no right or wrong answer. Try to answer each of the questions. Once we begin you cannot ask any more questions. I will read each question out loud as you read them to yourself. Then I

will give you time to mark your answer. Does anyone have a question before we begin?

I. I am happy in school

_____1. All the time.
_____2. Most of the time.
_____3. Pretty often.
_____4. Hardly ever.
_____5. Never.

II. When I get up in the morning and think of going to school

_____1. I am happy.
_____2. It doesn't make any difference whether I go to school or some other place.
_____3. I am sad and wish I didn't have to go.

III. If I had my way, I would like to go to school

_____1. No more.
_____2. A year more.
_____3. Two years more.
_____4. Five years more.
_____5. Ten years more.

IV. I like

_____1. All the children in my class.
_____2. Most of the children in my class.
_____3. A great many children in my class.
_____4. Hardly any children in my class.
_____5. None of the children in my class.

V. If I had all the money in the world and never had to worry about money, I would like to

_____1. Stop school right away and have a good time.

_____2. I would go to school until I graduated from this school.

_____3. I would go to school until I graduated from high school.

_____4. I would go to school until I graduated from college.

VI. I wish school were

_____1. From 9 o'clock until 10 o'clock.

_____2. From 9 o'clock until 12 o'clock.

_____3. From 9 o'clock until 3 o'clock.

_____4. From 9 o'clock until 4 o'clock.

_____5. From 9 o'clock until 5 o'clock.

VII. I like the teachers I have now

_____1. Very, very much.

_____2. A lot.

_____3. Pretty much.

_____4. I don't like them.

_____5. I hate them.

VIII. I like

_____1. All the teachers I have had in school.

_____2. Nearly all the teachers I have had.

_____3. Most of the teachers I have had.

_____4. Hardly any of the teachers I have had.

_____5. None of the teachers I have had.

IX. I learn

_____1. More in school than I do in any other place.

_____2. More in school than I do in most places.

_____3. Less in school than I do other places.

X. When I get out of school and get a job I hope the place where I work will be

_____1. Exactly like school.

_____2. Completely different from school.

XI. I wish the person I work for when I get a job will be

_____1. Exactly like my teachers.

_____2. Completely different from my teachers.

XII. Check one

_____1. I like school.

_____2. I don't like school.

XIII. If I had my way, I would keep school

_____1. Exactly the way it is now

_____2. I would make it different

XIV. If they were building a new school building, I would want them to make it

_____1. Exactly like the one we have now except that it would be nice and new.

_____2. Completely different from the one we now have.

XV. Check the subjects you enjoy in school. If you don't enjoy any of them don't check any.

_____1. Math
_____2. English
_____3. Reading
_____4. Spelling
_____5. Science
_____6. Social Studies
_____7. Art
_____8. Music

XVI. _____I like the way the teachers check my work and show me how I'm doing.

_____I don't like the way the teachers check my work. I wish they had some other way to show me how I'm doing.

XVII. _____I like the way the teachers let my parents know how I'm doing.

_____I don't like the way the teachers let my parents know how I'm doing. I wish they had another way of letting them know.

XVIII. You hear children say, "I have a good teacher." I have a strict teacher." Think of all the teachers you have had at this school. Were they "strict," "mean," "good," "bad?" Put a check mark by the words that describe them. Say just what you think. Your teachers, nor any one else you know, will not see this. In each group, choose one and place a check by the one you have chosen.

_____1. kind
_____2. mean

_____1. fair
_____2. unfair

_____1. too strict
_____2. just right

_____1. good teachers
_____2. bad teachers

_____1. smart
_____2. stupid

_____1. friendly
_____2. unfriendly

XIX. The children I meet in school are my friends and I like to play with them.

_____Yes. _____No.

XX. I would rather work than go to school, even if I didn't need the money.

_____Yes. _____No.

XXI. I think work is more fun than going to school.

_____Yes. _____No.

XXII. The things I learn in school are a lot of junk and will not help me when I get out.

_____Yes. _____No.

XXIII. If I were old enough to start working now I would stop school and go to work.

_____Yes. _____No.

XXIV. I wish I could go to school the rest of my life.

_____Yes. _____No.

XXV. The last item reads this way:

Imagine your best friend asked you, "Do you like school?" What would your answer be? Write it down just as you would say it to them. Don't worry about spelling, English, or anything else. Say just what you think about school. If you like school, say why. If you don't like school, say why. If you don't have enough room use the back of this paper.

VITA

Delorice Sykes Bell was born in Morristown, Tennessee on May 11, 1944. She was graduated from Morristown High School East, Morristown, Tennessee in May, 1961.

She attended Carson-Newman College at Jefferson City, Tennessee and received her Bachelor of Science Degree in Elementary Education there in 1964. She received a Master of Science Degree in Elementary Education from The University of Tennessee in 1970.

In 1964-1967 she taught elementary school (grade three) at Alpha School in the Hamblen County School System. In the Morristown City School System she taught on the lower intermediate team and served as team coordinator at John Hay Elementary School from 1967-1970. In 1970-1974 she was Title I Coordinator at Sherwood Elementary School in the Morristown City School System. She is now a kindergarten teacher at Lincoln Heights Elementary School in the Morristown City School System.

She began work on her Specialist in Education Degree in 1971, and received this degree in August 1976 with a major in Curriculum and Instruction.

Her professional memberships have included Alpha Delta Kappa, Pi Lambda Theta, National Education Association, Tennessee Education Association, East Tennessee Education

Association, the Hamblen County Education Association, and the Morristown Education Association. She has held several offices in these organizations.

She is married to Roy Gene Bell and has one daughter, Bethany. They live at Lowland in Morristown, Tennessee.