A STUDY OF THE ATTITUDES OF TEACHERS IN TITLE I AND NON-TITLE I DEPRESSED AREA ELEMENTARY SCHOOLS TOWARD PUPIL-TEACHER RELATIONS AS MEASURED BY THE MINNESOTA TEACHER ATTITUDE INVENTORY

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This is to certify that the

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ABSTRACT

A STUDY OF THE ATTITUDES OF TEACHERS IN TITLE I AND NON-TITLE I DEPRESSED AREA ELEMENTARY SCHOOLS TOWARD PUPIL-TEACHER RELATIONS AS MEASURED BY THE MINNESOTA TEACHER ATTITUDE INVENTORY

by

Charles Frank Smith, Jr.

The central purpose of this study was to determine after one year's operation of a Title I program how the attitudes of fourth, fifth, and sixth grade teachers in eight schools participating in the program compared with the attitudes of teachers of the same grades in five depressed area schools not participating. In addition to the central purpose, answers to some related questions were sought.

The 103 subjects in the study were teachers of reading, arithmetic, homeroom subjects, or self-contained classroom subjects in grades four, five and six in thirteen similar schools. Eight of the thirteen schools were selected to participate in a Federal compensatory education program under Title I. In Phase I of the study the Minnesota Teacher Attitude Inventory (MTAI) was administered and the resulting scores were tested for significance of difference between the mean score of teachers from the eight schools selected to

participate in Title I and the mean score of teachers in the five schools not selected to participate. Phase II was (1) to test for significance of difference between the mean attitude scores of the teachers from the eight Title I schools and the five non-Title I schools one year after the operation of the Title I program began and (2) to seek answers to related questions regarding personal demographic data about the teachers, working conditions of the teachers, and characteristics of the students they taught as the questions related to the teachers' MTAI scores.

There were no significant gains in teacher attitude scores following one year's participation in Title I. However, findings of this investigation support the following conclusions:

(1) The initial MTAI mean scores of Title I and non-Title I teachers were not significantly different.

(2) The MTAI mean scores of both Title I and non-Title I teachers were generally below the norm measurement for teachers of similar training and experience.

(3) White teachers regardless of whether they were teaching in Title I or non-Title I schools had a significantly more positive MTAI mean score than black teachers.

(4) Title I teachers with a master's degree or more and non-Title I teachers with less than a master's degree had similarly higher mean scores than their counterparts with similar teaching assignments, the results being a significant interaction of professional training and teaching assignment.

(5) Teachers with more than two years of teaching experience had a higher MTAI mean score than teachers with two or less years of teaching experience.

(6) Teachers who had taught with the system for more than two years had a higher MTAI mean score than teachers who had taught with the system for two or less years.

(7) Teachers who had taught in the building for more than two years had a higher MTAI mean score than teachers who had taught in the building for two or less years.

(8) Teachers of reading and teachers of arithmetic each had a significantly higher MTAI mean score than teachers of homeroom subjects and teachers of self-contained classroom subjects.

(9) Title I children did not demonstrate academic achievement gains as reflected by their SRA mean achievement scores even though they had been exposed to reading teachers and/or arithmetic teachers of significantly higher MTAI scores. Consequently, this study did not reveal that teachers with more positive MTAI scores were more effective teachers in terms of SRA pupil achievement scores.

(10) Teachers thirty years old and under did not have an MTAI mean score which was significantly different from that of teachers over thirty years old.

(11) The teaching staffs of school buildings with 50 per cent or more black teachers had lower MTAI mean scores than

the teaching staffs of school buildings with less than 50 per cent black teachers.

(12) The SRA achievement scores of the students taught by Title I and non-Title I teachers tended to drop from one year to the next.

(13) The percentage of black teachers was greater in schools where the children are more poverty-stricken.

Based upon the significant findings of this study, the above conclusions, the related literature reviewed in this study, and the considered judgment of the author the following recommendations are made:

(1) If a school system must hire teachers who are less competent than its best teachers, such teachers should not be concentrated in inner-city schools.

(2) Directors of personnel must be held personally accountable for the immediate development and implementation of a scheme designed to make teaching assignments based on a teacher's competencies to meet pupil needs instead of based on a teacher's race.

(3) Directors of personnel must be required to schedule personal interviews for each interested teaching candidate with at least two principals before a building assignment is made thereby avoiding pressure on the principal to hire the particular teacher sent to him.

(4) School systems and universities must collaborate as equal partners in the training of teachers for inner-city schools; eventually, school systems must hire only teachers specifically trained for teaching in the inner city to teach in inner-city schools.

(5) Immediately school systems must increase the number of blacks who are in central office decision-making positions to reflect the sharp increase of black children in the public schools and to prevent the school systems from subverting the quality of education provided for black children.

(6) The personnel departments of school systems must establish some accurate comprehensive means of comparing why some teachers teach in inner-city schools longer than two years and others teach in inner-city schools two or less years.

(7) School systems must assume the responsibility of providing an on-going program which has as its prime objective the improvement of the attitudes of its black and white teachers toward inner-city children and toward pupil-teacher relations.

(8) A major component of a compensatory education program must be devoted to teacher inservice, not only inservice devoted to how to use new teaching materials and equipment but inservice devoted to helping teachers develop more positive attitudes toward pupil-teacher relations.

(9) Inner-city school systems must take it upon themselves to provide a new kind of rigorous on-going inservice program for all their teachers and administrators. These inservice programs should be geared to the problems of the inner city, and they might very well follow the model of a sensitivy group. Participation in sensitivity groups should be mandatory for all administrators and highly recommended to all teachers of disadvantaged.

(10) There is an immediate need for the development of a standardized instrument which will more accurately measure the attitudes of black and white depressed area teachers.

(11) Studies must be conducted to determine the comparative effectiveness of teachers who teach in inner-city schools more than two years.

(12) New status roles in the hierarchy of inner-city teaching must be found so that inner-city teachers can have roles and positions of status respected by all teachers within the system.

(13) There is a need for this study to be replicated on a larger sample of teachers and school buildings.

There are many questions yet to be resolved pertaining to compensatory education, such as the following: (1) What are the basic and essential components of a comprehensive compensatory education program for the disadvantaged? (2) Are the gains we expect in academic achievement measurable? If so, when and how do we measure them?

Further research is needed to answer such specific questions as: (1) Why did the black teachers have such low scores? (2) Is the MTAI "race-proof"? (3) What influence, if any, does the black experience have upon a black teacher as he relates to black children in a depressed area school? (4) Is a less positive attitude score indicative of a less effective teacher? (5) How significant is a teacher's negative or positive attitude score if the attitude the score reflects is not perceived by the class?

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CHAPTER I

THE PROBLEM

Statement of the Problem

Recent developments in the education of depressed area children have prompted educators; agencies of local, state, and federal government; and foundations to provide compensatory education programs within the structure of the regular public day school. As a result of these programs, increased numbers of depressed area children are benefiting from compensatory education. These programs range in nature and scope from over 13,000 Head Start programs located in over 2,500 communities serving more than a half million children, to a massive school-community project attacking a variety of problems in Boston under the single direction of Action for Boston Community Development (ABCD). The attitudes of the classroom teachers of regular as well as compensatory programs, in which depressed area children are placed, provide a vital consideration which has not been explored to any degree. Therefore, it is imperative to answer the question: Is it possible for any educational program to be successful unless, first and foremost, the teacher likes and respects his students? The success of any compensatory education

program may well depend upon how the teachers feel toward the disadvantaged child.

The problems under consideration in this investigation are:

1. To determine how the attitudes of a sample of teachers from eight depressed area schools scheduled to participate in a federalTitle I program compare with the attitudes of a sample of teachers from five depressed area schools not scheduled to participate.

2. To determine after one year's operation of the Title I program how the attitudes of fourth, fifth, and sixth grade teachers in eight schools participating in the program compare with the attitudes of teachers of the same grades in five depressed area schools not participating in the program.

Statement of the Objective

The objective of this study is to ascertain whether there exists a relationship between the attitudes of two selected groups of teachers, one group from Title I schools and the other from schools not participating in Title I. (The latter schools shall be referred to as "non-Title I" schools in this study.) The teachers are assigned to teach reading, arithmetic, homeroom subjects, or self-contained classroom subjects in grades four, five, and six. The specific attitude being analyzed is that of the teacher toward pupil-teacher relations. The teachers are selected from thirteen elementary schools located in the ghetto of a midwestern urban community. One group consists of teachers in the eight schools participating in a federally funded elementary

compensatory education program, Title I of Public Law 89-10. The other group consists of teachers from five similar schools which are not participants in the federally funded program.

The attitudes of the teachers are measured by use of the Minnesota Teacher Attitude Inventory[1] which is described in detail in Chapter Three.

The central question to be explored in this study is:

> After one year's participation in a Title I compensatory education program, do fourth, fifth, and sixth grade teachers of reading, arithmetic, homeroom subjects, or self-contained classroom subjects tend to have a more positive attitude toward pupil-teacher relations than a comparable group of teachers who have not participated in a Title I compensatory education program?

Questions to Be Explored

In addition to the central question of this study, related questions are explored individually with reference to the MTAI scores of the teachers.[2] The related questions are categorized into groups pertaining to personal demographic data about the teachers, to selected working conditions, and to selected characteristics of the students.

1. Demographic Data about the Teachers

> Does the sex, race, age, marital status, professional training, or teaching

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[1] In this thesis the Minnesota Teacher Attitude Inventory is referred to as the MTAI.

[2] The questions related to the central question of the study are itemized in Chapter III, page 39-41.

experience of the teacher relate to the attitudes of Title I and non-Title I teachers toward pupil-teacher relations?

2. Selected Working Conditions

Does the grade taught, subject taught, building enrollment, or percentage of black teachers in the building relate to the attitudes of Title I and non-Title I teachers toward pupil-teacher relations?

3. Selected Characteristics of the Students

Does the percentage of black students in the student body, the level of academic achievement of the students, or the degree of poverty of the students relate to the attitudes of Title I and non-Title I teachers toward pupil-teacher relations?

A General Theoretical Orientation to Teacher Attitudes and the Learner

To relate the importance of teacher attitudes toward pupil-teacher relations to pupil achievement, it is necessary to look at what is done when a teacher assists a student to learn.

Suppose a learner does not have a certain fact, understanding, or skill prior to his contact with the teacher. Following the influence of the teacher the learner does know. The question then is: What happens in the process while the learner is going from not knowing to a point of knowing?

It is not within the purpose of this study to debate such philosophical questions as the following: Does the teacher give the knowledge to the student, or does the

student have the knowledge but need the teacher to help him order it? It is necessary, however, to view the process of learning in light of the influence that the attitudes of the teacher toward pupil-teacher relations have upon the student during the teaching-learning session.

The teacher uses structures of language (grammar and rhetoric) which are known to the student to point out some principles of the new learning. The students follow the teacher's teaching from the known principles to those to be learned. Francis C. Wade, S. J., develops this idea in his article, "Causality in the Classroom." " . . . the art of the teacher consists precisely in presenting these known data in such a way that . . . the desired . . . "[3] principles become present in the mind of the learner.

In teaching, the teacher uses signs of his own knowledge which include language and gestures. The learner receives and perceives these signs as representative of the teacher's knowledge. If the teacher has low expectations of his learner's abilities, he will select those signs which he believes appropriate. If he has negative feelings toward his students, he will tend to select signs and gestures which reflect his feelings. In summary, signs signify things and objects. However, the selection of these signs is

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[3]Francis C. Wade, S. J., "Causality in the Classroom," in Modern Schoolman, ed. by George P. Klubertanz, S. J. (Ann Arbor: Cushing-Mallory, Inc., August, 1955), XXVIII, p. 144.

influenced by the teacher's attitude toward his learner.

If, when presenting his signs, the teacher is confronted with puzzled faces, blank stares, or discipline problems, he and his students are not in accord. The good teacher then alters his signs until accord is achieved. If the teacher does not alter his signs, the student perceives that the teacher does not really care whether he learns, or that the teacher is unprepared or inadequate for the teaching task, or that the student himself is not smart enough.

The student's initial motivation to follow the signs of the teacher is contingent upon his perceiving that the teacher likes and respects him, and has confidence in his ability to learn. This acceptance by the teacher fulfills a need in the student, and he reciprocates by demonstrating to the teacher that he likes and respects the teacher. His means of demonstration is an attempt to learn. When he does learn, the learning itself is rewarding and becomes a motivation to continue to learn. Success in learning becomes a more significant motivational factor than the initial one of pleasing the teacher.

If the teacher's attitudes are negative, or perceived by the student to be negative, the initial motivational steps in learning are thwarted. The disadvantaged child is then handicapped as he proceeds through the grades, deficient in his mastery of the signals (language) of the teacher and deprived of the initial motivational stimulus of the teacher. Performance of disadvantaged children in school becomes

progressively worse till, in most cases, they drop out.

Wade summarizes the interaction between teacher and student in the learning process when he refers to the signs the teacher uses. "With an object present to his mind, the student acts to form his own taught knowledge; and the teacher, through his [selected] signs as logical instruments, is the specificative cause of the student's taught knowledge."[4]

Wade concludes that if a teacher does not have trust and respect for his students he is not teaching, but rather indoctrinating. For it is mutual trust and respect which unite the mind of the teacher and the taught on a common meeting ground. On the absence of this common meeting ground Wade comments:

> Without such meeting ground teacher and taught do not meet as minds; there is no ground for the student's assent. What is left the student is a pseudoground; that is, the teacher said so. Such a student, assenting on the word of the teacher, is indoctrinated, not taught. True, he gets something; but he gets it by hearing and holds it by memory and becomes a skilled repeater instead of a knowing man. His teacher, on the other hand, cut off from first principles [mutual trust and respect between teacher and students], must go on indoctrinating, whether he wants to or not, for there is no escape. Let him try to escape by being 'objective' and by professedly refusing to take sides. Still he does have opinions and these must color his teaching; he, after all, like other teachers, can only teach what he knows. The student, meanwhile, who is told he is getting uncolored truth, does not even suspect that he is lapping up, without reason, opinions that demand reasons. Thus, the unprincipled teacher, running from

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[4] Ibid., p. 145.

open indoctrination, stumbles into the more vicious trap of masked . . . indoctrination. What would save him and his teaching and his students' mind is appeal to the first principles of being.[5]

Assumptions Underlying the Study

The following are assumptions underlying this study:

1. The reliability and validity of the MTAI is assumed. (The instrument is described in detail in Chapter III.)

2. Attitudes and opinions obtained by use of the research instrument were accurate at the time the information was obtained.

3. It is valuable to know whether there are significant correlations between the attitudes of Title I and non-Title I depressed area teachers.

4. It is valuable to know whether after teaching one year in a compensatory education program the attitudes of teachers are comparatively more positive.

5. It is valuable to know whether a teacher's sex, race, age, marital status, professional training, and teaching experience are related to the attitudes he has toward pupil-teacher relations.

6. It is valuable to know whether the grade taught, subject taught, building enrollment, and percentage of black teachers in the building relate to teacher attitudes toward pupil-teacher relations.

7. It is valuable to know whether the percentage of black students in the student body, the level of academic achievement of the students, and the degree of poverty of the students relate to teacher attitudes toward pupil-teacher relations.

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[5] Ibid., p. 146.

Significance of the Study

The difficult task of educating the people from our urban depressed areas is yet to be successfully tackled by educators, industry, or government. There are developmental programs, remedial programs, and compensatory programs which have been incorporated either into the formal educational plans of most urban public school systems or established outside their framework. In spite of the special programs the educational output from ghetto schools is generally disgraceful. The children are performing poorly, and in fact only 40 per cent graduate from high school. It is common knowledge that opportunities for drop-outs of any color are severely limited, but even some graduates of black ghetto high schools have difficulty reading and computing well enough to get or hold a simple job. For those ghetto learners who happen to be black the problem is compounded by racism on the part of many whites and considerable class consciousness on the part of many middle and upper class blacks.

Recently the most bitter attacks on the process of education in ghetto areas are being directed at those who teach in ghetto school buildings. The teachers and administrators have been " . . . accused of being uninterested in the children, of stereotyping them as academic failures, of being ineffective in doing the job they are . . . "[6] hired to do, and of having, almost universally, a less than

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[6]Marjorie B. Smiley and Harry L. Miller, Policy Issues in Urban Education (New York: The Free Press, 1968), p. 11.

positive attitude toward the children.

The attacks on the depressed schools by both laymen and educators tend to focus on the teacher and can be divided into three categories; namely, they pertain to instructional styles, the training and selection of teachers, and pupil-teacher rapport.

Criticism of instructional styles ranges from the limiting factors of obsolete building facilities to the exclusive use of middle class oriented textbooks and teaching aids. Most educators and lay persons tend to agree that textbooks and teaching aids should characterize and symbolize a society with which depressed area children can identify. There seems to be no agreement, however, on the details of how, when, where, and how much the curriculum should portray the urban depressed areas.

Attacks upon the training and selection of teachers for depressed areas are general but without agreement on approaches to improve the processes. The training of teachers for depressed area schools by colleges and universities varies from a blitzkrieg bus tour through a depressed area to a more intensive commitment on the part of the university. The most committed universities offer such courses of study as an undergraduate or graduate specialization in teaching the disadvantaged. Usually the course of study consists of class work in addition to a number of hours of observation per week in a depressed area school and neighborhood.

The major criticisms directed at the quality of pupil-teacher rapport have centered around the impersonal attitudes of teachers toward their disadvantaged students. There seem to be two basic arguments relating to the cause of the impersonal attitudes, or poor pupil-teacher rapport, in disadvantaged schools. Some maintain, as does Robert D. Strom,[7] that poor pupil-teacher rapport is caused mainly by the teacher's insensitivity to aspects of his own behavior which damage the self-concept of his students.

In deference to the problems confronting teachers with poor pupil-teacher rapport some writers and teachers " . . . contend that until class size is reduced in low income schools, teacher-pupil rapport will remain impersonal and cannot be expected to improve appreciably."[8] To the need for reduced class size may be added the needs for more teaching aids, supplies, and equipment; additional salary; teacher aides; school involvement in social programs; and inservice workshops.

If the cause of poor pupil-teacher rapport is not mainly teacher insensitivity but poor working conditions, it seems reasonable to think that if the conditions related to class size, teaching aids, salary, and auxiliary services are changed, the impersonal attitudes of teachers should change.

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[7]Robert D. Strom, "Teacher Aspiration and Attitude," in The Inner-City: Teacher Behaviors, ed. by Robert D. Strom (Columbus, Ohio: Charles E. Merrill Books, Inc., 1966), p. 34.

[8]Ibid.

There should be a change, therefore, in the impersonal attitudes of teachers toward pupil-teacher relations among teachers who participated in a Title I program of the Federal Elementary and Secondary Education Act of 1965. Although the Title I program in this study was designed specifically to raise the reading and arithmetic achievement levels of children, it provided for assistance in the areas mentioned above as important in altering the impersonality of teacher behavior towards students. It provided for (a) reduced class size in all fourth, fifth, and sixth grade reading and arithmetic lessons, (b) a substantial supply of teaching aids, supplies, and pieces of equipment, (c) teacher salary in kind by relieving teachers of much of their clerical work and assigning it to teacher aides, (d) a school social worker for each participating building, and (e) an instructional specialist who provided daily inservice assistance.

It will be a goal of this study to see whether the attitudes of teachers toward pupil-teacher relations are changed following the implementation of Title I.

Federal Title I Program[9]

The purpose of the Title I program is to raise the reading and arithmetic achievement levels of fourth, fifth,and sixth grade disadvantaged youngsters in participating schools.

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[9]For the complete text of the Title I proposal of the Flint Public Schools see Appendix A.

Selection of Schools

The schools in this program were selected according to the guidelines for Title I of the Federal Elementary and Secondary Education Act of 1965. The criteria were two:

1. The percentage of families with annual incomes of less than $2,000.
2. The percentage of children who are educationally disadvantaged as indicated by low achievement.

Components of the Program

Seven components of the program were designed to relate with and to extend the services of a number of existing educational programs in the Flint Public Schools.

1. Improving Reading in the Early Elementary Years (1-3)

   The major emphasis of this component of the program is to provide a significant increase in the daily instructional time in reading for early elementary children.

   To implement the program team teachers were provided over and above the usual number of regular classroom teachers in the approximate ratio of one team teacher to every three early elementary teachers.[10]

2. Improving Reading and Arithmetic in the Later Elementary Grades (4-6)

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[10]This component of the program was only partially implemented; therefore, the early elementary teachers were not included in this study.

The major emphasis of this component of the program is to provide developmental reading and arithmetic instruction daily for all upper grade children in a classroom setting where the pupil-teacher ratio does not exceed twelve to one.

To implement the program two reading and two arithmetic teachers were provided for each group of six regular classroom teachers of upper elementary grades in the Title I schools.

Each reading and arithmetic teacher has a classroom of his own. He teaches six periods of reading or arithmetic per day to a class of about ten students.

3. Providing Instructional Leadership via the Services of Reading and Arithmetic Specialists

A Reading Specialist and an Arithmetic Specialist are available to provide consultation services to the Title I reading and arithmetic teachers.

4. Providing Instructional Leadership via the Services of an Instructional Specialist

An Instructional Specialist is provided for each of the participating schools. The services of the Instructional Specialist are available to all teachers in the building.

5. Providing Social Adjustment Service via the School Social Worker

A school Social Worker is provided for each of

the participating schools to help children adapt to school by working with children, teachers, and parents.

6. Providing Clerical Aides to Help Teachers

   A Clerical Aide is provided for each selected school to free teachers of non-instructional activities.

7. Implementing an Inservice Program via Service of an Inservice Specialist

   The Inservice Specialist plans specific programs for the participating schools to develop, interpret, and promote a better understanding of the social forces which influence the lives of the disadvantaged child.

In order to implement the above programs, additional physical facilities, instructional materials, and equipment were needed.[11] Additional physical facilities were needed to provide teaching stations for the upper elementary reading and arithmetic teachers. The needed facilities consisted of eighteen one-room mobile unit classrooms installed on the eight school sites of the participating schools. Reassignment of early elementary self-contained classes from buildings to mobile units made classroom space available in the main buildings for reading and arithmetic teachers.

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[11] A complete list of the kinds of instructional materials purchased and the number and location of mobile units and redesigned classrooms is in Appendix A.

Each of the eighteen classrooms in the main buildings of the participating schools was redesigned to make three sound-proof rooms; two rooms were for reading or arithmetic classrooms, and one room was for an instructional laboratory.

Delimitations of the Study

One of the major limitations of this study lies in the sample of teachers. Although all the fourth, fifth, and sixth grade teachers of reading, arithmetic, homeroom subjects, and self-contained classroom subjects in the thirteen schools were tested one year following the testing of the representative sample, fourteen (40 per cent) of the teachers in the initial sample had either resigned or transferred within the year. Therefore, generalizations from this study should be made with caution.

Definition of Terms

1. Disadvantaged, depressed, ghetto. These three adjectives are used interchangeably in the study. They are used to refer to persons and areas which are characterized by the following:

   High degree of transiency
   Very low rate of economic productivity
   Inadequate communicative skills
   High drop-out rate from school
   High rate of failure in school
   High proportion of dilapidated housing
   Large number of welfare recipients
   Poor health habits
   Low level of educational attainment among adults
   High crime rate

   One might well question using "ghetto" interchangeably with "disadvantaged" and "depressed"

because "ghetto" describes a geographical area where there is a concentration of a racial or national group, whereas "disadvantaged" and "depressed" describe the socioeconomic status of a group or area. However, since the thirteen schools in this study are located in the black ghetto which is also the depressed area with the highest concentration of disadvantaged persons, using these terms interchangeably is justified. Furthermore, more than 77 per cent of the black students in this school district live in the ghetto area. (See Appendix B.)

2. Compensatory education. Compensatory education is a program designed to make up for those social, economic, and educational factors which place students among the disadvantaged. The goals are much more sweeping than pure remediation, and they cannot be substituted by a regular developmental program. (Remediation is designed to correct specific problems. Developmental programs are designed for everyone within the basic educational program.)

Overview of the Thesis

In Chapter II the literature related to this study is reviewed. In addition to a report on the search for

previous research relevant to the purpose of this study, other research which has a bearing on the study is reported.

The design of the study is described in Chapter III. It includes background on the setting of the study.

Chapter IV contains an analysis of the results of the study.

The summary, conclusions, recommendations, and implications for further research are presented in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

Introduction

In order to grasp the significance of the attitudes of the ghetto teacher toward his pupils and his teaching it is necessary to investigate the teacher himself. How does the teacher in a depressed area school compare to the teacher in a non-depressed area? What are his feelings about his teaching? What are his attitudes toward his students? Who are the disadvantaged students he teaches? In what kinds of compensatory education programs has he participated to improve the academic success of his disadvantaged students?

Answers to these questions about the ghetto teacher lie within knowledge we have about the child himself. Given the social class of the student, the income of his family, the educational level of his parents, and the color of his skin, one can quite accurately guess what kind of school he attends, the quality of education he is receiving, the kinds of teachers to whom he is likely to be exposed, and how successful he is apt to be academically.[1]

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[1]Patricia Cayo Sexton, Education and Income, Inequalities of Opportunity in Our Public Schools (New York: The Viking Press, Inc., 1961).

An investigation of such sources as the Journal of Educational Research, the Education Index, The Handbook of Research on Teaching, the Phi Delta Kappan, and the Dissertation Abstracts of University Microfilms, Incorporated, did not indicate that a previous research probe in which the attitudes of two similar groups of ghetto teachers were assessed after one group had participated in a compensatory education program has ever been conducted. Essentially the studies in this area have dealt with one group rather than a control and an experimental group. Robert E. Herriott and Nancy Hoyt St. John have reported the results of such a one-dimensional study[2] as has Kenneth Clark. Clark described the Banneker Project in St. Louis and reported that changes were made in " . . . the attitude and perspective of teachers which influenced the way in which the students were taught and learned. . . ." even though there had been no other drastic changes in school programs.[3]

Although before and after studies comparing two groups of teachers only one of which participated in a compensatory program have not been done, hardly anyone would deny the significance of the attitudes of the teacher in the ultimate success of any educational program. Matthew J. Pillard underscores this pivotal role of the teacher:

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[2]Robert E. Herriott and Nancy Hoyt St. John, Social Class and the Urban School (New York: John Wiley and Sons, Inc., 1966).

[3]Kenneth B. Clark, Dark Ghetto (New York: Harper and Row, Publishers, 1965), p. 144.

> The most crucial element on which success of educational programs ultimately depends is the school staff, the individuals who do the job. Even the most clearly articulated goals and the most carefully delineated programs are not self-actuating. These may be developed in large part by the community and its educational leaders, but their implementation depends upon the work of teachers. Thus classroom teachers and their associates who daily face the challenge of guiding the young toward a better life become the center of attention in urban schools.[4]

Therefore, it is essential to consider the attitudes of teachers -- those who will plan, implement, and evaluate our educational programs.

The Teacher and His Attitudes Toward His Job and the Students He Teaches

It is generally accepted that students benefit more from exposure to teachers with strong educational backgrounds than they do from teachers with weak academic backgrounds. Studies by Becker,[5] Herriott,[6] Sexton,[7] Ravitz,[8] and Clark,[9]

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[4]Matthew J. Pillard, "Teachers for Urban Schools," in Education in Urban Society, ed. by B. J. Chandler, Lindley J. Stiles, and John I. Kitsuse (New York: Dodd, Mead and Company, 1966), p. 194.

[5]Howard S. Becker, "Schools and Systems of Stratification," in Education, Economy, and Society, ed. by A. H. Halsey, Jean Floud, and C. Arnold Anderson (Glencoe, Ill.: The Free Press, 1961), pp. 93-104.

[6]Herriott and St. John, op. cit.

[7]Sexton, op. cit.

[8]Mel Ravitz, "The Role of the School in the Urban Setting," in Education in Depressed Areas, ed. by A. Harry Passow (New York: Teacher's College, Columbia University, 1963), pp. 6-23.

[9]Clark, op. cit., pp. 133-39.

found that the teachers of the disadvantaged generally have poorer academic backgrounds, they are less satisfied, and they have less desirable attitudes toward their students than teachers of middle class children. To compound the problem prospects for better teachers seem dim considering a study by James S. Coleman who found that teachers in training who have the characteristics which might benefit ghetto children tend to prefer to teach in middle class schools.[10]

Robert E. Herriott studied the influence that the socioeconomic status of the student body had upon the attitudes of teachers and principals in 500 schools in forty-one large cities. The study was designed to determine to what extent the social class composition of the pupils in urban schools was associated with characteristics of the staff of these schools. His findings indicate that elementary teachers in ghetto schools are far less satisfied with their work and assignment than are their fellow teachers who are assigned to middle class or "silk stocking" schools. He states, "Teachers in schools of lowest SES [socioeconomic status] are, of all teachers, the least satisfied with various aspects of their teaching situation."[11] Not only are they

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[10]James S. Coleman, Equality of Educational Opportunity (Washington, D. C.: U. S. Government Printing Office, 1966), pp. 25-27.

[11]Herriott and St. John, op. cit., p. 206.

dissatisfied but nearly half of them "want out." "Moreover, 42 per cent of the teachers in these schools, as compared with 18 per cent in schools of highest SES, aspire to a school 'in a better neighborhood.'"[12]

Herriott found that the greatest source of teacher dissatisfaction in ghetto areas is with the substandard academic performance of students[13] although these same teachers reported that they are satisfied with the state of teaching as a profession.[14] In view of these findings one would suspect that most of these teachers see the ghetto assignments as an undesirable but necessary initiation into the teaching profession. Herriott gives support to this supposition when he states that ghetto teachers are usually younger, less experienced, newer to the school system, the recipients of less salary in each age bracket than teachers in higher socioeconomic areas,[15] and they are relatively eager for new assignments.[16]

David Gottlieb in a recent study, "Teaching and Students: The Views of Negro and White Teachers,"[17] found that a

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[12] Ibid.

[13] Ibid., p. 90.

[14] Ibid., p. 69.

[15] Ibid., p. 206.

[16] Ibid., p. 69.

[17] David Gottlieb, "Teaching and Students: The Views of Negro and White Teachers," in Educating the Disadvantaged Learner, Part III, ed. by Staten W. Webster (San Francisco: Chandler Publishing Company, 1966), pp. 437-46.

teacher's race tends to influence the kind of dissatisfaction he finds with his job. His study deals with the attitudes of ninety black and white elementary school teachers toward black and white pupils from low income families in a midwestern urban community.

Gottlieb found that teacher dissatisfactions can be grouped into two categories, one pertaining to working conditions and the other pertaining to the pupil. In the category of working conditions he included such causes for dissatisfaction as old age of the school buildings; large or overcrowded class sizes; inadequate and insufficient amounts of teaching supplies, equipment, and materials; and a lack of auxiliary professional and non-professional services. In the category of dissatisfaction with pupils he includes the usual characteristics of the disadvantaged child such as inadequacies in the child's socioeconomic status; his disruptive, impudent behavior and lack of discipline; and his inability to perform well academically.

Among his findings Gottlieb reported that black teachers complained chiefly about working conditions while white teachers emphasized the students' lack of academic ability and lack of discipline (though there were whites who complained about working conditions and, conversely, blacks who complained about students). He concluded that, not only do the teachers indicate the areas of their dissatisfaction, but their dissatisfactions tend to be affected by race.

> The items mentioned by white teachers tend to fall within the category we have designated as 'clientele' factors [students] whereas the items expressed by Negro teachers are more likely to fit within the 'institutional' grouping [working conditions]. The two items most frequently mentioned by white teachers are 'lack of parental interest' and 'student behavior or discipline problems.' Although some Negro teachers do express concern over these same problems, they tend to place greater emphasis on factors such as 'lack of proper equipment' and 'overcrowded conditions.'[18]

Gottlieb speculates that because black teachers are able to identify more closely with black children they might search for facts external to the child to explain the many problems that arise in school.[19] This speculation has been corroborated by E. Frazier[20] and Arnold M. Rose.[21]

James S. Coleman directed an extensive survey of over half a million students in three thousand schools for the United States Office of Education. In his report, Equality of Educational Opportunity, Coleman found that teachers of the disadvantaged differ in a number of ways from their colleagues teaching in schools located in middle or upper class areas.

The most striking difference Coleman points out is that

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[18]Gottlieb, op. cit., pp. 443-44.

[19]Ibid., p. 444.

[20]E. Frazier, The Negro in the USA (New York: The Macmillan Co., 1949).

[21]Arnold M. Rose, ed., Race Prejudice and Discrimination (New York: Alfred A. Knopf, Inc., 1951).

black teachers teach black children and white teachers teach white children. There are exceptions to the other differences between teachers of the disadvantaged and advantaged, but this is the most generally true and gross difference.

> For the nation as a whole, the average Negro elementary student attends a school in which 65 percent of the faculty are Negro and the average white elementary student attends a school in which 97 percent of the faculty are white . . .[22]

Coleman did not find, as might be supposed, a relationship existing between the race of the student and the amount of training his teacher had although he did find that black ghetto children are more likely to have teachers of lower verbal facility than children of middle or upper class schools. "The average Negro pupil is likely, . . . to be taught by teachers who score less well on a short 30-item verbal facility test . . . "[23] Although black students have teachers of lesser verbal ability, they are more likely to have teachers of greater experience.[24] Moreover, race does not seem to be a factor in one's commitment to teaching or to a particular school system.[25] Coleman reported that the teacher of black children has slightly larger class enrollment than does the average teacher of white children.[26]

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[22]Coleman, op. cit., p. 126.

[23]Ibid., p. 130.

[24]Ibid., p. 136.

[25]Ibid., p. 151.

[26]Ibid., p. 163.

Facilities and Curriculum Practices

Coleman reported in Equality of Educational Opportunity that a number of school characteristics and curriculum practices do not have any appreciable effect upon the achievement of students when selected personal background characteristics are held constant.

The following list of school characteristics and curriculum practices accounts for a very small percentage of the variation in achievement of a group of sixth and ninth grade black and white students from which Coleman reached this conclusion.[27]

Volumes per student in school library
Science laboratory facilities (9 and 12 only)
Number of extra curricular activities (9 and 12 only)
Presence of accelerated curriculum
Comprehensiveness of curriculum (9 and 12 only)
Strictness in promotion of slow learners (6 only)
Use of grouping or tracking (9 and 12 only)
School size
Number of guidance counselors (9 and 12 only)
Urbanism of school's location

He noted that in general there is a variation in school characteristics and curriculum practices among all 12 grades, but in the elementary grades there is a low variation with respect to facilities.

In addition Coleman found that contrary to popular belief, pupil-teacher ratio[28] and the number of specialized rooms in the building do not show any perceptible relationship to achievement.[29]

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[27] Ibid., pp. 220-75.

[28] Ibid., p. 312.

[29] Ibid., pp. 313-15.

Although such a study was not designed to investigate the qualitative value of the variables, these findings are not very encouraging when one realizes that nearly all of the federally funded compensatory education programs have chosen to rectify inequities in the above-mentioned variables as a means for bridging the educational gap of the culturally deprived child.

Coleman concluded that the attributes of school facilities and curriculum practices account for far less variation in achievement of minority group children than do the attributes of other students and slightly less than the attributes of staff.[30] Therefore, one has to conclude from Coleman's study that the composition of student population in the school environment makes the most difference in a student's intellectual development.

Considering together these two facts -- that federally funded compensatory programs seem to focus upon improvement in areas Coleman has found less highly significant to student achievement (school facilities and curriculum practices) and the fact that attributes of staff are more significant -- gives added impetus to the desirability of studying teacher attitudes.

The Disadvantaged Student

"The disadvantaged" refers to a group having a number of common characteristics such as low income; low educational

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[30] Ibid., p. 302.

achievement; low social status; tenuous employment, underemployment, or unemployment; absence of participation in the power structure of the community; health problems; and practically no opportunity for improvement. The racial and ethnic composition of the disadvantaged group tends to reflect a minority group -- Afro-American, Puerto Rican, Mexican American, American Indian, and mountain or Southern rural white -- although some disadvantaged persons may belong to the racial and ethnic groups composing the majority society of the United States. Most disadvantaged persons are concentrated in an urban ghetto inhabited predominantly by one racial or ethnic group.

Social, economic, educational, and residential isolation has fostered and perpetuated an alien culture for the disadvantaged. Children of the disadvantaged come to schools which are established, maintained, and operated by and for the dominant culture. But what is (or appears to be) appropriate for the dominant culture is not necessarily appropriate for the minority. In fact, compulsory public education in the United States is seriously indicted by the disproportionately high rate of scholastic retardation among disadvantaged children.

Disadvantaged children exhibit the following characteristics in school:

Lack of response to conventional classroom approaches
Inadequate performance in communication skills
Low achievement in reading and arithmetic
Socially unacceptable behavior
Indifference to responsibility

Non-purposeful activity
Physical defects and poor health habits
Over-age for grade
Poor attendance
High rate of failure
High drop-out rate
Low aspiration level

Although disadvantaged children show a normal range of scholastic aptitude, they do not achieve in school at a normal rate of progress. Thus one speaks of "scholastic retardation." "Experts" have laid the blame for the disadvantaged child's scholastic retardation from one extreme to the other. Some cite the nature of the home background. Others blame the student for not trying, for being undisciplined, and for not having the needed intellect. Still others blame the inept teachers and unsympathetic school administrators.

One supporter of the latter point of view is Kenneth Clark who believes the attitudes of teachers are more to blame for the disadvantaged child's lack of academic progress than any other factor. He asks educators to search themselves by considering, among other questions, the following:

> To what extent do they [contemporary social deprivation theories] offer acceptable and desired alibis for the educational default: the fact that these children, by and large, do not learn because they are not being taught effectively and they are not being taught because those who are charged with the responsibility of teaching them do not believe that they can learn, do not expect that they can learn, and do not act toward them in ways which help them to learn.[31]

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[31]Clark, op. cit., p. 131.

The General Nature of Compensatory Education Programs

Compensatory education programs for the disadvantaged were virtually unknown prior to 1960. Most of the programs have been designed and implemented under an uncontrolled experimental basis, mainly concerned with the total effect of a multiphase program on a target population.

Most of the programs are designed to meet observed needs which, however, are not necessarily based on actual needs. "For all their variety of means, the programs have generally suffered from one fundamental difficulty -- they are based on sentiment rather than on fact."[32]

Compensatory is the title that has been given to programs designed for the disadvantaged. There is no doubt that the programs are designed to compensate for the deprived student's inadequate background. With few exceptions the aims or objectives of these programs are "to raise achievement level, to improve a student's self-concept, and to broaden the student's horizon."

One might say facetiously that most of the programs represent an educator's move to transform disadvantaged children into middle class children so that our present

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[32]Edmund W. Gordon and Doxey A. Wilkerson, Compensatory Education for the Disadvantaged (New York: College Entrance Examination Board, 1966), p. 158.

means of teaching might be more effective. There is no question as to the ineffectiveness of our present methods of teaching the disadvantaged, but the question is: Is it best to change the child to meet the teaching methods and the curriculum, or to change the teaching methods and the curriculum to meet the child's needs?

This point has been commented on by Gordon.

> . . . the unexpressed purpose of most compensatory programs is to make disadvantaged children as much as possible like the kinds of children with whom the school has been successful, and our standard of educational success is how well they approximate middle-class children in school performance. It is not at all clear that the concept of compensatory education is the one which will most appropriately meet the problems of the disadvantaged.[33]

Gordon goes on to say that what is needed is a search for the kinds of educational experiences which are more appropriate for disadvantaged children. The search for more appropriate educational experiences for disadvantaged students in the past has concentrated more on the student than on curriculum, teaching methods, and staff. On this point Gordon says educators have been "unwilling to abandon what we think we have learned about teaching through our years of educating, with some success, the children of the middle- and upper-classes, we have tried adding and multiplying our existing techniques to arrive at a formula for success with less privileged children."[34] He feels educators have not said to the deprived child, "We will take you as you are, and ourselves assume the burden of finding educational techniques

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[33] Ibid., p. 159.

[34] Ibid.

appropriate to your needs."[35]

One cannot take lightly the growing acknowledgement of the fact that teaching the disadvantaged is a specialized task. Getting the needed specialist is no easy task, and one cannot rely upon a graduate course or a two-week in-service workshop to produce staff who are qualified to provide a satisfactory level of instruction in disadvantaged schools.

The fact remains that most teachers do not want to teach in disadvantaged schools,[36,37] and that we have difficulty in identifying teachers who are successful in teaching the disadvantaged. Koenigsberg studied teachers who had been identified by their administrators as successful in teaching the disadvantaged, but she was unable to substantiate the teacher expertise with any objective evidence.[38]

It is known that to be a successful teacher of the disadvantaged one must have a positive attitude toward his students. Strom expresses this idea in his statement that when the teacher ignores the value of the child as an individual no motivation can be transferred.[39] Until compensatory education programs for the disadvantaged devote a significant portion of their efforts toward the development

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[35] Ibid.

[36] Becker, op. cit.

[37] Clark, op. cit.

[38] Gordon, op. cit., p. 165.

[39] Strom, op. cit., p. 35.

of more positive attitudes on the part of staff toward the disadvantaged, it is doubtful these programs will live up to expectations.

The Federal Elementary and Secondary Education Act of 1965, Public Law 89-10

The passage of the Federal Elementary and Secondary Education Act[40] in 1965 dramatized unmistakably the intention of the federal government to share in the responsibility for both public and private education at the local level.

The traditional fear of local districts that federal funds mean federal control, lost its significance in the face of the pressing need to provide a more adequate educational program. The government made available over one billion dollars to initiate new programs, conduct research, and foster experiments in the area of education, mainly for deprived children who had heretofore not been receiving an adequate education.

Of the five title programs in the ESEA package, Title I, a program for the disadvantaged, is the portion which is related to this study.

The purpose of Title I is to meet the educational needs of disadvantaged children which the local school district is not fulfilling with its regular school programs. It supports programs to develop curriculum, to expand supplementary

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[40] In this section of the study the Federal Elementary and Secondary Education Act of 1965 is referred to as ESEA.

services, to strengthen the local educational program, and to provide remedial instruction. The local school administrators have the responsibility for identifying those children, pre-school through grade 12, who are economically deprived and educationally deprived.

The first-year survey of the programs funded reveals that the emphasis (63 per cent) is being placed on the deprived elementary school child. It also shows that 92 per cent of the children served are in public schools while 6 per cent are in non-public schools. The remaining 2 per cent are in pre-school programs.[41]

In addition to the financial benefits that a system receives from federal aid there is usually an effect on teacher morale and attitudes.[42,43] Generally staff members from all schools ask to participate in the ESEA programs. Most who participate are caught up in the excitement of the undertaking and many times experience greater job satisfaction and demonstrate more efficient performance.

Summary

It appears from the literature reviewed in this chapter that:

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[41]Howard S. Rowland and Richard L. Wing, Federal Aid for Schools, 1967-1968 Guide (New York: Macmillan Company, 1967), p. 22.

[42]Ibid., p. 3.

[43]Clark, op. cit., p. 143.

1. The most crucial element upon which the success of a compensatory education program depends is the school staff.
2. Teachers of the disadvantaged generally have poorer academic backgrounds, less satisfaction in their work, and less desirable attitudes toward their students than teachers of middle class children.
3. The major causes for job dissatisfaction among teachers of the disadvantaged are substandard academic performance of students and inadequate working conditions. Race tends to influence the perceived cause of dissatisfaction.
4. School facilities and curriculum practices are less highly significant to student achievement than are the attributes of staff and the other children attending the school.
5. It is believed by some that the attitudes of teachers are more to blame for the disadvantaged child's lack of academic progress than any other factor.
6. Most compensatory education programs are designed to meet observed needs which, however, are not necessarily needs based on facts.
7. Most educators have relied unwittingly upon educational techniques inappropriate to the needs of the disadvantaged. They have tried to change the disadvantaged child to meet the middle class curriculum instead of changing curriculum and techniques of teaching.

8. The fear that accepting federal aid means federal control has lessened, and the federal government has dramatized unmistakably its intentions to share in the responsibility for both public and private education at the local level.

The literature explored in this chapter provides a framework for discussing the findings of this investigation, according to the design of the study explained in the next chapter.

CHAPTER III

DESIGN OF THE STUDY

Introduction

This chapter contains a delineation of the methodology and procedures used to carry out the study. The teacher population involved in the study is described along with the method used to select it. The Minnesota Teacher Attitude Inventory[1] is outlined along with the procedure employed to administer it. Finally, the statistical analyses used in the study are explained. These are the Student's "t" Test, the 2 by 2 contingency table, and Fisher's analysis of variance.[2]

Purpose of the Study

The general purposes of the investigation are (1) to determine how the attitudes of a cross section of teachers from eight Title I depressed area schools compare to those

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[1] In this thesis the Minnesota Teacher Attitude Inventory is referred to as the MTAI.

[2] George A. Ferguson, Statistical Analysis in Psychology and Education (New York: McGraw-Hill Book Company, Inc., 1959).

of a similar cross section of teachers from five non-Title I depressed area schools and (2) to determine how the attitudes of the teachers in the eight Title I schools compare to those of the teachers in the five non-Title I schools at the end of one year's operation of the Title I compensatory education program. The resolution of the second general purpose is sought through two avenues, i.e., comparing Title I and non-Title I MTAI mean scores and analyzing the answers to the following questions about teacher attitudes toward pupil-teacher relations as measured by the MTAI:

Question A

Do the personal demographic data about Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations as measured by the MTAI?

Sub-question A:1

Does the sex of Title I and non-Title I teachers relate to their MTAI scores?

Sub-question A:2

Does the race of Title I and non-Title I teachers relate to their MTAI scores?

Sub-question A:3

Does the age of Title I and non-Title I teachers relate to their MTAI scores?

Sub-question A:4

Does the marital status of Title I and non-Title I teachers relate to their MTAI scores?

Sub-question A:5

Does the professional training of Title I and non-Title I teachers relate to their MTAI scores?

Sub-question A:6

Do the total years of teaching experience of Title I and non-Title I teachers relate to their MTAI scores?

Sub-question A:7

Do the total years of teaching experience with the present school system of Title I and non-Title I teachers relate to their MTAI scores?

Sub-question A:8

Do the total years of teaching experience in the present building of Title I and non-Title I teachers relate to their MTAI scores?

Question B

Do selected working conditions of Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations as measured by the MTAI?

Sub-question B-1

Does the grade taught by Title I and non-Title I teachers relate to their MTAI scores?

Sub-question B:2

Does the subject taught by Title I teachers relate to their MTAI scores?

Sub-question B:3

Does the size of the student enrollment in the building relate to MTAI scores of Title I and non-Title I teachers?

Sub-question B:4

Does the percentage of black teachers on the staff of Title I and non-Title I schools relate to teacher attitudes toward pupil-teacher relations as measured by the MTAI?

Question C

Do selected characteristics of the students in Title I and non-Title I schools relate to attitudes of teachers toward pupil-teacher relations as measured by the MTAI?

Sub-question C:1

> Does the percentage of black students enrolled in the school building relate to the attitude scores of Title I and non-Title I teachers as measured by the MTAI?

Sub-question C:2

> Does the level of student academic achievement relate to attitude scores of Title I and non-Title I teachers as measured by the MTAI?

Sub-question C:3

> Does the degree of student poverty relate to the attitudes of teachers toward pupil-teacher relations as measured by the MTAI?

In seeking answers to these questions and in order to collect data in keeping with the above-stated purpose, it is the intent of this study, firstly, to compare the attitudes of designated Title I teachers to those of teachers not designated to participate in Title I prior to the implementation of the Title I compensatory education program. Secondly, it is the intent of the study to compare the attitudes of the Title I and non-Title I teachers after the Title I program had been in operation one year.

Methods of Investigation

All research conducted in this study was with the cooperation of the Research Department, Flint Board of Education, Flint, Michigan.

The thirteen schools in this study were selected because they previously had been identified by the school system as

the hard core of poverty, cultural disadvantage, and underachievement. The thirteen schools are in the inner city and contain the overwhelming majority of black pupils enrolled in elementary schools. The schools represent the hard core of scholastic underachievement.

Sample

Before describing the characteristics of the 103 teachers in this study, who are from the thirteen most severely disadvantaged schools in the system, it is appropriate to account for the selection of the teachers who were included in the first and second phases of the study. Prior to the implementation of the study it was suspected that the unusually high rate of teacher mobility in the thirteen schools would definitely have an adverse effect upon any attempts to conduct a pre-post-test study. Therefore it was decided to conduct the study in two phases.

Phase one of the study was a test for significance of the difference between mean scores of two groups of teachers from the thirteen schools attended by the most severely disadvantaged group of children in the city: (a) the fourth, fifth, and sixth grade teachers of reading, arithmetic, homeroom subjects, and self-contained classroom subjects in the eight schools which had been selected to participate in a Title I compensatory education program and (b) the fourth, fifth, and sixth grade teachers of reading, arithmetic, homeroom subjects, and self-contained classroom subjects in the

the five schools which had not been selected to participate in Title I.

Phase two of the study was to test for significance of the difference between mean scores of the teachers from the eight Title I schools and the five non-Title I schools one year after the operation of the Title I program.

Selection of Teachers for Phase I

In the selection of the teachers to be included in the first phase of the study (those tested prior to the implementation of Title I), a random sample of teachers was desired. However, due to the high mobility rate of teachers in these inner-city schools, a representative sample of teachers was selected. In order to achieve a truly representative sample the Director of Research for the Flint Board of Education and the author decided that the Director of Research, the Director of Elementary Education, and the principals of the thirteen schools would select the teachers.

In order to get a truly representative sample the following criteria were used:

1. Teachers from grades four, five, and six. These grades were selected because the arithmetic and reading phase of the Title I program would affect these teachers.

2. Sex of the Teacher. An effort to get a balance of male and female teachers was made although the number of males in these schools is small.

3. Race of the Teacher. An effort to get a balance of black and white teachers from each building was considered important. The result was a near balance of 28 white and 26 black teachers.

4. Principal's Recommendation. This was important because the support of the administrators and teachers was needed in order to accomplish this study.

5. Experience of the Teacher. It was considered important to have a balance in years of teaching experience. It was difficult to have a consistent balance in this criterion because of the high mobility rate of teachers in the inner-city schools. It would have been ideal to have an equal number of first year teachers, teachers in the two-four year category, teachers in the five-nine year category, and so on. It was impossible to achieve this ideal balance.

6. Training of the Teacher. It was considered important to have a balance in the preparation of teachers. It was impossible to achieve this balance in grades four, five, and six in these thirteen schools.

Selection of Teachers for Phase II

In the selection of the teachers to be included in the second phase of the study (those tested following one year's operation of Title I), all fourth, fifth, and sixth grade teachers of either reading, arithmetic, homeroom subjects, or self-contained classroom subjects in the eight Title I schools and the five non-Title I schools were chosen.

Characteristics of the Sample

The setting of this study was Flint, Michigan, an industrial city with a population of approximately 200,000 persons. There are forty-four elementary schools in addition to eight junior high and four high schools in the city.

The school system employs 2,002 school teachers, 1,632 white and 370 black, to teach 46,451 students. Although the student body is approximately 33 per cent black, the black

teachers represent only 18 per cent of the total teaching staff, and 75 per cent of them are teaching on the elementary level. (See Appendix B.) Of the 103 teachers in the study 43 are male and 60 are female, while 48 are black and 54 are white.

It should be noted that the criteria for selection of Title I and non-Title I schools were not attitudes of teachers but rather the degree of poverty and low level of achievement of the students enrolled at a particular school. Furthermore, the thirteen schools selected had been identified by the public school system as disadvantaged schools two years before.

The Instrument

The Minnesota Teacher Attitude Inventory (MTAI) was selected because it is a well-known instrument for measuring teacher attitudes. (See Appendix C.) It is designed to measure those attitudes of a teacher which will predict how well he will get along with pupils. The assumption is made that desirable teacher attitudes are necessary if meaningful pupil-teacher relationships are to develop and that desirable pupil-teacher relationships are prerequisite to worthwhile learning within the classroom.

In the construction of the items for the instrument, five areas of attitudes were sampled. The five are the following:[3]

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[3]Walter W. Cook, Carroll H. Leeds, and Robert Callis, Minnesota Teacher Attitude Inventory Manual (New York: The Psychological Corporation, 1951), p. 10.

1. Moral status of children in the opinion of adults, especially as concerns their adherence to adult-imposed standards, moral or otherwise. Example: 'Children should be seen and not heard.'

2. Discipline and problems of conduct in the classroom and elsewhere, and methods employed in dealing with such problems. Example: 'Pupils found writing notes should be severely punished.'

3. Principles of child development and behavior related to ability, achievement, learning, motivation, and personality development. Example: 'The boastful child is usually overconfident of his ability.'

4. Principles of education related to philosophy, curriculum, and administration. Example: 'Pupils should be required to do more studying at home.'

5. Personal reactions of the teacher, his likes and dislikes, sources of irritation, etc. Example: 'Without children life would be dull.'

The MTAI assumes that a teacher scoring at the high end of the scale will be able to maintain a harmonious classroom situation. The manual says:

> It is assumed that a teacher ranking at the high end of the scale should be able to maintain a state of harmonious relations with his pupils, characterized by mutual affection and sympathetic understanding. The pupils should like the teacher and enjoy school work. The teacher should like the children and enjoy teaching. Situations requiring disciplinary action should rarely occur. The teacher and pupils should work together in a social atmosphere of cooperative endeavor, of intense interest in the work of the day, and with a feeling of security growing from a permissive atmosphere of freedom to think, act and speak one's mind with mutual respect for the feelings, rights, and abilities of others.[4]

On the other hand a teacher scoring at the opposite extreme, the low end of the scale, is not expected to be

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[4] Ibid., p. 3.

able to maintain a harmonious classroom situation.

> At the other extreme of the scale is the teacher who attempts to dominate the classroom. He may be successful and rule with an iron hand, creating an atmosphere of tension, fear and submission; or he may be unsuccessful and become nervous, fearful and distraught in a classroom characterized by frustration, restlessness, inattention, lack of respect, and numerous disciplinary problems. In either case both teacher and pupils dislike school work; there is a feeling of mutual distrust and hostility. Both teacher and pupils attempt to hide their inadequacies from each other. Ridicule, sarcasm, and sharp tempered remarks are common. The teacher tends to think in terms of his status, the correctness of the position he takes on classroom matters, and the subject matter to be covered rather than in terms of what the pupil needs, feels, knows, and can do.[5]

In reference to the instrument and its reliability it is concluded:

> Investigations carried on by the authors over the past ten years indicate that the attitudes of teachers toward children and school work can be measured with high reliability, and that they are significantly correlated with the teacher-pupil relations found in the teacher's classroom. The Minnesota Teacher Attitude Inventory has emerged from these researches. It is designed to measure those attitudes of a teacher which predict how well he will get along with pupils in interpersonal relationships and indirectly how well satisfied he will be with teaching as a vocation.[6]

Analysis Procedures

The data used in the analysis involved information from a Personal History Data Sheet (see Appendix C) and the MTAI score for each teacher. The relationship of the MTAI score

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[5] Ibid.

[6] Ibid.

and each variable from the Personal History Data Sheet was analyzed separately.

The statistical tools used in the analysis of the data in the study were the Student's "t" Test, the 2 by 2 contingency table, and Fisher's analysis of variance (one-way and two-way). The statistics were used to test the deviation of the sample mean from the universal mean and also to test the significance of difference between the mean scores of the Title I and non-Title I teachers.

For each appropriate category and group an analysis of variance was performed at the Computer Center of the Harvard University Graduate School of Education with programs designed for the 7094 IBM computer. The programs used were The Multivariate Analysis of Variance and The Multiple Discriminant Analysis by Kenneth J. Jones.

Statistical Procedures

To determine what relationship, if any, exists between the MTAI scores of both the Title I and non-Title I teachers and the questions under study, it was necessary to categorize the personal demographic data about the teachers according to sex, race, age, marital status, professional training, and teaching experience; the working conditions according to grade taught, subject taught, building enrollment, and percentage of black teachers in the building; and the characteristics of the students according to percentage of black students in the student body, academic achievement, and degree of poverty.

A. Demographic Data about the Teachers

A:1 Sex
1. female
2. male

A:2 Race
1. black
2. white

A:3 Age
1. 20-30
2. 31 and over

A:4 Marital Status
1. single
2. married

A:5 Years of Training
1. less than master's degree
2. master's degree or more

A:6 Years of Teaching Experience
1. two or less
2. more than two

B. Selected Working Conditions

B:1 Grade Taught
1. fourth
2. fifth
3. sixth
4. fourth, fifth, and sixth
5. fifth and sixth
6. fourth and fifth

B:2 Subject Taught
1. reading
2. arithmetic
3. homeroom
4. self-contained classroom

B:3 Building Enrollment
1. 300-399
2. 400-499
3. 500-599
4. 600-699
5. 700-799
6. 800-899
7. 900-999
8. 1,000-1,099
9. 1,100-1,199
10. 1,200-1,299

B:4 Percentage of Black Teachers in the Building
1. 0-19%
2. 20-39%
3. 40-59%
4. 60-79%
5. 80-99%

C. Selected Characteristics of the Students

C:1 Percentage of Black Students Enrolled in the Building
1. 0-19%
2. 20-39%
3. 40-59%
4. 60-79%
5. 80-99%

C:2 Level of Academic Achievement (approximate percentage of children achieving in the lowest quartile on the basis of systemwide achievement records)

1. 30-34%
2. 35-39%
3. 40-44%
4. 45-49%
5. 50-54%
6. 55-59%

C:3 Degree of Poverty (approximate number of families living in the school district which have annual incomes of less than $2,000)

1. 8-9%
2. 10-11%
3. 12-13%
4. 14-15%
5. 16-17%
6. 18-19%
7. 20-21%
8. 22-23%

Administration of the Instrument

Each teacher selected for the study was contacted through his principal by the Research Division of the Flint Public School System and asked if he would kindly take part in a study being made pertaining to the Title I program. To assure the teachers that no outside time would be asked of them, they were informed that they would be released from classroom duties for the period of time necessary to complete the instrument. Each was told that his classroom would be manned by a substitute teacher during the time he was completing the instrument and that it would be necessary for him to have a forty-five-minute to one-hour lesson prepared for his substitute.

Before the instrument was distributed, the teachers were told not to identify themselves by name on either the Personal History Data Sheet or the MTAI answer sheet. A numbered Personal History Data Sheet was attached to a

correspondingly numbered MTAI answer sheet. The Personal History Data Sheet collected personal demographic data. Administration of the MTAI followed the directions stated in the MTAI Manual. Following the administration of the instrument the answer sheets were hand scored.

Summary

This chapter has contained a delineation of the methodology and procedure used to carry out the study. The teacher population involved in the study was described along with the method used to select it. The Minnesota Teacher Attitude Inventory (MTAI), the instrument used in the study, was outlined. The statistical analysis involving the Student's "t" Test, the 2 by 2 contingency table, and Fisher's analysis of variance contained in the study was explained.

The problem has been defined, related research has been reviewed, and the procedures for collecting and analyzing the data have been described. The next step is to analyze the data. This is carried out in Chapter IV and V.

CHAPTER IV

ANALYSIS OF RESULTS

Introduction

This study has a twofold purpose: (1) to determine how the attitudes of a cross section of teachers from eight schools designated to participate in the Title I program compare to those of a similar cross section of teachers from five schools not designated to participate in Title I and (2) to determine how the attitudes of teachers in eight Title I schools compare to those of teachers in five non-Title I schools at the end of one year's operation of Title I.

The implementation of the study was divided into two phases: one before the Title I program began and the other following a year of its operation. The first phase of the study was to determine how the Minnesota Teacher Attitude Inventory (MTAI) scores of a sample of fourth, fifth, and sixth grade teachers from eight depressed area schools scheduled to participate in the Title I program compare with those of a similar sample of teachers from five schools not scheduled to participate. The second phase was to determine how the (MTAI) scores of fourth, fifth, and sixth grade

teachers participating in Title I compare with the scores of teachers of the same grades not in Title I. The Phase II investigation was pursued by the use of two operations, i.e., comparing Title I and non-Title I MTAI mean scores and analyzing the answers to three categories of questions. The categories of questions were related to the following information about the teacher: personal demographic data, selected working conditions, and selected characteristics of his students.

The Minnesota Teacher Attitude Inventory (MTAI) is the instrument used in the study. Raw scores on the MTAI range from a "plus 150" to a "minus 150." Initially it was quite awkward to compute positive and negative raw scores together; therefore, to eliminate the negative scores and to facilitate the computation it was decided to add a constant of 100 to each raw score. Adding the constant 100 to all MTAI raw scores has no effect on the significance of the statistics. It should be noted that sample mean scores reported in this chapter carry the constant 100 which was added to all raw scores; but, if comparisons are made to the norm mean scores, the constant 100 is automatically dropped from the sample mean.

A higher MTAI score can be interpreted to mean more positive attitudes toward pupil-teacher relations while, on the other hand, a lower MTAI score can be interpreted to mean less positive attitudes toward pupil-teacher relations.

In Table 4.1 mean raw scores and standard deviations of the five standardized norm groups of experienced elementary school teachers established for the MTAI are presented.

For the purpose of this study the standardized mean used is the one in Table 4.1 for elementary teachers who teach in school systems with 21 or more teachers and who have four years of training, a mean raw score of 55.1, and a standard deviation of 36.7.

TABLE 4.1-- Standardized mean raw scores and standard deviations of five groups of experienced elementary school teachers for the MTAI, Form A.

	Rural Teachers	Systems with Fewer than 21 Teachers		Systems with More than 21 Teachers	
		2 Years Training	4 Years Training	2 Years Training	4 Years Training
N	332.0	118.0	102.0	249.0	247.0
Mean ($\bar{X}$)	29.7	29.2	37.0	40.1	55.1
Standard deviation (SD)	38.1	38.6	39.4	37.2	36.7

Phase I of the Study

Phase I of the study is to determine how the attitudes of teachers in eight schools designated to participate in a Title I program compare to those of teachers in five similar schools not designated to participate in the Title I program.

Presented in Table 4.2 are the individual raw scores on the MTAI derived from testing the selected groups of

teachers from schools designated to participate in the Title I program and teachers from schools not designated to participate.

TABLE 4.2-- Individual MTAI raw scores of the Phase I sample of teachers

Teacher	Raw Score	Teacher	Raw Scores
Designated Title I			
155	124	190	85
156	142	191	113
163	124	192	115
165	111	178	172
166	56	198	102
168	143	195	87
169	94	196	153
170	116	197	176
171	146	184	177
173	139	185	115
188	103	186	115
189	142	187	112

$\bar{X}$ (Mean) = 122.08
N = 24

Not Designated Title I			
177	124	161	147
174	171	179	145
175	125	180	87
158	167	181	141
159	159	183	116
160	78		

$\bar{X}$ (Mean) = 132.72
N = 11

To determine whether or not the mean scores of the two groups of teachers were significantly different the "t" test for significance of difference between means was performed. An analysis of this operation is presented in Table 4.3.

TABLE 4.3-- Statistical data and "t" value of the Phase I sample of teachers

	Designated Title I	Not Designated Title I
N	24	11
Mean	122.08	132.72
Standard deviation	28.86	29.00
"t" ratio	.98	

From the data in Table 4.3 the unbiased estimate of the pooled variance was computed. For 33 degrees of freedom a "t" value equal to 2.036 is required for significance at the .05 level of confidence. The observed "t" value of .98 in Table 4.3 is below the significance level; therefore, the statistics can be interpreted to mean the two groups were from the same universe.

Phase II of the Study

In Phase II of the study attitudes of Title I teachers toward pupil-teacher relations are compared with attitudes of non-Title I teachers toward pupil-teacher relations as measured by the MTAI one year after the Title I program

began. The first operation will involve comparing the MTAI mean score of Title I teachers with the MTAI mean score of non-Title I teachers. The second operation will involve analyzing the answers to the following three categories of questions (Questions A, B, and C):

Question A

> Do the personal demographic data (sex, race, age, marital status, professional training, and teaching experience) of Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations?

Question B

> Do selected working conditions (grade taught, subject taught, size of student enrollment, and percentage of black teachers on the staff) of Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations?

Question C

> Do selected characteristics of the students (percentage of black students, level of academic achievement, and degree of poverty)in Title I and non-Title I schools relate to the attitudes of teachers toward pupil-teacher relations?

A Comparison of Title I and Non-Title I MTAI Scores

The analysis of data in Phase I of the study failed to indicate that the teachers in the Title I schools were from a population different from that of the teachers in the non-Title I schools prior to the implementation of the Title I program. A similar analysis was performed on the MTAI scores of teachers in Phase II.

A "t" test for significance of the difference between independent means was applied to the scores of the Title I

and non-Title I teachers in Phase II of the study, and the results are reported in Table 4.4. An inspection of Table 4.4 reveals that the "t" value of -.85 of the difference between the means is not significant because for 86 degrees of freedom a "t" value equal to 1.948 is required for significance at the .05 level.

TABLE 4.4-- Mean difference between the scores of Title I and non-Title I teachers

	Title I	Non-Title I
N	60	28
Mean	131.52	138.86
Standard deviation	37.50	36.55
"t" ratio	-.852	

The Title I teachers had a mean score of 31.52 and the non-Title I a mean score of 38.86 both of which were low compared to the standardized norm of 55.1 with a standard deviation of 36.7. In fact, 53 per cent of the Title I and 39 per cent of the non-Title I teachers scored in the bottom quartile. There were eight Title I and three non-Title I scores at the fifth percentile or lower. In the top quartile there were four Title I and three non-Title I scores, and the highest scores for both Title I and non-Title I were at the 95th percentile.

In conclusion, after a year's participation in the Title I program, the teachers in Title I schools continued

to have attitudes toward pupil-teacher relations which were not significantly different from the attitudes of teachers in non-Title I schools.

Question A

Do the personal demographic data (sex, race, age, marital status, professional training, and teaching experience) of Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations?

The answer to Question A is a compilation of the answers to eight sub-questions which deal with specific characteristics of the teachers, i. e., sex, race, age, marital status, professional training, and teaching experience. The statistical data to be analyzed for each sub-question are presented in a fourfold 2 by 2 contingency table and also in an analysis of variance table. However, where there were eight or fewer subjects in a cell, it was decided that there was an insufficient number of subjects to investigate the problem statistically. Nevertheless, such a problem is investigated in a descriptive manner.

Sub-question A:1 Does the sex of Title I and non-Title I teachers relate to their MTAI scores?

The variables studied in Sub-question A:1 were (a) teaching assignment (Title I or non-Title I) and (b) sex of each teacher. The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

Presented in Figure 4.1 are the alternatives for Sub-question A:1 with the number of subjects and mean score for each cell.

Teaching Assignment	Sex	
	Female	Male
Title I	N = 34 $\bar{X}$ = 129.9	N = 26 $\bar{X}$ = 133.6
Non-Title I	N = 19 $\bar{X}$ = 137.5	N = 9 $\bar{X}$ = 141.8

Figure 4.1-- MTAI mean scores of Title I and non-Title I female and male teachers.

An inspection of Figure 4.1 reveals that Title I female and male teachers had lower MTAI mean scores than either non-Title I females or males. The Title I males had a slightly higher mean score than the Title I females; similarly, the non-Title I males had a slightly higher mean score than non-Title I females. The non-Title I males had the highest MTAI mean score of any of the cells.

One must be cautious about seeing too many implications in the information presented in Figure 4.1 because of the small number of subjects in the non-Title I male cell.

In search for statistical answers to Sub-question A:1 a two-way analysis of variance was used to ascertain whether

or not there existed a relationship among the variables of a teacher's sex, his participation in Title I, and his score on the MTAI. The statistical results of the procedure are presented in Table 4.5.

TABLE 4.5-- Two-way analysis of variance of the relationship between teaching assignment and sex to MTAI scores of teacher attitudes toward pupil-teacher relations.

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio*
Teaching assignment	1,140.9	1	1,140.9	0.789
Sex	201.5	1	201.5	0.139
Interaction	1.6	1	1.6	0.001
Within cell	121,479.4	84	1,446.2	. .

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96.

For 1 and 84 degrees of freedom, an F ratio of 3.96 is required for significance at the .05 level of confidence. The observed F ratios in Table 4.5 are well below this; therefore, the statistical results neither indicated a significant difference in the MTAI scores due to teaching assignment with respect to sex, nor sex with respect to teaching assignment, nor a significant interaction of teaching assignment and sex with respect to scores received on the MTAI.

Sub-question A:2 Does the race of Title I and non-Title I teachers relate to their MTAI scores?

The variables studied in Sub-question A:2 were (a) teaching assignment (Title I or non-Title I) and (b) race of each teacher. The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

In Figure 4.2 the alternatives for Sub-question A:2 with the number of subjects and MTAI mean score for each cell are presented.

Teaching Assignment	Race	
	Black	White
Title I	N = 32 $\bar{X}$ = 122.5	N = 28 $\bar{X}$ = 141.9
Non-Title I	N = 13 $\bar{X}$ = 131.6	N = 15 $\bar{X}$ = 145.1

Figure 4.2-- MTAI mean scores of Title I and non-Title I black and white teachers.

An inspection of Figure 4.2 reveals that black and white Title I teachers had slightly lower MTAI mean scores than their racial counterparts in non-Title I schools. White teachers had higher mean scores than black teachers, and white non-Title I teachers had a mean score 22.6 points higher than black Title I teachers.

One would hesitate to draw any rash conclusions, but the data seem to indicate that the MTAI mean scores for white teachers were similar whether they taught in the Title I program or not. Black teachers who did not teach in the Title I program had a higher MTAI mean score than black teachers who did teach in Title I.

A two-way analysis of variance was used to ascertain whether or not there existed a relationship among the variables of teaching assignment, race, and MTAI scores. The results of the analysis are presented in Table 4.6.

TABLE 4.6-- Two-way analysis of variance of the relationship between teaching assignment and race to MTAI scores of teacher attitudes toward pupil-teacher relations.

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio*
Teaching assignment	714.6	1	714.6	0.522
Race	7,036.6	1	7,036.6	5.144**
Interaction	163.7	1	163.7	0.120
Within cell	114,908.4	84	1,368.0	. .

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96. F ratios which are significant at this level are indicated by **.

For 1 and 84 degrees of freedom an F ratio of 3.96 is required for significance at the .05 level of confidence. An inspection of Table 4.6 reveals that the F ratio of race was 5.144 and significant at the .05 level of confidence. From the data in the table the following observations were made: (a) The statistical results failed to indicate a significant difference in MTAI scores due to teaching assignment with respect to race. (b) The statistical results did indicate a significant difference between white and black teachers in MTAI scores. White teachers scored significantly higher than black teachers regardless of teaching assignment. Furthermore, the data in Figure 4.2 reveal that black teachers in Title I had the lowest score among the four groups of teachers. (c) The statistical results failed to indicate a significant interaction of teaching assignment and race with respect to scores received on the MTAI.

Sub-question A:3 Does the age of Title I and non-Title I teachers relate to their MTAI scores?

The variables studied in Sub-question A:3 were (a) teaching assignment (Title I or non-Title I) and (b) two age categories of teachers (thirty and under; over thirty). The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

In Figure 4.3 the alternatives for Sub-question A:3 with the number of subjects and MTAI mean score for each cell are presented.

Teaching Assignment	Age	
	Thirty Years Old and Under	Over Thirty Years Old
Title I	N = 24 $\overline{X}$ = 130.0	N = 36 $\overline{X}$ = 132.6
Non-Title I	N = 15 $\overline{X}$ = 145.4	N = 13 $\overline{X}$ = 131.3

Figure 4.3-- MTAI mean scores of Title I and non-Title I teachers thirty years old and under and over thirty years old.

An inspection of Figure 4.3 reveals that teachers in three of the cells had similar MTAI mean scores, i.e., Title I teachers thirty years old and under, and Title I and non-Title I teachers over thirty years old. Non-Title I teachers thirty years old and under had a higher MTAI mean score than the teachers in the other cells; from the data presented in Figure 4.3 one might speculate that they had a higher MTAI mean score than other teachers because of their youth and enthusiasm, but this speculation is repudiated by Title I teachers in the same age bracket having the lowest mean score of the four groups.

A two-way analysis of variance was used to ascertain whether or not there existed a relationship among the variables of teaching assignment, age, and MTAI scores. The results of the analysis are presented in Table 4.7.

TABLE 4.7-- Two-way analysis of variance of the relationship between teaching assignment and age to MTAI scores of teacher attitudes toward pupil-teacher relations.

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio*
Teaching assignment	908.4	1	908.4	0.634
Age	293.0	1	293.0	0.205
Interaction	1,307.5	1	1,307.5	0.913
Within cell	120,314.5	84	1,432.3	. .

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96.

For 1 and 84 degrees of freedom an F ratio of 3.96 is required for significance at the .05 level of confidence. An inspection of Table 4.7 reveals that the F ratios fall well below the needed level for significance; therefore, the statistical results neither indicated a significant difference in the MTAI scores due to teaching assignment with respect to age, nor age with respect to teaching assignment, nor a significant interaction of teaching assignment and age with respect to MTAI scores.

Sub-question A:4 Does the marital status of Title I and non-Title I teachers relate to their MTAI scores?

The variables studied in Sub-question A:4 were (a) teaching assignment (Title I or non-Title I) and (b) marital status.

They were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

Presented in Figure 4.4 are the alternatives for Sub-question A:4 with the number of subjects and MTAI mean score for each cell.

Teaching Assignment	Marital Status	
	Single	Married
Title I	N = 17 $\bar{X}$ = 136.1	N = 43 $\bar{X}$ = 129.7
Non-Title I	N = 8 $\bar{X}$ = 148.6	N = 20 $\bar{X}$ = 135.0

Figure 4.4-- MTAI mean scores of Title I and non-Title I single and married teachers.

An inspection of Figure 4.4 reveals that single Title I teachers and married non-Title I teachers each had a similar MTAI mean score which was slightly larger than that of married Title I teachers. Single non-Title I teachers had the highest MTAI mean score, but the small number of subjects in the cell limited speculation about what the mean score might imply.

A two-way analysis of variance was used to ascertain whether there existed a relationship among the variables of teaching assignment, marital status, and MTAI score. The results of the analysis are summarized in Table 4.8.

TABLE 4.8-- Two-way analysis of variance of the relationship between teaching assignment and marital status to MTAI scores of teacher attitudes toward pupil-teacher relations.

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio*
Teaching assignment	1,022.9	1	1,022.9	0.715
Marital status	1,354.4	1	1,354.4	0.946
Interaction	209.4	1	209.4	0.146
Within cell	120,236.7	84	1,431.4	. .

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96.

For 1 and 84 degrees of freedom an F ratio of 3.96 is required for significance at the .05 level of confidence. An inspection of Table 4.8 reveals that the F ratios are well below the significance level; therefore, the statistical results indicated neither a significant difference in the MTAI scores due to teaching assignment with respect to marital status, nor marital status with respect to teaching assignment, nor a significant interaction of teaching assignment and marital status with respect to MTAI scores.

Sub-question A:5 Does the professional training of Title I and non-Title I teachers relate to their MTAI scores?

The variables studied in Sub-question A:5 were (a) teaching assignment (Title I or non-Title I) and

(b) two categories of professional training of teachers (less than a master's degree; master's degree or more). The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

Presented in Figure 4.5 are the alternatives for Sub-question A:5 with the number of subjects and MTAI mean score for each cell.

Teaching Assignment	Professional Training	
	Less than a Master's Degree	Master's Degree or More
Title I	N = 34 $\bar{X}$ = 123.6	N = 26 $\bar{X}$ = 141.9
Non-Title I	N = 18 $\bar{X}$ = 146.9	N = 10 $\bar{X}$ = 124.4

Figure 4.5-- MTAI mean scores of Title I and non-Title I teachers holding less than a master's degree and a master's degree or more.

An inspection of Figure 4.5 reveals that Title I teachers with a master's degree or more had a higher MTAI mean score than either Title I teachers with less than a master's degree or non-Title I teachers with a master's or more. Non-Title I teachers with less than a master's degree had a similar but slightly higher score than the more trained Title I teachers.

A two-way analysis of variance was used to ascertain

whether there existed a relationship among the variables of teaching assignment, professional training, and MTAI score. The results of the analysis are summarized in Table 4.9.

TABLE 4.9-- Two-way analysis of variance of the relationship between teaching assignment and professional training to MTAI scores of teacher attitudes toward pupil-teacher relations.

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio*
Teaching assignment	1,153.7	1	1,153.7	0.853
Professional training	625.1	1	625.1	0.462
Interaction	7,469.8	1	7,469.8	5.525**
Within cell	113,574.6	84	1,352.1	. .

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96. F ratios which are significant at this level are indicated by **.

In Table 4.9 the observed F ratio of teaching assignment is .853 and professional training is .462. Both ratios fall below that of 3.96 which is required for significance with 1 and 84 degrees of freedom at the .05 level of confidence. However, the F ratio of 5.525 for the interaction of teaching assignment and professional training is significant at the .05 level.

An inspection of Figure 4.5 reveals the nature of the interaction of teaching assignment and professional training. Title I teachers holding at least a master's degree

had a mean score of 141.9 compared to the lower mean score of 123.6 for those Title I teachers holding less than a master's degree. For non-Title I teachers an opposite distribution of high-low MTAI scores was the case. The non-Title I teachers holding less than a master's degree had a mean score of 146.9 which was higher than that of 124.4 earned by the non-Title I teachers.

A comparison of Figure 4.3 (age) and Figure 4.5 (professional training) reveals that the number of subjects in the non-Title I cell 30 years old and under was highly similar to the number of subjects in the non-Title I with less than a master's degree. Furthermore, the two cells compared probably contained a high percentage of the same people. These facts lead one to suspect that the MTAI mean score in the cell of non-Title I teachers with less than a master's degree reflected an age difference rather than a degree status and, consequently, did not give an accurate view of the relationship of professional training and MTAI score.

Sub-questions A:6, A:7, and A:8 Sub-questions A:6 through A:8 deal with the years of teaching experience of the subjects.

Sub-question A:6

> Do the total years of teaching experience of Title I and non-Title I teachers relate to their MTAI scores?

Sub-question A:7

> Do the total years of teaching experience with the present school system of Title I

and non-Title I teachers relate to their MTAI scores?

Sub-question A:8

Do the total years of teaching experience in the present building of Title I and non-Title I teachers relate to their MTAI scores?

Sub-questions A:6, A:7, and A:8 are explored as a unit because they are very closely related and yet each one represents a specific question. One 2 by 2 contingency table of the total years of teaching experience is presented instead of a separate one for each category of teaching experience because the data for each is so similar. However, a two-way analysis of variance is presented for each category.

The variables studied in Sub-questions A:6, A:7, and A:8 were (a) teaching assignment (Title I or non-Title I) and (b) years of teaching experience (total, with system, and in present building). The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

In Figure 4.6 the alternatives for Sub-question A:6 with the number of subjects and MTAI mean score in each cell are presented.

Teaching Assignment	Total Years of Teaching Experience	
	Two or Less Years of Teaching Experience	More than Two Years of Teaching Experience
Title I	N = 20 $\bar{X}$ = 116.0	N = 40 $\bar{X}$ = 139.3
Non-Title I	N = 8 $\bar{X}$ = 128.6	N = 20 $\bar{X}$ = 143.0

Figure 4.6-- MTAI mean scores of Title I and non-Title I teachers with a total of two or less years of teaching experience and more than two years.

An inspection of Figure 4.6 reveals that regardless of teaching assignment teachers with more than two years of teaching experience have higher MTAI mean scores than teachers with less experience. Title I teachers with more years of teaching experience had a mean score of 139.3 which was 23.3 points higher than the 116.0 mean score of Title I teachers with fewer years of experience. The mean scores of the non-Title I teachers followed a similar pattern with the more experienced teachers having a mean score of 143.0 while the less experienced ones had a score of 128.6. The experienced non-Title I teachers had a substantially higher MTAI mean score than the less experienced Title I teachers and a slightly higher one than the experienced Title I teachers.

From the information in Figure 4.6 there seemed to be a relationship between the variables of having more than two years of teaching experience, not participating in Title I, and having a higher MTAI score. And yet one must be cautious about inferring anything regarding the importance or lack of importance of participation in the Title I program because of the few number of subjects in the cell of non-Title I teachers with two or less years of experience.

To ascertain whether or not there existed a statistically significant relationship among the variables of teaching experience, teaching assignment, and MTAI scores a two-way analysis of variance was performed.

A teacher's experience was classified into three categories: (a) total years of teaching experience, (b) total years of teaching experience with the school system, and (c) total years of teaching experience in the present building. In Tables 4.10, 4.11, and 4.12 the statistical findings for each of the above categories are presented, respectively.

TABLE 4.10-- Two-way analysis of variance showing the relationship between teaching assignment and total years of teaching experience to MTAI scores of teacher attitudes toward pupil-teacher relations.

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio*
Teaching assignment	770.5	1	770.5	0.571
Total years of teaching experience	8,333.4	1	8,333.4	6.173**
Interaction	320.4	1	320.4	0.237
Within cell	113,399.0	84	1,350.0	. .

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96. F ratios which are significant at this level are indicated by **.

TABLE 4.11-- Two-way analysis of variance showing the relationship between teaching assignment and years of teaching experience with the system to MTAI scores of teacher attitudes toward pupil-teacher relations.

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio*
Teaching assignment	1,548.4	1	1,548.4	1.190
Years of teaching experience with the system	8,719.5	1	8,719.5	6.698**
Interaction	3,208.8	1	3,208.8	2.465
Within cell	109,346.7	84	1,301.7	. .

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96. F ratios which are significant at this level are indicated by **.

TABLE 4.12-- Two-way analysis of variance showing the relationship between teaching assignment and years of teaching experience in the present building to MTAI scores of teacher attitudes toward pupil-teacher relations.

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio*
Teaching assignment	1,124.0	1	1,124.0	0.892
Teaching experience in present building	11,785.6	1	11,785.6	9.356**
Interaction	4,098.1	1	4,098.1	3.253
Within cell	105,815.6	84	1,259.7	. .

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96. F ratios which are significant at this level are indicated by **.

An F ratio of 3.96 is required for significance at the .05 level of confidence with 1 and 84 degrees of freedom. An inspection of Tables 4.10, 4.11, and 4.12 reveals that the F ratios of .571, 1.190, and .892, respectively, for teaching assignment with respect to teaching experience are not significant at the .05 level of confidence.

However, the F ratio of 6.173 for total years of teaching experience with respect to teaching assignment, the F ratio of 6.698 for the total years of teaching experience with the system with respect to teaching assignment, and the F ratio of 9.356 for the years of teaching experience in the present building are all significant at the .05

level of confidence. One could conclude from the data presented that more experienced teachers had more positive attitudes toward pupil-teacher relations than less experienced teachers. Furthermore, the data presented in Tables 4.11 and 4.12 indicate that teachers who remained with the system tended to remain in the same building.

The F ratios for interaction (.237, 2.465, and 3.253 in Tables 4.10, 4.11, and 4.12, respectively) did not indicate a significant interaction of teaching assignment and teaching experience.

The statistics did indicate that the variable of years of teaching experience was significant at the .05 level of confidence relative to the MTAI scores of Title I and non-Title I teachers. An F ratio of 3.96 is required for 1 and 84 degrees of freedom to be significant at the .05 level of confidence. The F ratios of 6.173, 6.698, and 9.356 were reported for total years of teaching experience, years of experience with the system, and years of experience in the building, respectively.

Summary of Question A The above data in Sub-questions A:1 through A:8 pertaining to sex, race, age, marital status, professional training, and teaching experience were presented as a preliminary step to answering Question A.

Question A

> Do the personal demographic data of Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations as measured by the MTAI?

The statistical results in Questions A:1 through A:8 failed to indicate a significant difference in MTAI scores due to teaching assignment in Title I or non-Title I with respect to the personal demographic data of teachers, i.e., sex, race, age, marital status, professional training, and teaching experience.

The statistical results for Question A:2 did indicate a significant difference at the .05 level of confidence in race between the MTAI scores of black and white teachers. An F ratio of 3.96 is necessary for 1 and 84 degrees of freedom to be significant at the .05 level of confidence. The F ratio of race was 5.144 and indicated that white teachers scored significantly higher than black teachers regardless of teaching assignment. The data in Figure 4.2 reveal that black Title I teachers had the lowest MTAI score of the four groups of teachers.

The statistics neither indicated a significant difference in the MTAI due to sex, age, marital status, professional training, nor teaching experience due to teaching assignment.

The statistical results did indicate a significant difference in MTAI scores due to the interaction of professional training and teaching assignment. An F ratio of 3.96 is necessary for 1 and 84 degrees of freedom to be significant at the .05 level of confidence. The F ratio of the interaction of professional training and teaching assignment was 5.525 and significant at the .05 level of confidence. The data indicated that Title I participants

with master's degrees and non-participants without master's degrees were significantly different from Title I participants without master's degrees and non-participants with master's degrees.

The statistical results did not indicate a significant difference in MTAI scores due to the interaction of program participation and sex, race, age, marital status, or teaching experience. (A summary of the average age, training, and experience of all elementary teachers in the system can be found in Appendix B.)

Question B

Do selected working conditions of Title I and non-Title I teachers (grade taught, subject taught, size of the student enrollment of the building, and percentage of black teachers with whom teachers work) relate to their attitudes toward pupil-teacher relations as measured by the MTAI?

The answer to Question B is a compilation of answers to four sub-questions which deal with the working conditions under which the teacher instructs. The statistical data analyzed for each sub-question are presented in a 2 by 2 contingency table and/or an analysis of variance table. Where there were eight or fewer subjects in a category or a cell of the contingency table, it was decided that the number of subjects was insufficient to investigate the problem statistically; however, the problem was investigated in a descriptive manner.

Sub-question B:1 Does the grade taught by Title I and non-Title I teachers relate to their MTAI scores?

The variables studied in Sub-question B:1 were (a) teaching assignment (Title I or non-Title I) and (b) grade taught (4th, 5th, 6th, 4th through 6th, 5th and 6th, or 4th and 5th). The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations. It should be noted that teachers who teach all three grades are teachers of reading and arithmetic; therefore, interpretation of the MTAI mean score of teachers of grades 4 through 6 will be discussed when Sub-question B:2, dealing with teaching area, is presented.

In Figure 4.7 are presented the alternatives for Sub-question B:1 with the number of subjects and MTAI mean score for each cell.

Teaching Assignment	4th Grade	5th Grade	6th Grade	4-6th Grade	5-6th Grade	4-5th Grade
Title I	N=18	N=7	N=9	N=23	N=1	N=2
	$\bar{X}$=117.3	$\bar{X}$=96.7	$\bar{X}$-138.1	$\bar{X}$=150.3	$\bar{X}$=163	$\bar{X}$=118
Non-Title I	N=11	N=2	N=8	N=3	N=2	N=2
	$\bar{X}$=144.6	$\bar{X}$=168	$\bar{X}$=122.4	$\bar{X}$=144.3	$\bar{X}$=160	$\bar{X}$=114.5

Figure 4.7-- The number of Title I and non-Title I teachers instructing at each grade level.

An inspection of Figure 4.7 reveals that there was a wide variety of grades taught by the eighty-eight teachers in the second phase of the study, and consequently there were eight cells with eight or fewer subjects per cell. Therefore, the data in Figure 4.7 did not seem to lend themselves to reliable statistical analysis. However, the mean scores of the 5th grade teachers merit attention even though there were only two non-Title I 5th grade teachers. When two groups of scores are almost two standard deviations apart, they warrant further investigation.

Sub-question B:2 Does the subject taught by Title I teachers relate to their MTAI scores?

The variables studied in Sub-question B:2 were the subjects taught by Title I teachers; namely, the variables were reading, arithmetic, homeroom subjects, and self-contained classroom subjects. They were investigated in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

Presented in Figure 4.8 are the alternatives for Sub-question B:2 with the MTAI mean score and number of Title I teachers in each cell.

Teaching Area			
Reading	Arithmetic	Homeroom Subjects	Self-contained Classroom Subjects
N=13	N=13	N=12	N=22
$\bar{X}$=152.2	$\bar{X}$=147.0	$\bar{X}$=124.8	$\bar{X}$=113.8

Figure 4.8-- MTAI mean scores of Title I teachers of reading, arithmetic, homeroom subjects, and self-contained classroom subjects.

An inspection of Figure 4.8 reveals that teachers of reading and arithmetic had much higher MTAI mean scores than teachers of homeroom and self-contained classroom subjects. Teachers of reading had the highest MTAI mean score of all the teachers while teachers of self-contained classroom subjects had the lowest mean score.

To ascertain whether or not there existed a significant relationship between the classroom subjects a teacher instructed and his MTAI score, a one-way analysis of variance was performed. The resulting statistics are presented in Table 4.13.

TABLE 4.13-- One-way analysis of variance of the relationship between the classroom subjects Title I teachers taught and their MTAI scores.

Source of Variation	Mean Squares	Degrees of Freedom	F Ratio*
Between subjects taught	5,360.1	3	4.39**
Within subjects taught	1,219.8	56	

*In order for F to be significant at the .05 level, the ratio must equal or exceed 2.78. F ratios which are significant at this level are indicated by **.

An F ratio of 2.78 is necessary for 3 and 56 degrees of freedom before significance at the .05 level of confidence can be concluded. An inspection of Table 4.13 reveals that the F ratio of 4.3 was significant at the .05 level of confidence. From the results in Figure 4.8 and Table 4.13 it can be said that both Title I teachers of reading and arithmetic had significantly higher MTAI scores than both teachers of self-contained and homeroom subjects although teachers of reading and teachers of arithmetic did not have significantly different MTAI scores from each other.

Sub-question B:3 Does the size of the student enrollment in the building relate to MTAI scores of Title I and non-Title I teachers?

The variables under consideration in Sub-question B:3 were (a) teaching assignment (Title I or non-Title I) and (b) total student enrollment in each school building. The variables were studied in relationship to MTAI scores of

teacher attitudes toward pupil-teacher relations.

In Table 4.14 the total student enrollment and the MTAI mean scores of teachers by building are presented.

An inspection of the information in Table 4.14 reveals that the student enrollment in the Title I schools ranged from 423 to 645 (with the exception of school #2 which had a student enrollment of 1,295) while the student enrollment in the non-Title I schools ranged from 321 to 1,100. It is obvious from the table that the number of teachers in the second phase of the study from each building was less than eight except for four Title I and non-Title I buildings. Therefore, any analysis about MTAI scores and student enrollment made from the data presented in the table must be descriptive and consequently more speculative than statistical.

TABLE 4.14-- Total student enrollment and the MTAI mean scores of teachers in the study by building.

School	Total Student Enrollment	Teachers in the Study	
		Number	MTAI Mean
Title I			
1	531	3	175.0
2	1,295	18	126.4
3	558	10	145.9
4	498	7	124.4
5	423	6	137.7
6	554	4	125.8
7	501	3	144.3
8	645	9	110.6
Non-Title I			
9	1,100	6	126.0
10	321	4	122.8
11	848	5	131.8
12	1,087	9	155.7
13	454	4	145.3

The MTAI mean scores of teachers from the non-Title I schools ranged from 122.8 to 155.7 which is slightly less of a range than the scores of teachers from the Title I schools which ranged from 124.4 to 175.0 except for the 110.6 mean of school #8.

From the data presented in Table 4.14 there did not appear to be any relationship between the size of the student enrollment in the building and the MTAI scores of the teachers from that particular building.

Sub-question B:4 Does the percentage of black teachers on the staffs of Title I and non-Title I schools relate to teacher attitudes toward pupil-teacher relations as measured by the MTAI?

The variables under consideration in Sub-question B:4 were (a) teaching assignment (Title I or non-Title I) and (b) percentage of black teachers comprising the staff. The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations by building.

In Table 4.15 the total number and percentage of black teachers assigned to each school and the MTAI mean score of teachers in the second phase of the study by school are presented.

An inspection of Table 4.15 reveals that the percentage of black teachers on the staffs of Title I schools ranged from 13 to 73 per cent while in the non-Title I schools it ranged from 40 to 67 per cent. The small size of the sample from each building limited the statistical and descriptive methods by which the data could be analyzed. From the data presented in Table 4.15 no relationship appeared to exist between the percentage of black teaching staff in a building and the MTAI mean score for the building.

TABLE 4.15-- The percentage of black teachers on the staff by school and the MTAI mean score of teachers in the study by school.

School	Number and Percentage of Black Teachers on the Staff		Teachers in the Study	
	N	Percentage	N	MTAI Mean
Title I				
1	11	35	3	175.0
2	34	63	18	126.4
3	13	46	10	145.9
4	19	73	7	124.4
5	3	13	6	137.7
6	21	72	4	125.8
7	15	63	3	144.3
8	18	53	9	110.6
Non-Title I				
9	22	56	6	126.0
10	14	67	4	122.8
11	15	38	5	131.8
12	21	49	9	155.7
13	10	40	4	145.3

However, if the Title I and non-Title I schools are grouped into two categories, one in which black teachers compose less than 50 per cent of the building staff and the other in which black teachers compose 50 per cent or more of the staff irrespective of teaching assignment, some interesting observations can be made. Table 4.16 presents such data.

TABLE 4.16-- MTAI mean scores by schools with a 50 per cent or more black staff and schools with less than a 50 per cent black staff.

Schools	Percentage of Black Teachers on the Staff	MTAI Mean of Teachers in the Study
	50% or More	
Title I		
2	63	126.4
4	73	124.4
6	72	125.8
7	63	144.3
8	53	110.6
Non-Title I		
9	56	126.0
10	67	122.8
Total 7		
	Less than 50%	
Title I		
1	35	175.0
3	46	145.9
5	13	137.7
Non-Title I		
11	38	131.8
12	49	155.7
13	40	145.3
Total 6		

From an inspection of Table 4.16 one might infer that schools with teaching staffs composed of 50 per cent or more blacks had lower average mean scores than schools with staffs composed of less than 50 per cent blacks.

Fifty-one of the 88 teachers in the second phase of the study taught in schools which had staffs composed of 50 per cent or more black teachers; 32 of the 51 teachers were black teachers. The disproportionate number of blacks in schools with lower mean scores coincides with the finding in Question A, i.e., that blacks had lower mean scores than whites.

Summary of Question B The above data in Sub-questions B:1 through B:4 pertaining to the working conditions of teachers were presented as a preliminary to answering Question B.

Question B

> Do selected working conditions of Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations as measured by the MTAI?

The statistical results in Questions B:1 through B:4 failed to indicate a significant difference in MTAI scores due to teaching assignment with respect to grade taught, subject taught, total student enrollment, and percentage of black teachers on the building staff.

The statistical results did indicate a significant difference at the .05 level of confidence in MTAI scores due to the subject taught (reading, arithmetic, homeroom subjects, or self-contained classroom subjects). An F ratio of 2.78 is necessary for 3 and 56 degrees of freedom for significance at the .05 level of confidence. The statistics indicated that both Title I teachers of reading and

arithmetic had higher MTAI scores than Title I teachers of self-contained classroom and homeroom subjects. One can speculate that teachers of specific subject areas had higher scores because they were working in the area of their specialty and had smaller sized classes (12 to 15 children per class contrasted with 29 to 32 in self-contained classroom and homeroom subjects).

The statistics did not indicate any significance with respect to the size of the student body in the building or the percentage of black teachers with whom a teacher works. (A summary of the number of students and teachers by race for all schools in the system can be found in Appendix B.)

Question C

Do selected characteristics of the students (percentage of black students in the student body, level of academic achievement, and degree of poverty) in Title I and non-Title I schools relate to attitudes of teachers toward pupil-teacher relations as measured by the MTAI?

The answer to Question C is a compilation of the answers to three sub-questions which deal with certain characteristics of the students taught. The statistical data pertaining to these questions are analyzed in a descriptive manner.

Sub-question C:1 Does the percentage of black students enrolled in the school building relate to the attitude scores of Title I and non-Title I teachers as measured by the MTAI?

The variables under consideration in Sub-question C:1 were (a) teaching assignment (Title I or non-Title I) and (b) percentage of black students in the student body. The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

In Table 4.17 the number and percentage of black students enrolled in each building and the MTAI mean score of the teachers who participated in the study in each building are presented.

An inspection of the information in Table 4.17 reveals that black students comprised 92 to 99 per cent of the student body in all Title I schools except school #5 where they comprised 26 per cent of the total enrollment. In the non-Title I schools they comprised 97 per cent of the student body except in schools #9 and #13 where they were 86 and 41 per cent, respectively. The limited number of MTAI scores available for each Title I and non-Title I building (except #2 and #3) restricted the interpretation one could make about how the percentage of black students enrolled in a building related to teacher attitudes toward pupil-teacher relations as measured by the MTAI. However, no relationship seemed indicated by the data in Table 4.17.

Nevertheless, the 13 schools in this study enrolled 77 per cent of the 10,144 black students in the 43 elementary schools in the system. By contrast there were 13 elementary schools in the system with no black enrollment and 22 schools with less than a five per cent black enrollment. (See Appendix B.)

TABLE 4.17-- The number and percentage of black students and the MTAI mean scores of teachers in the study by building

School	Student Enrollment			Teachers in the Study	
	Total	Black Students			
		N	Percentage	N	MTAI Mean
Title I					
1	531	521	98	3	175.0
2	1,295	1,236	95	18	126.4
3	558	515	92	10	145.9
4	498	469	94	7	124.4
5	423	109	26	6	137.7
6	554	550	99	4	125.8
7	501	494	99	3	144.3
8	645	636	99	9	110.6
Non-Title I					
9	1,100	944	86	6	126.0
10	321	311	97	4	122.8
11	848	821	97	5	131.8
12	1,087	1,058	97	9	155.7
13	454	185	41	4	145.3

Sub-question C:2 Does the level of student academic achievement relate to attitude scores of Title I and non-Title I teachers as measured by the MTAI?

The variables under consideration in Sub-question C:2 were (a) teaching assignment (Title I or non-Title I) and

(b) SRA (Science Research Associates) achievement scores of fifth and sixth grade students. The variables were studied in relationship to MTAI scores of teacher attitudes toward pupil-teacher relations.

In Tables 4.18, 4.19, and 4.20 the SRA composite raw score range, average grade equivalent, and percentile scores of fifth and sixth graders in the Title I and non-Title I schools are presented.

In Table 4.18 the achievement scores of the fifth grade classes in the 13 schools prior to the implementation of Title I are presented. The average grade equivalent score for each school was below the national norm of 5.1. (The tests were administered during the first month of the fifth year.) Four of the Title I schools had an achievement score which was at least 1.2 of a grade below the national norm. Title I school #8 had an average grade equivalent score which was .4 of a grade higher than the other schools in the study and .5 of a grade below the national norm. All of the schools in the study except school #8 had achievement scores which ranged in the lower (13-20) percentile group of the national norm. The fifth grade classes reported in Table 4.18 are the sixth grade classes reported in Table 4.20 one year later.

TABLE 4.18-- Fifth grade SRA grade-equivalent and percentile scores* for schools designated Title I and not designated Title I

School	Fifth Grade Enrollment	Average Grade-Equivalent	Percentile	Raw Score Range
		Designated Title I		
1	62	4.2	20	146-149
2	134	3.9	15	134-137
3	61	3.8	13	130-133
4	62	3.9	15	134-137
5	50	4.1	17	138-145
6	54	3.8	13	130-133
7	64	4.2	20	146-149
8	68	4.6	33	166-173
		Not Designated Title I		
9	127	4.1	17	138-145
10	32	4.1	17	138-145
11	143	4.1	17	138-145
12	127	4.2	20	146-149
13	51	4.2	20	146-149

*The scores correspond to the composite raw score range of the Blue Level SRA Achievement Series Multilevel Test, Form C.

In Table 4.19 the achievement scores of the sixth grade classes in the 13 schools prior to the implementation of the Title I program are presented. An inspection of the table reveals that classes were achieving from 1.8 grades to .9 of a grade below the national norm of 6.1.

TABLE 4.19-- Sixth grade SRA grade-equivalent and percentile scores* for schools designated Title I and not designated Title I

School	Sixth Grade Enrollment	Average Grade-Equivalent	Percentile	Raw Score Range
		Designated Title I		
1	60	4.4	11	154-161
2	142	4.5	12	162-165
3	55	4.5	12	162-165
4	47	4.3	09	150-153
5	49	4.5	12	162-165
6	53	4.4	11	154-161
7	59	5.1	23	190-193
8	71	4.7	16	174-177
		Not Designated Title I		
9	130	4.7	16	174-177
10	31	4.3	09	150-153
11	99	5.1	23	190-193
12	127	4.8	19	178-185
13	48	5.2	25	194-201

*The scores correspond to the composite raw score range of the Blue Level SRA Achievement Series Multilevel Test, Form C.

In comparing Tables 4.18 and 4.19 it is obvious that the designated Title I sixth graders were not a grade ahead of the fifth graders. The sixth graders in school #7 were, at most, .9 of a grade ahead of the fifth graders, while the sixth graders in school #8 were only .1 of a grade ahead of the fifth graders. In two non-Title I schools, #11 and #13, the sixth grade classes were achieving one grade level above the fifth grade classes.

A comparison of the percentile ranking of the schools indicated that except for school #8 the fifth graders were in the 13-20 percentile group of the national norm, but seven of the sixth grade classes were scoring below the 13th percentile.

In Table 4.20 the achievement scores for the sixth graders in Title I and non-Title I schools one year following the operation of the Title I program are presented.

An inspection of the table reveals that the average grade equivalents of the sixth grade classes were as much as 1.8 grades below the national norm of 6.1. A comparison of the national percentile ranking of the fifth graders prior to the implementation of Title I (Table 4.18) and their sixth grade ranking (Table 4.20) indicated that, except for school #8, all the fifth grade classes were scoring in the 13-20 percentile group of the national norm but five of the sixth grade classes were scoring below the 13th percentile. This low percentile rank of sixth grade classes following the implementation of the Title I program is comparable to the low percentile rank of the sixth grade classes which were tested prior to the Title I program (Table 4.19).

The variables of student achievement and MTAI scores of teachers are presented in Table 4.21.

TABLE 4.20-- Sixth grade SRA grade-equivalent and percentile scores* for Title I and non-Title I schools

School	Sixth Grade Enrollment	Average Grade-Equivalent	Percentile	Raw Score Range
		Title I		
1	59	4.7	16	174-177
2	141	4.5	12	162-165
3	52	4.4	11	154-161
4	66	4.3	09	150-153
5	47	4.9	21	186-189
6	66	4.3	09	150-153
7	59	4.8	19	178-185
8	70	5.4	31	210-213
		Non-Title I		
9	144	4.5	12	162-165
10	39	4.8	19	178-185
11	120	4.7	16	174-177
12	120	4.9	21	186-189
13	49	4.7	16	174-177

*The scores correspond to the composite raw score range of the Blue Level SRA Achievement Series Multilevel Test, Form C.

An inspection of Table 4.21 reveals that the achievement gains of the Title I students and non-Title I students ranged from .4 of a grade to .8 of a grade with an average annual gain of .6. The small number of teachers in each building in the study, except for buildings #2 and #3, limited the interpretation one could make about how the MTAI scores of teachers related to the level of pupil achievement. However, from the very low MTAI mean that the teachers in school #8

had and the gain in achievement made by the fifth graders, one might suspect that having a low score was related to higher achievement.

TABLE 4.21-- Student achievement level and the MTAI mean scores of teachers in the study by building

School	MTAI		Student Achievement Level		
	Number	Mean	Pre-Title I 5th Graders	Title I 6th Graders	Av. Gain
			Title I		
1	3	175.0	4.2	4.7	.5
2	18	126.4	3.9	4.5	.6
3	10	145.9	3.8	4.4	.6
4	7	124.4	3.9	4.3	.4
5	6	137.7	4.1	4.9	.8
6	4	125.8	3.8	4.3	.5
7	3	144.3	4.2	4.8	.6
8	9	110.6	4.6	5.4	.8
			Non-Title I		
9	6	126.0	4.1	4.5	.4
10	4	122.8	4.1	4.8	.7
11	5	131.8	4.1	4.7	.6
12	9	155.7	4.2	4.9	.7
13	4	145.3	4.2	4.7	.5

Sub-question C:3 Does the degree of student poverty relate to the attitudes of teachers toward pupil-teacher relations as measured by the MTAI?

The variables under consideration in Sub-question C:3 were (a) percentage of families in the school attendance area

earning less than $2,000 annual income and (b) MTAI mean scores of teachers by building.

In Table 4.22 the percentage of poverty-stricken families in the school attendance area and the MTAI mean score for each school are presented.

TABLE 4.22-- The percentage of poverty-stricken families in the school attendance area and the MTAI mean score for each school

School	Approximate Percentage of Families with Less than $2,000 Annual Income*	Teacher	
		N	MTAI Mean
	Title I		
1	13.4	3	175.0
2	14.1	18	126.4
3	21.9	10	145.9
4	18.0	7	124.4
5	14.1	6	137.7
6	16.9	4	125.8
7	20.9	3	144.3
8	13.4	9	110.6
	Non-Title I		
9	8.6	6	126.0
10	20.9	4	122.8
11	8.2	5	131.8
12	8.4	9	155.7
13	9.6	4	145.3

*Reported in the 1960 U.S. Census Report.

An inspection of Table 4.22 reveals that the Title I schools were located in neighborhoods where 13 to 22 per cent of the families reported an annual income of less than

$2,000 per year according to the 1960 census. On the other hand, the non-Title I schools (except school #10) were located in neighborhoods where 8 to 10 per cent of the families reported an annual income of less than $2,000. An obvious distinction between Title I and non-Title I schools is that the children attending Title I schools came from poorer homes than children attending non-Title I schools (except for school #10).

The reliability of any reported relationship between the degree of neighborhood poverty and the MTAI scores of teachers was weakened because in some school buildings the MTAI mean was calculated on such a small number of teachers. Therefore, in Table 4.22 no observable relationship among program participation, degree of poverty, and the MTAI mean was found.

Summary of Question C The above data in Sub-questions C:1 through C:4 pertaining to selected characteristics of the students were presented as a preliminary to answering Question C.

Question C

> Do selected characteristics of the students in Title I and non-Title I schools relate to attitudes of teachers toward pupil-teacher relations as measured by the MTAI?

The analysis of the data presented in Questions C:1 through C:4 failed to indicate a significant difference in MTAI mean scores due to teaching assignment with respect to either the percentage of black teachers on the staff of the

building, the level of poverty of the students, or the level of academic achievement of the students.

Summary of Chapter IV

The purpose of this study was to ascertain how the attitudes of teachers in Title I and non-Title I schools compared. The data were reported and analyzed according to the design of the study.

The analysis of scores in Phase I of the study did not indicate significantly different MTAI scores between the two groups of teachers, those from schools designated to participate in Title I and those from schools not designated to participate.

In Phase II of the study an analysis did not indicate significantly different scores between Title I and non-Title I teachers on the MTAI administered one year after the Title I program began. The analysis did reveal that the MTAI mean scores of both Title I teachers (31.5) and non-Title I teachers (38.9) were below the MTAI standardized mean of 55.1. Also in Phase II of the study three basic questions (A, B, and C) were investigated by first seeking answers to related sub-questions. The statistical results for the sub-questions of Question A, regarding the relationship between personal demographic data and teacher attitudes, are presented in Table 4.23 and Figure 4.9.

TABLE 4.23-- Summary of the two-way analysis of variance for the sub-questions of Question A

Sub-question	F Ratio* of the Source of Variation		
	Teaching Assignment with Respect to Variable	Variable with Respect to Teaching Assignment	Interaction of Teaching Assignment and Variable
A:1 (sex)	0.789	0.139	0.001
A:2 (race)	0.522	5.144**	0.120
A:3 (age)	0.634	0.205	0.913
A:4 (marital status)	0.714	0.946	0.146
A:5 (professional training)	0.853	0.462	5.525**
A:6 (total experience)	0.571	6.173**	0.237
A:7 (system experience)	1.190	6.698**	2.465
A:8 (building experience)	0.892	9.356**	3.253

*In order for F to be significant at the .05 level, the ratio must equal or exceed 3.96. F ratios which are significant at this level are indicated by **.

An inspection of Table 4.23 reveals the following about each sub-question:

A:1. Sex was not significant to the MTAI scores of Title I and/or non-Title I teachers.

A:2. Race was significant with an F ratio of 5.144 which was above the required F ratio of 3.96 for 1 and 84 degrees of freedom to be significant at the .05 level of confidence. From the statistics in Table 4.5 one can conclude that black teachers had a much lower mean score than white teachers. Therefore, black teachers had a less positive attitude toward pupil-teacher relations than white teachers.

A:3. Age was not significant to the MTAI scores of Title I and/or non-Title I teachers.

A:4. Marital status was not significant to the MTAI scores of Title I and/or non-Title I teachers.

A:5. Professional training and teaching assignment had a significant interaction. The F ratio of the interaction was 5.525 which was above the required F ratio of 3.96 for 1 and 84 degrees of freedom. Title I teachers with a master's degree or more and non-Title I teachers with less than a master's degree had similarly higher mean scores than their counterparts with similar teaching assignments.

A:6-
A:8. Years of teaching experience (total, within the system, and in the building) was significant. More experienced teachers had more positive attitudes toward pupil-teacher relations than less experienced teachers.

Although significance was revealed with respect to the variables of race and years of teaching experience; and the variable of interaction between professional training and teaching assignment; teaching assignment was not significant to MTAI scores for either Title I or non-Title I teachers.

Questions and Alternatives*	Teaching Assignment			
	Title I		Non-Title I	
	Cell 1	Cell 2	Cell 3	Cell 4
Sub-question A:1 (female--male) 1,3 2,4	N=34 $\bar{X}$=129.0 (4)**	N=26 $\bar{X}$=133.6 (3)	N=19 $\bar{X}$=137.0 (2)	N=9 $\bar{X}$=141.8 (1)
Sub-question A:2 (black--white) 1,3 2,4	N=32 $\bar{X}$=122.5 (4)	N=28 $\bar{X}$=141.9 (2)	N=13 $\bar{X}$=131.6 (3)	N=15 $\bar{X}$=145.1 (1)
Sub-question A:3 (younger--older) 1,3 2,4	N=24 $\bar{X}$=130.0 (4)	N=36 $\bar{X}$=132.6 (2)	N=15 $\bar{X}$=145.4 (1)	N=13 $\bar{X}$=131.3 (3)
Sub-question A:4 (single--married) 1,3 2,4	N=17 $\bar{X}$=136.1 (2)	N=43 $\bar{X}$=129.7 (4)	N=8 $\bar{X}$=148.6 (1)	N=20 $\bar{X}$=135.0 (3)
Sub-question A:5 (less training--more training) 1,3 2,4	N=34 $\bar{X}$=123.6 (4)	N=26 $\bar{X}$=141.9 (2)	N=18 $\bar{X}$=146.9 (1)	N=10 $\bar{X}$=124.4 (3)
Sub-question A:6 (less experience--more experience) 1,3 2,4	N=20 $\bar{X}$=116.0 (4)	N=40 $\bar{X}$=139.3 (2)	N=8 $\bar{X}$=128.6 (3)	N=20 $\bar{X}$=143.0 (1)

Figure 4.9-- A summary of the 2 by 2 contingency tables containing the MTAI mean scores for the sub-questions of Question A.

*The numbers under the alternatives correspond to the Title I or non-Title I cell in which the data is presented.

**The numbers in parentheses represent the rank order from 1 to 4 (high to low) of the mean scores for the alternatives of each question by cell.

An inspection of Figure 4.9 reveals the following about each sub-question:

A:1. Non-Title I males had the highest MTAI mean score of the four alternatives of sex by teaching assignment while Title I females had the lowest score.

A:2. Non-Title I whites had the highest MTAI mean score of the four alternatives of race by teaching assignment while Title I blacks had the lowest score.

A:3. Non-Title I younger teachers had the highest MTAI mean score of the four alternatives of age by teaching assignment while Title I younger teachers had the lowest score.

A:4. Non-Title I single teachers had the highest MTAI mean score of the four alternatives of marital status by teaching assignment while Title I married teachers had the lowest score.

A:5. Non-Title I less trained teachers had the highest MTAI mean score of the four alternatives of professional training by teaching assignment while the Title I less trained teachers had the lowest score.

A:6. Non-Title I more experienced teachers had the highest MTAI mean score of the four alternatives of teaching experience by teaching assignment while the Title I more experienced teachers had the lowest score.

From the statistical results of the data in Question A the profile of a teacher with more positive attitudes would be a non-Title I young, single, white, male teacher who had less than a master's degree and more than two years of teaching experience. The teacher with less positive attitudes would be a Title I, young, married, black, female teacher who had less than a master's degree and less than two years of teaching experience.

The statistical results of the sub-questions of Question B regarding selected working conditions and teacher attitudes revealed that teachers of reading and teachers of arithmetic had significantly higher MTAI mean scores than teachers of homeroom subjects and teachers of self-contained classroom subjects. Otherwise the grade taught, the size of the student enrollment, and the percentage of black teachers on the staff was not significant to the attitudes of teachers.

Statistical results of the sub-questions of Question C regarding selected characteristics of the students reveal that neither the percentage of black students enrolled in the student body, nor the level of student academic achievement, nor the degree of student poverty were related to teacher attitudes as measured by the MTAI.

Chapter Five will include a summary of the study followed by conclusions, recommendations, and implications for future research.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS FOR FUTURE RESEARCH

Summary

The purposes of the investigation in this study were the following:

1. To determine how the attitudes of a cross section of teachers from eight Title I depressed area schools compared to those of a similar cross section of teachers from five non-Title I depressed area schools.

2. To determine how the attitudes of the teachers in the eight Title I schools compared to those of the teachers in the five non-Title I schools at the end of one year's operation of the Title I compensatory education program.

The resolution of the first purpose was sought by comparing the MTAI mean score of the teachers designated Title I with the MTAI mean score of the teachers not designated Title I.

The resolution of the second purpose was sought through two operations, i.e., comparing Title I and non-Title I MTAI mean scores and analyzing the answers to the following questions about teacher attitudes toward pupil-teacher relations as measured by the MTAI:

1. Do the personal demographic data (sex, race, age, marital status, professional training, and teaching experience) of Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations?

2. Do selected working conditions (grade taught, subject taught, size of student enrollment, and percentage of black teachers on the staff) of Title I and non-Title I teachers relate to their attitudes toward pupil-teacher relations?

3. Do selected characteristics of the students (percentage of black students, level of academic achievement, and degree of poverty) in Title I and non-Title I schools relate to the attitudes of teachers toward pupil-teacher relations?

The literature reviewed in Chapter II failed to reveal any studies which were identical to this study, but it did reveal studies which were relevant. Specifically, the literature revealed a consensus that the most crucial element upon which the success of a compensatory education program depends is the school staff; furthermore, it revealed that some authorities believe poor attitudes of teachers are more to blame for the lack of academic progress of disadvantaged children than any other factor.

This study involved 103 fourth, fifth, and sixth grade teachers from the thirteen most severely disadvantaged schools in a midwestern industrial community. The instruments used were the Minnesota Teacher Attitude Inventory (MTAI) and a Personal History Data Sheet. The MTAI was designed to measure the attitudes of teachers toward pupil-teacher relations by sampling five areas of attitudes. The five areas were moral status, discipline, principles of child development and behavior, principles of education, and

personal reactions of the teacher. The Personal History Data Sheet was designed to collect data pertaining to a teacher's personal demographic data, his working conditions, and characteristics of the students he teaches.

The study was conducted in two phases. In Phase I a comparison was made between the MTAI scores of teacher attitudes toward pupil-teacher relations of a sample of teachers from eight schools designated to participate in a Title I program; and those MTAI scores of a sample of teachers from five similar schools not designated to participate in Title I.

The analysis of the data collected in the first phase of the study failed to demonstrate any significant difference between the MTAI mean score of teachers in schools designated to participate in Title I and the MTAI mean score of teachers not designated to participate. The "t" ratio of the two mean scores was .98 which was below the ratio of 2.036 which was needed for significance at the .05 level of confidence for 33 degrees of freedom. The analysis of the data revealed that the MTAI scores of teachers in schools designated to participate in Title I and the MTAI scores of teachers in schools not designated to participate in Title I were from the same universe.

In Phase II of the study which was conducted one year following the implementation of the Title I compensatory education program a comparison was made between the MTAI scores of the attitudes of the Title I teachers toward

pupil-teacher relations; and those MTAI scores of the non-Title I teachers. The attitudes were compared in relation to teaching assignment (Title I or non-Title I) and the variables of personal demographic data, selected working conditions, and selected characteristics of the students.

The analysis of the MTAI scores collected in the second phase of the study failed to demonstrate any significant difference between the mean score of Title I teachers and the mean score of non-Title I teachers. The Title I teachers had a MTAI mean score of 31.52 and the non-Title I teachers had a MTAI mean score of 38.86. The "t" ratio of the two mean scores was -.852 which was below the needed ratio of 1.948 for significance at the .05 level of confidence for 86 degrees of freedom. The results of the analysis were interpreted to mean that after one year's participation in the Title I program the teachers in Title I schools continued to have attitudes toward pupil-teacher relations which were not significantly different from the attitudes of teachers in non-Title I schools.

An analysis of the MTAI scores in relation to teaching assignment (Title I or non-Title I) and the variables of personal demographic data, selected working conditions, and selected characteristics of the students did reveal six significant differences in MTAI mean scores of the fifteen variables (sex, race, age, marital status, professional training, total years of teaching experience, years of teaching experience with the system, years of teaching

experience in the building, grade taught, subject taught, building enrollment, percentage of black students, percentage of black teachers, degree of poverty of students, and level of academic achievement of students).

The analysis revealed a significant difference in MTAI scores for six variables: (1) race, (2) professional training, (3) total years of teaching experience, (4) years of teaching experience with the system, (5) years of teaching experience in the building, and (6) subject taught.

1. Race was significant at the .05 level of confidence with an F ratio of 5.14 which was above the required F ratio of 3.96 for 1 and 84 degrees of freedom. White teachers had more positive attitude scores than black teachers.

2. Professional training and teaching assignment had a significant interaction with an F ratio of 5.53 which was above the required F ratio of 3.96 for 1 and 84 degrees of freedom. Title I teachers with a master's degree or more and non-Title I teachers with less than a master's degree had similarly higher mean scores than their counterparts with similar teaching assignments.

3. Total years of teaching experience was significant at the .05 level of confidence with an F ratio of 6.17 which was above the required F ratio of 3.96 for 1 and 84 degrees of freedom. Teachers with more than two years of teaching experience had more positive attitude scores than teachers with less than two years of teaching experience.

4. Years of teaching experience with the present school system was significant at the .05 level of confidence with an F ratio of 6.70 which was above the required F ratio of 3.96 for 1 and 84 degrees of freedom. Teachers with two or more years of teaching experience with the system had more positive attitude scores than teachers with less than two years of teaching experience with the system.

5. Years of teaching experience in the present building was significant at the .05 level of confidence with an F ratio of 9.36 which was above the required F ratio of 3.96 for 1 and 84 degrees of freedom. Teachers with more than two years of teaching experience in the

present building had more positive attitude scores than teachers with less than two years teaching experience in the present building.

6. Teaching of reading and teaching of arithmetic was significant at the .05 level of confidence with an F ratio of 4.39 which was above the required F ratio of 2.78 for 3 and 56 degrees of freedom. Teachers of reading and teachers of arithmetic had more positive attitude scores than teachers of homeroom subjects and teachers of self-contained classroom subjects.

Conclusions

The research findings of this investigation support the following conclusions which are applicable to the teachers who took part in this study and may also be applicable to teachers of the disadvantaged in general.

1. The initial MTAI mean scores of Title I and non-Title I teachers were not significantly different.

2. The MTAI mean scores of the Title I and non-Title I teachers measured following a year's participation in the program were not significantly different.

3. The MTAI mean scores of both Title I and non-Title I teachers were generally below the norm measurement for teachers of similar training and experience.

4. White teachers regardless of whether they were teaching in Title I or non-Title I schools had a significantly more positive MTAI mean score than black teachers.

5. Title I teachers with a master's degree or more and non-Title I teachers with less than a master's degree had similarly higher mean scores than their counterparts with similar teaching assignments, the results being a significant interaction of professional training and teaching assignment.

6. Teachers with more than two years of teaching experience had a higher MTAI mean score than teachers with two or less years of teaching experience.

7. Teachers who had taught with the system for more than two years had a higher MTAI mean score than teachers who had taught with the system for two or less years.

8. Teachers who had taught in the building for more than two years had a higher MTAI mean score than teachers who had taught in the building for two or less years.

9. Teachers of reading and teachers of arithmetic each had a significantly higher MTAI mean score than teachers of homeroom subjects and teachers of self-contained classroom subjects.

10. Title I children did not demonstrate academic achievement gains as reflected by their SRA mean achievement scores even though they had been exposed to reading teachers and/or arithmetic teachers of significantly higher MTAI scores. Consequently, this study did not reveal that teachers with more positive MTAI scores were more effective teachers in terms of SRA pupil achievement scores.

11. Title I teachers had a slightly lower mean attitude score than non-Title I teachers.

12. Teachers thirty years old and under did not have an MTAI mean score which was significantly different from that of teachers over thirty years old.

13. Teachers who remained with the system tended to remain in the same building.

14. The teaching staffs of school buildings with 50 per cent or more black teachers had lower MTAI mean scores than the teaching staffs of school buildings with less than 50 per cent black teachers.

15. The SRA achievement scores of the students taught by Title I and non-Title I teachers tended to drop from one year to the next.

16. The percentage of black teachers was greater in schools where the children are more poverty-stricken.

Recommendations

Recommendations in this section are based upon studies in the field of education of the disadvantaged, related literature, the findings of this study, and the considered judgment of the author.

It is assumed that the objectives and goals of any community operating a public school system are to provide quality education and equal educational opportunities for all children in its charge. If one agrees with this assumption and accepts Pillard's contention[1] that "The most crucial element on which success of educational programs ultimately depends is the school staff . . . ," one must conclude that a school system cannot hope to attain its goals until it has made available to the children in its charge the best teachers it can hire and/or retrain. Among other things the teachers must be competent; they must have the tools with which to work; and they must have positive attitudes toward themselves, their students, and pupil-teacher relations. If the MTAI scores of the inner-city teachers in this study are typical of the scores of the teachers in other inner-city schools, then one could conclude that inner-city schools are not getting a fair share of their system's more competent teachers (i.e., teachers with more positive attitudes). Therefore, one could make the following recommendations[2] to directors of personnel:

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[1]Pillard, op. cit.

[2]There will be a total of 16 recommendations in this study.

Recommendations

Establish an effective system for recruiting and assigning competent teachers to inner-city schools so that:

1. if the system must hire teachers who are less competent, they not be concentrated in inner-city schools.
2. teaching positions in inner-city schools are not the last positions in the system to be filled.
3. school systems and universities collaborate as equal partners in the training of teachers for inner-city schools and so that eventually school systems hire only teachers specifically trained for teaching in the inner city.

In order that the elementary school principal be accountable for the teaching results in his building it is essential that he have an accountable decision-making role in determining who will make up his staff. Therefore, it is recommended that:

Recommendation

4. directors of personnel schedule personal interviews for each interested candidate with at least two principals before a building assignment is made thereby avoiding pressure on the principal to hire the particular teacher sent to him.

There is a critical need for the development of an instrument to measure teacher attitudes which reflects no bias against black teachers because the instrument takes into account the black experience. The black teachers in this study had less positive attitude scores which measured attitudes toward pupil-teacher relations than white teachers even though the student body they taught was 88 per cent black. The less-than-positive attitudes of black teachers may be attributed to a number of factors among which are the following: (1) There seems to be a practice of assigning black teachers either to teach black children or to teach in depressed areas where the level of pupil achievement is the lowest in town. (2) Black teachers probably were more critical of the inventory instrument because they saw it as an instrument designed and standardized by whites and reflective of the attitudes of whites. (3) Black teachers, because they are products of school settings which were disadvantaged to a similar or worse degree, are more pessimistic about the whole school setting than white teachers. (4) Black teachers, part of an American subculture, probably used a different scale for measuring their attitudes than white teachers. For example, one of the MTAI questions posed was, "Success is more motivating than failure." Most white teachers, even those teaching in disadvantaged areas, would answer "Yes." Black teachers, on the other hand, from personal experience would tend to answer "No." (5) It is possible that black teachers were more realistic in their answers than white teachers.

The foregoing has not been an attempt to rationalize away the less-than-positive attitudes of black teachers; rather, it has attempted to put the statistical results in perspective. Now recommendations are in order:

Recommendations

5. There is an immediate need for the development of a standardized instrument which will more accurately measure the attitudes of black and white depressed area teachers.
6. There is a need for this study to be replicated on a larger sample of teachers and school buildings.
7. Directors of personnel must be held personally accountable for the immediate development and implementation of a scheme designed to make teaching assignments based on a teacher's competencies to meet pupil needs instead of based on a teacher's race.
8. School systems must assume the responsibility of providing an on-going program which has as its prime objective the improvement of the attitudes of its black and white teachers toward inner-city children and toward pupil-teacher relations.
9. Immediately school systems must increase the number of blacks who are in central office decision-making positions to reflect the sharp increase of black children in the public schools and to prevent the school systems from subverting the quality of education provided for black children.

Contrary to common belief, teachers with two or less years of teaching experience did not have more positive attitude scores toward pupil-teacher relations than teachers with more than two years of experience. Usually, new teachers are thought to be more enthusiastic and optimistic about the potentialities of their students and, therefore, possessed of more positive attitudes toward them than teachers with more years of experience. However, the above statistical result leads to speculation attempting to explain the less positive attitude scores of the teachers with little experience. This group of beginning teachers contained, no doubt, a disproportionate percentage of young teachers whose attitudes might reflect less interest in their students because they are often (1) undecided about whether they want to remain in teaching, (2) more mobile and unsettled about where they will live and work, (3) less experienced with and less knowledgeable and understanding of children and the learning process, and (4) assigned to schools in disadvantaged areas and "putting in time" until they are re-assigned to the suburbs.

The findings in this study indicated that teachers who had taught in inner-city schools for more than two years tended to remain in the school building to which they were originally assigned. Furthermore, these teachers had significantly higher MTAI scores than teachers who had taught two or less years either in the building, in the system, or in total years. There was no information available pertaining to why some

teachers in this study remained beyond two years and others left before two years. To meet the demand for information pertaining to why some teachers of the disadvantaged stay and why some leave the following recommendations are made:

Recommendations

10. The personnel departments of school systems must establish some accurate comprehensive means of comparing why some teachers teach in inner-city schools longer than two years and others teach in inner-city schools two or less years.
11. Studies must be conducted to determine the comparative effectiveness of teachers who teach in inner-city schools more than two years.

The Title I program was designed to improve the reading and arithmetic achievement levels of fourth, fifth, and sixth grade disadvantaged youngsters in the Title I schools. The program had seven components which were designed to function together in an effort to accomplish the objective of the program.

After one year's operation of the program there had been no significant changes in the reading and arithmetic achievement levels of the children in the Title I schools; in fact, their SRA achievement scores tended to drop from the previous year which is common among children from low income families.

An inspection of the operational budget of the Title I program reveals the financial priorities which were placed upon the seven components of the program. Of the seven

components the one dealing with inservice was receiving the least amount of financial assistance. In view of the comparison of the MTAI measure of Title I and non-Title I teachers with the standardized norm, it seems apparent that much more effort and a higher priority must be given new and different inservice programs which are designed to improve a teacher's attitudes through an introspective exploration of himself and his relationship to his students.

Recommendations

12. A major component of a compensatory education program must be devoted to teacher inservice, not only inservice devoted to how to use new teaching materials and equipment but inservice devoted to helping teachers develop more positive attitudes toward pupil-teacher relations.
13. The Federal guidelines pertaining to compensatory education programs must require school systems to design inservice programs which include sensitivity training as a major component.
14. Inner-city school systems must take it upon themselves to provide a new kind of rigorous on-going inservice program for all their teachers and administrators. These inservice programs should be geared to the problems of the inner city, and they might very well follow the model of a sensitivity group. Participation in sensitivity groups should be mandatory for all administrators

and highly recommended to all teachers of disadvantaged.

The two groups of Title I teachers who had significantly higher MTAI mean scores were reading teachers and arithmetic teachers. One would suspect that two factors definitely contributed to their significantly higher MTAI mean scores, i.e., having a specific job to do and having a job of prestige and status in an inner-city school. The designation of Title I Reading Teacher or Title I Arithmetic Teachers was something one could be proud to use. Also, Title I Reading and Title I Arithmetic Teachers had new roles in the hierarchy of the inner-city schools. Each teacher so designated had his own room with hundreds of teaching aids which he could call his own. Furthermore, each teacher met with six groups of children per day, and the size of no group exceeded fifteen students. In light of these findings and observations it is recommended that:

Recommendations

15. in the opinion of the writer, urban school systems move in a direction in which fourth, fifth, and sixth grade inner-city teachers be responsible for teaching no more than one or two specific subjects in which they have high competence. The practice of assigning teachers to teach homeroom subjects and self-contained classroom subjects should be phased into a team teaching arrangement in which teachers will pool their expertise.

16. new status roles in the hierarchy of inner-city teaching must be found so that inner-city teachers can have roles and positions of status respected by all teachers within the system.

Implications for Future Research

Emerging from this study are conclusions, recommendations, and a number of unanswered questions. The unanswered questions presented in this section suggest a direction for research in an area of increased concern and activity.

There are many questions yet to be resolved pertaining to compensatory education, such as the following: (1) At which grade should a compensatory education program start? (2) What are the basic and essential components of a comprehensive compensatory education program for the disadvantaged? (3) Are the gains we expect in academic achievement measurable? If so, when and how do we measure them?

Further research is needed to answer such specific questions as: (1) Why did the black teachers have such low scores? (2) Is the MTAI "race-proof"? (3) How valid are the answers of black teachers to the MTAI questions in this new era of black awareness? (4) What influence, if any, does the black experience have upon a black teacher as he relates to black children in a depressed area school?

(5) How do the attitude scores of white depressed area teachers compare with those of other white teachers teaching in the system? (6) Do the attitude scores of teachers with more than two years of experience change or remain the same? (7) Is a less positive attitude score indicative of a less effective teacher? (8) How significant is a teacher's negative or positive attitude score if the attitude the score reflects is not perceived by the class? (9) How does a teacher's MTAI score relate to his attitudes toward pupil-teacher relations measured by an interview technique? (10) If this study were replicated on a larger sample of teachers and school buildings, would the results be the same?

APPENDICES

APPENDIX A

FLINT COMMUNITY SCHOOLS

Public Law 89-10

Elementary and Secondary Act of 1965

Title I Proposal

FLINT COMMUNITY SCHOOLS

Public Law 89-10

Elementary and Secondary Act of 1965

Title I Proposal

I. Purpose and Background of the Proposal

II. Program

A. Public Schools

1. Improving Reading in the Early Elementary Years (1-3)

2. Improving Reading and Arithmetic in the Later Elementary Grades (4-6)

3. Providing Instructional Leadership via Services of Reading and Arithmetic Specialists

4. Correlating Reading and Arithmetic Instruction with the Total Instructional Program in Each School via Services of Instructional Specialists

5. Facilitating the Learning Process in Reading and Arithmetic by Providing Social Adjustment Services via the School Social Worker

6. Making Optimum Use of Instructional Time by Assistance of Clerical Aides to Help Teachers

7. Implementing an Inservice Program via Services of the Inservice Specialist

8. Implementing the Research Program via Services of a Research Specialist

B. Non-Public Schools[a]

1. Providing Services for Non-Public Schools

2. Providing Instructional and Testing Materials

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[a] Although the original proposal included both public and non-public schools, this thesis involved only the public schools.

III. Instructional Materials and Equipment

IV. Physical Facilities

V. Program Coordination

VI. Research and Design and Evaluation

VII. Budget

VIII. Appendix

A. Selection of Schools According to Guidelines for Title I of Elementary and Secondary Act

B. List of All Schools, Elementary and Secondary, from Greatest to Least Need in Family Economic Deprivation and Low Pupil Achievement

I. PURPOSE AND BACKGROUND OF THE PROPOSAL

Purpose

The main purpose of this proposal is to raise achievement levels in reading and arithmetic among children attending elementary schools where a high proportion of the pupils are from economically deprived home environments and have low achievement records.

Introduction and Background Information

We believe elementary education must be concerned with the whole child; i.e., his physical, mental, social, and emotional aspects. The child's intellectual development cannot proceed in isolation from growth in other characteristics. Therefore, the program of the school should include instruction and services sufficient to meet as many needs as possible that are preconditions to and concomitants of learning.

We believe learning occurs continuously in and out of school. For maximum benefit to the child, the efforts of home, school, and other agencies need to be united and consistent. To this end, a close relationship must exist between the school staff and other persons concerned with the education of the child.

The realization of our purpose to improve the level of achievement will not occur merely through intensified instruction in reading and arithmetic alone. The whole child must be considered as well as the "pre-conditions" to improved achievement. Therefore, we have designed six components to the program to accomplish our purpose. The program is concerned with (1) reading, (2) arithmetic, (3) instructional specialist services, (4) school social worker services, (5) clerical assistance for teachers, and (6) inservice education for the total staff.

The main emphasis of this program is directed towards reading and arithmetic in grades 1-6. Since formal reading is not presently taught in prekindergarten or kindergarten, these groups have not been included in the arithmetic and reading portion of the program. Furthermore, secondary schools have not been included because a program of this depth and scope would require more financial effort than is presently available under this grant.

This program will relate to and extend the services of a number of presently existing education programs in the Flint Community School system, such as the reading clinic and the library stations.

Before describing the program, some general observations about the nature of the area for which it was designed will provide background information. This area is characterized by having the highest concentration of in-migration of low-income and culturally disadvantaged families of the city.

A number of children living in this area suffer from sensory, emotional, physiological, economic, cultural, and social disadvantages. One of the major socio-psychological disadvantages which many of these experience is a lack of skill in oral communication and problem solving. Another handicap they suffer is the lack of books, pictures, magazines, newspapers, puzzles, and games. For most elementary children living in this area, language is a major part of the problem which affects their success in school.

It has long been known that ability and interest in reading are necessary to scholastic success. Many of the aptitude and intelligence tests are so designed that reading and vocabulary count very heavily, and they are considered valid as predictors of academic success.

The school records of the children in the target area indicate that the majority of these children are handicapped from the outset of their school careers by lack of exposure to reading materials, "average" verbal articulation, and to adults who read at home. As a result, these pupils fall progressively farther behind their peers as they move into the upper elementary grades and junior high school. These disadvantages are compounded by the fact that a large number of teachers who are trying to help these learners have not been adequately prepared to meet their needs.

Numbers of children from these communities give evidence of:

1. Indifference to responsibility
2. Non-purposeful activities
3. Poor health habits
4. Inadequate communication skills
5. Little mastery of reading skills
6. A pattern of failure

In school, some of these children have experienced:

1. Low achievement rates
2. Low intelligence test scores
3. High failure rates
4. Poor attendance
5. High incidence of behavioral difficulties
6. High drop-out rates
7. Physical and/or mental handicaps

The term "target area" has been used to describe the school attendance districts eligible for the program according to the guidelines established for Title I of the Elementary and Secondary Education Act of 1965 (Public Law 89-10). This is described on page 19 of the appendix.

Schools in the Program

There are nine public and two non-public elementary schools located within the boundaries of this area. These schools and their student enrollment are:

		ENROLLMENT			
Public Schools	Kindergarten	1-6	Special Education	7-8	Total
Clark	69	430	12	-	511
Dort	168	1,003	30	-	1,201
Doyle	82	455	15	-	552
Fairview[a]	62	236	12	-	310
Lincoln	60	343	0	-	403
Kennedy	80	434	13	-	527
Parkland	77	410	17	-	504
Roosevelt	52	380	14	-	446
Stewart	110	560	14	-	684
Sub Total	760	4,251	127	-	5,138
Non-Public					
Sacred Heart	38	221	-	66	325
St. Michael	44	287	-	108	439
Sub-Total	82	508	-	174	764
Grand Total	842	4,759	127	174	5,902

The secondary schools were not included in the Title I package since we have other projects and programs for them which are in effect at the present time.

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a Although Fairview is located in the target area, it will not participate in the Title I Program because it is presently being considered for involvement in a specially funded program.

1. Under the Vocational Act of 1963, the secondary schools have 120 students on a work-study program with a grant of $42,000 for the 1965-66 school year. This program provides from $45 to $60 per month to needy students so that they may remain in school.

2. Through the Mott Foundation, a Personalized Curriculum Program has been developed in the junior and senior high schools. This program is designed to provide an individualized approach to educational experiences for the drop-out or potential drop-out. Pupil-teacher ratio has been lowered to 15 to 1 for these pupils. Two special counselors have been placed in each of the senior high schools. One counsels with these pupils on social, emotional, and educational problems. The other coordinates work experience. There are approximately thirty (30) of these pupils in each of our junior high schools and 120 in each of the senior high schools. A very large percentage of these young people come from low-income families.

II. PROGRAM

Reading Program Rationale

The entire academic curriculum of the school is built on the expectation that the child can read. Not only is the ability to read a necessity in each of the subject areas as a key to the content, but the ability to read and understand instructions and explanations is essential throughout the child's school experience.

The widespread occurrence of reading deficiencies cannot begin to be met by having limited remedial reading with individual or small groups of students. A more practical and educationally desirable approach is to help classroom teachers devote more individual time to all students in a developmental reading program. The proposed program will allow for this increased instructional time in developmental reading.

Mathematics Program Rationale

A sound mathematics education is accepted as essential for all of our children. Our mathematics education hinges on the form or type of instruction available to our students.

Classes in mathematics must and can be organized with instruction planned to meet each student at all times at his level of achievement. When a larger portion of the students in class have deficiencies in mathematics, it is essential that pupil-teacher ratio be reduced to provide more individual instruction. Enrichment of the student's experience with practical, concrete, and colorful materials is important to stimulate motivation.

An individualized developmental mathematics program such as we propose will afford maximum achievement to each student. The program will (1) supply adequate supplementary materials to completely individualize student instruction and work experiences, (2) supply enrichment materials to reawaken and sustain the student's interest in mathematics, (3) supply additional teachers to increase individual instruction.

A. Public Schools

1. Improving Reading in the Early Elementary Years (1-3)

Major emphasis on basic reading skills will characterize the program in the early elementary years.

As currently organized in the selected schools, as in all other Flint elementary schools, each early elementary classroom teacher includes in his daily schedule approximately one hour of instruction in reading in the morning and a second hour in the afternoon. Since reading is taught in three to four small groups, each small group has approximately 15 to 20 minutes per session during which time the children in the group have direct access to the teacher in terms of instruction, supervision, and guidance in acquiring basic reading skills. The remainder of the reading period is spent in independent study.

The major goal of this part of the program will be to provide a significant increase in instructional time in reading for early elementary children in the selected schools.

Team teachers will be provided over and above the usual number of regular classroom teachers on the approximate ratio of one team teacher for every three early elementary teachers.[a]

[a] 23 early elementary reading teachers, 39 weeks

These additional early elementary team teachers will have full-time teaching assignments. They will be assigned by the principal to work in team teaching activities with at least one early elementary teacher. The objective will be to double the instructional time in reading, particularly for low-achieving children, through increased opportunities for small-group instruction.

It is hypothesized that providing each child with a significantly greater period of direct instruction in reading and more direct access to a reading teacher on an individual basis will bring about major improvement in pupil reading achievement. This hypothesis can be tested objectively by means of standardized achievement tests.

2. Improving Reading and Arithmetic in the Later Elementary Grades (4-6)

Major emphasis on reading and arithmetic will characterize the program in the later elementary grades.

As currently organized in the selected target schools, as well as in other Flint elementary schools, later elementary children receive approximately 40 minutes of reading instruction and 40 minutes of arithmetic instruction during each school day. As is true in most later elementary grades in any school system, in Flint schools there tends to be a wider range of levels of achievement at the later elementary level than in the early elementary years. For this reason, the regular classroom teacher of reading and/or arithmetic has major problems in meeting the individual educational needs of pupils in these subject areas.

This program will have as its major goal providing a means of more nearly meeting the individual instructional needs of pupils in reading and arithmetic as follows:

a. Two reading teachers and two arithmetic teachers will be provided for each six classrooms of later elementary children in each of the selected target schools.[a]

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[a] 30 1/2 later elementary reading and arithmetic teachers, 39 weeks

b. One classroom will be partitioned and remodeled in order to provide for efficient teaching by each pair of reading teachers. The same will be true for each pair of arithmetic teachers. Each classroom will be suitably equipped with special reading or arithmetic materials.

c. During each school day, the six regular later elementary classroom teachers will teach their reading and their arithmetic instruction classes at different times during the morning or afternoon. Then in a given classroom, during the daily reading period, the number of teachers responsible for reading instruction will be augmented to three -- the regular classroom teacher and the two reading teachers. Children will be assigned for developmental reading instruction in small groups, depending upon their individual needs. While 10 to 15 children remain with the regular teacher, 7-10 children will be deployed to each of the two reading teachers. It is anticipated that low-achieving children will generally be assigned to the smaller reading groups. Children will be deployed in the same manner to the regular teacher and the two arithmetic teachers during each daily arithmetic instruction period.

   The preceding manner of providing for instruction in reading and arithmetic will greatly increase the daily individual instructional time in these basic subject areas for all later elementary children. It is hypothesized that this increased instructional time will have a beneficial effect on pupil achievement levels in reading and arithmetic. This hypothesis can be tested by means of standardized achievement tests.

3. Providing Instructional Leadership via the Services of Reading and Arithmetic Specialists

   A Reading Specialist and an Arithmetic Specialist will be provided to facilitate development of effective reading and arithmetic programs in the target schools. They will be assigned to the Instructional Services Department and will work under the guidance of the staff consultants for reading and arithemetic who have systemwide responsibility in their respective subjects.

Directing their attention exclusively to the target schools, the Reading and Arithmetic Specialists will assist the staff consultants in providing technical information, curriculum interpretation, and inservice education.[a]

4. Correlating Reading and Arithmetic Instruction with the Total Instructional Program in Each School via Services of Instructional Specialists.

Along with continuous efforts to upgrade instruction in all subject areas, special attention will be given to reinforcing the intensified instruction in reading and arithmetic in all other classes, when and where appropriate. An Instructional Specialist will be assigned to each[b] of the selected schools, with responsibility for:

a. Coordinating effective communication among teachers regarding instructional activities, and joint planning for instructional improvement.

b. Providing assistance to teachers in relation to adaptation of instructional techniques, introduction of new teaching methods, and modification in curriculum to provide for pupil educational needs.

c. Encouraging teachers to provide a variety of compensatory educational experiences and assisting in their planning and execution.

d. Providing leadership, under the direction of the principal, for meaningful follow-up in each school of the inservice education program for teachers.

5. Facilitating the Learning Process in Reading and Arithmetic by Providing Social Adjustment Services via the School Social Worker

Success in the learning process includes many factors besides actual classroom instruction. Some of these are the child's home background,

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[a] 1 Reading Specialist, 40 weeks
1 Arithmetic Specialist, 40 weeks
(To work on a shared basis with non-public schools)

[b] 8 Instructional Specialists, 40 weeks
(Two of above to work part time in non-public schools)

the cultural environment in which he develops, his attitude, his relationship with his peers and adults, and his self-image and feeling of personal worth.

All teachers have the responsibility of knowing the children with whom they work, of giving understanding, and developing empathy. However, some children present problems that require the services of trained personnel who have the time and freedom from a regular assigned class load to work toward adequate solutions.

The school social worker, who is an integral part of the educational system, is professionally trained to provide help to the child, the parent, the teacher, and other school personnel with problems that center in the school experience and the child's adaptation to it. The problems may focus on the child's personality and behavior, on school adjustment, or on unfavorable home conditions that limit successful academic and social performance.

School social workers will be assigned to schools to provide case work services, work with children and parents, and complement the efforts of the classroom teacher toward improved responses in the learning situation.[a]

6. Making Optimum Use of Instructional Time by Assistance of Clerical Aides to Help Teachers

One of the limiting factors in public school education is the amount of time which classroom teachers must give to non-instructional activities.

In order to free instructors to devote their energies toward actual teaching and working with pupils, a clerical aide will be provided for each of the selected schools, and will be assigned to the Instructional Specialist.[b]

The main contribution of the clerical aide will be the preparation, under the teacher's direction, of individualized curriculum materials in reading and arithmetic. The aide will also provide important non-instructional services for teachers, such as:

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a 9 School Social Workers, 39 weeks
(1 of above to work full time in non-public schools)

b 19 Clerical Aides, 39 weeks (11 of these to work in non-public schools)

a. Ordering and scheduling instructional materials both within the building and from the central facility

b. Preparing duplicated materials

c. Posting information on school record forms

d. Assisting, as appropriate, with arrangements for field trips

e. Assisting in the scoring of tests

f. Obtaining library collections

g. Assisting in non-instructional activities in the classroom

7. Implementing an Inservice Program via Services of an Inservice Specialist[a]

Not enough teachers have been trained to work with children who are known as "economically and culturally deprived." Recent research has revealed that much special knowledge is required for teachers to be successful and do an adequate job in the teaching of such children. Because teacher training is inadequate for these areas, it becomes the responsibility of the school district to continue the education of the teachers through an inservice program.

Certain types of inservice activities have proven to be most useful and helpful to teachers. It is our intent to:

a. Provide for teachers to attend professional workshops and conferences

b. Provide services of people who can interpret research findings and suggest ways to alter instructional practices to make use of the findings

c. Provide for staff workshops to help teachers clarify purposes and goals and choose instructional materials appropriate for accomplishing stated purposes and goals

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a 1/2 Inservice Specialist, 40 weeks, to work on shared basis with non-public schools

d. Provide for the availability of current magazines, books, and/or other reading material

e. Provide speakers who can help teachers better understand the children in the areas of concern

f. Develop definite methods of helping children to improve their self-images and feelings of worth in a class atmosphere where they can experience success.

In general, the inservice education program planned specifically for the target area schools should develop, interpret, and promote a better understanding of the social and educational forces which influence the lives of the children in depressed areas.

8. Implementing the Research Program via Services of a Research Specialist

One of the important aspects of the program will be the acquisition of knowledge concerning the effects of the project as it is implemented in the eight selected elementary schools. The research phase of the program will attempt to measure these effects.

Questions which will be of primary concern to those engaged in the program research will be:

a. Will increased instructional time in reading and arithmetic measurably affect pupil achievement in these subject areas?

b. To what extent will increased school social work services improve pupil adjustment to the school setting and achievement in the basic skills subjects of reading and arithmetic?

In order to implement the research aspect of the program, a half-time research specialist will be employed. His primary responsibility will be to work in the selected schools in the administration of achievement tests and research instruments and in data gathering. He will also work with the two non-public schools involved in the program in order to gather appropriate achievement data in reading and arithmetic for educationally disadvantaged children enrolled in these schools.

He will work cooperatively with the Research and Testing Services Department of the Flint Public Schools in data analysis and in dissemination of research findings.[a]

B. Non-Public Schools

1. Providing Services for Non-Public Schools

This program is offered to non-public schools located in the target area as outlined in Title I.

Through the years, public and non-public schools in Flint have shared in many services, including use of items from the Instructional Materials Center, library resources, diagnostic services, speech correction, and health services. In planning the program for Title I, conferences were held with representatives of the non-public and Flint Community Schools with the following agreements being reached:

a. Develop a cooperative proposal rather than separate programs

b. Concentrate on the elementary schools (1-6 for public schools; 1-8 for non-public)

c. Emphasize the areas of reading and arithmetic

d. Share services as follows:

1) and 2) Improving Reading in the Early Elementary Years and Reading and Arithmetic in the Later Elementary Grades

Any elementary child living within the boundaries set by Flint Board of Education action for the local school may be enrolled in that school to benefit from the special program for improvement in reading and arithmetic.

3) Providing Instructional Leadership via the Reading and Arithmetic Specialists

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a 1/2 Research Specialist, 40 weeks

One reading and one arithmetic specialist will be available to work with teachers of these two subjects in non-public schools on a shared basis.

4) Correlating Reading and Arithmetic Instruction with the Total Instructional Program in Each School via Instructional Specialists

Two instructional specialists will be available for consultation and inservice education to non-public schools on a part-time basis.

5) Facilitating the Learning Process in Reading and Arithmetic by Providing Social Adjustment Services via the School Social Worker

One school social worker will be provided to work in non-public schools.

6) Making Optimum Use of Instructional Time by Assistance of Clerical Aides to Help Teachers

Eleven clerical aides will be available to help teachers in non-public schools.

7) Implementing an Inservice Program

Non-public school personnel may participate in the inservice programs provided to the public schools.

2. Providing Instructional and Testing Materials

Instructional materials and equipment will be loaned on the same basis per building as provided to public schools.

III. INSTRUCTIONAL MATERIALS AND EQUIPMENT

A necessary element of this project consists of the materials and equipment which will be used by teachers in the daily task of teaching the children. The following basic guidelines will be followed with regard to the purchase and use of teaching materials and equipment:

A. Emphasis will be placed on printed materials and aids in addition to the basic and supplementary texts now in use.

B. Fresh and different approaches will be used to stimulate learning.

C. A variety of teaching methods will characterize each class; e.g., each child following the procedure to which he responds best.

D. The tools of teaching in each classroom will be varied and sufficient to allow prompt and appropriate change of activities on an individual basis.

E. A high degree of exploration of different materials and techniques will be encouraged.

IV. PHYSICAL FACILITIES

To carry out the preceding proposals, it is necessary to provide:

A. Eighteen Mobile Units

These are one-room classrooms to be installed on 8 school sites adjacent to the buildings, as follows:

Clark	2	Kennedy	2
Dort	4	Parkland	2
Doyle	2	Roosevelt	2
Lincoln	2	Stewart	2

Early elementary children, in a self-contained organization, will be assigned to these units, thus freeing classroom space in the main building for lower class load in later elementary grades.

B. Eighteen Redesigned Rooms

Eighteen classrooms in the following schools will be redesigned:

Clark	2	Kennedy	2
Dort	4	Parkland	2
Doyle	2	Roosevelt	2
Lincoln	2	Stewart	2

Each of the above designated classrooms will be divided into three sound-proof sections to house small groups of children for instruction in reading and arithmetic.

V. PROGRAM COORDINATION

The Title I program will be operated within the existing framework of the Flint Community Schools under the supervision of the Associate Superintendent of the K-12 Division. The responsibility for planning and implementing this program will be charged to the office of Elementary Education.

An elementary consultant, assigned to the Director of Elementary Education, will carry out the details of operation, working in an advisory capacity and cooperatively with principals, staff members, non-public school representatives, and lay persons.

A secretary for the consultant will be added to assume the additional clerical duties.[a]

VI. RESEARCH DESIGN AND EVALUATION

Evaluation of the program will be concerned primarily with pupil achievement in reading and arithmetic.

The present systemwide standardized achievement testing program at the elementary level of the Flint Public Schools includes administration of appropriate Science Research Associates Multilevel Achievement Tests at the close of the third year and at the beginning of the sixth grade. These tests include objective measures in reading and in arithmetic, which are reported in grade equivalent scores and percentile scores.

In order to make it possible to dovetail the Title I Program evaluation with the on-going Flint school achievement testing program, the SRA Multilevel tests will be used in the fourth, fifth, and sixth grades of the selected schools. Sections of the tests related to reading and arithmetic will be administered at the beginning and end of the school year for each grade in each of the Flint schools involved in the program.

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[a] 1 Consultant, 48 weeks
1 Secretary, 48 weeks

At the early elementary level, appropriate reading tests will be selected and administered on a pre- and post-test basis.

Each year for the duration of the project, test data will be gathered for all grades 1-6 children in the program schools. Data processing services will be employed to analyze this data. Particular attention will be given to gains made by the portion of children in these schools, who are educationally disadvantaged.

In addition to the above general studies, special case studies will be made of a random sample of educationally disadvantaged children who have major contacts with the school social worker.

During the past two years, the Research Services Department of the Flint Public Schools has been conducting a research study concerning the self-concept, motivation for learning, personal need structure, and school adjustment of a sample of children who will be in the Title I Program. This study will be continued and related to the findings concerning achievement in reading and arithmetic.

Finally, teacher observations of the educationally disadvantaged children in their classrooms will be solicited through instruments to be devised by the Research Services Department. These findings will be incorporated in the total evaluation of the program.

VII. BUDGET, BALANCE OF 1965-66 ACADEMIC YEAR

Item (as listed on Application Form)		Salaries	Other	Total
Item 10--Project Budget--Non-Construction				
100	Administration 1 Consultant for Program Coordination, 1 Secretary, 1 Reading Specialist, 1 Arith. Specialist, 1/2 In-service Specialist, 1/2 Research Specialist. Other=Car Allowance	$ 21,776	$ 705	$22,481
200	Instruction 8 Bldg. Instructional Specialists; 53 1/2 teachers, with approximately 40 percent employed immediately upon program approval; balance phased in during remainder of school year. Other=Car Allowance for 2 Instructional Specialists.	196,675	120	196,795
300	Attendance Service 19 Clerical Aides--8 for Public Schools, 11 for Non-Public Schools	30,400		30,400
600	Operation Plant Mobile units added to provide necessary classroom space.	2,800	1,200	4,000
1100	Community Services 9 School Social Workers--8 for Public Schools, 1 for Non-Public Schools. Estimate of Employment: Approximately 30% employed upon program approval; balance employed throughout remainder of academic year, as staff becomes available. Other=Car Allowance.	27,500	900	28,400
1220C	Minor Remodeling* Remodeling of 18 classrooms to make stations needed for small-group instruction for later elementary program.		48,600	48,600

*Classroom remodeling will be in compliance with Michigan State Building Code.

Budget continued		Salaries	Other	Total
1230	Initial or Additional Equipment 53 teachers' desks & chairs--$6,095. Curriculum materials and equipment--$119,342.		125,437	125,437
Other				
	Inservice Education=$4,000. Research materials & data processing--$4,000.		8,000	8,000
TOTAL Item 10, Project Budget		$279,151	184,962	464,113

	FACILITIES	Amount	Total
Item 16-B--Proposed Facilities			
1210C	Site Preparation & Improvements Purchase, bldg. demolition, & grading of 4 lots--2 each adjacent to school sites at Kennedy School and Doyle School. These school facilities are inner-city schools located near downtown area with extremely limited site and completely inadequate playground area.	$40,000	$40,000
1220B	Erection of New Structures.* Purchase, installation & furnishing of 18 mobile units to be used primarily by educationally disadvantaged pupils in early elementary phase of the program. Furnishings consist of children's desks & chairs, classroom tables, necessary added storage cabinets. Needed teacher desks and chairs included in Item 10-1230.	216,000	216,000
TOTAL Item 16B-Facilities		256,000	256,000

*Erection of mobile units will be in compliance with Michigan State Building Code.

TOTAL ALL PROGRAM COSTS	AMOUNT
Item 10---Project Cost--Non Construction	$464,113
Item 16B--Facilities	256,000
TOTAL ALL PROGRAM COSTS	$720,113

1. Clarification of Budget Item 16B-1220B--Purchase of 18 Mobile Units

   a. Mobile Units are required to enable the Flint Community Schools to put the Title I Program into operation. Enrollment at all eight target elementary schools is already at building capacity. Four of these schools now have mobile unit installations for our current program.

      Our Title I Program was deliberately designed to require a minimum of additional classroom space, because of the problem of already crowded conditions. (For example, because of limited classroom space, team teaching and provision for several small-group instructional activities in one room became the major aspect of the program design, rather than measurable reduction in pupil-teacher ratio. Without the addition of the 18 mobile units, the Flint Schools could not carry out the program.

      The possibility of rental of space in churches, vacant stores, and other facilities in the target area was explored and rejected. Many such facilities do not qualify, or qualify only minimally, under the Michigan Fire Code. In addition, such facilities as are available in the area are regarded as being undesirable settings for a full-time grades 1-6 instructional program for the duration of the 3-year project.

   b. Purchase, rather than rental, of the mobile units from the 1965-66 budget is essential to put the program into effect on a sound financial basis for a 3-year period.

      In order to plan adequately for the program, it was necessary to examine the cost of the program for

the 1966-67 and 1967-68 school years as well as for the balance of the 1965-66 academic year. When the program is fully implemented in September 1966, it is estimated that staff costs alone will take 93.9 percent of the anticipated monies available ($720,000) and that this percentage will increase to an estimated 97 percent in 1967-68. This would make it impossible to plan for rental fees in the 1966-67 and 1967-68 academic years. Careful planning, therefore, dictated the need for purchase of mobile units from the 1965-66 budget.

2. Clarification of Item 16B-1210C--Acquisition of Property Adjacent to Two School Sites

Acquisition of four lots is essential to provide classrooms for the program at Doyle and Kennedy Elementary Schools, both of which are inner-city schools located near the downtown area. They are overcrowded and have extremely limited sites. There is no way that classrooms needed for the program can be provided for the educationally disadvantaged children in these schools without the addition of more land. Acquisition of property in these areas necessitates purchase of houses, which can be obtained for a relatively moderate cost. Demolition and site grading will proceed immediately upon project approval and after purchase of property.

Mobile units for the operation of the program will be installed on these sites, and, as stated on page 17, these units, as well as all other units, will be used by educationally disadvantaged pupils in the early elementary phase of the program.

VIII. APPENDIX

(Appendix to Title I proposal)

A. SELECTION OF SCHOOLS ACCORDING TO GUIDELINES FOR TITLE I OF ELEMENTARY AND SECONDARY EDUCATION ACT

1. Criteria for Selection of Schools

The two criteria used for identifying the target schools were as follows:

a. The percent of families with incomes of less than $2,000
b. The percent of children who are educationally disadvantaged as indicated by low achievement

2. Procedure Used in the Selection of Schools

a. The 1960 United States Census Report for Flint, Michigan, was used to obtain data on families with less than $2,000 income. The percent of families with less than $2,000 income was calculated for each of the 41 census tract areas in the City of Flint. Then the census tract areas were related to the school attendance areas in order to determine the approximate percent of families with less than $2,000 income for each individual school. This is reported in column 1 of the List of Schools on the following two pages. Schools are ranked from highest to lowest percent of low income families.

b. Results of the 1965 system-wide achievement testing program were used to obtain data on achievement levels by individual schools. Local system percentile norms were used to calculate the scores which are within the lowest quartile in terms of achievement. Next, individual building reports of scores were used to determine the percent of children in each school who are achieveing in the lowest quartile on the basis of system-wide achievement records. These percents are reported in the List of Schools on pages 20 and 21. Schools are ranked from highest to lowest percent of pupils achieving in the lowest quartile.

c. To determine greatest to least need on the basis of both criteria, the schools were regrouped on the basis of an average of the rank orders reported in columns 1 and 2 of the List of Schools.

This average of ranks for each school is reported in column 3 on pages 20 and 21. The eight elementary schools which rank lowest in column 3 constitute the list of target schools for the Title I Program. It has already been indicated in the footnote on page 5 why Fairview Elementary School is not included in this program even though it ranks among the lowest. Also, on this same page is a reference to the reason why secondary schools are not a part of the proposed program.

d. In the case of the non-public schools, one (St. Michael's Parochial School) is physically located within the target area and has a comparatively high proportion of pupils living in this area. Although the second non-public school (Sacred Heart Parochial School) is physically located somewhat to the north of the target area, a relatively high proportion of their student body lives within the area. Grades K-8 are designated as being a part of the Title I Program in these non-public schools because they designate their elementary grades as including grades 7 and 8 as well as grades K-6.

11. LIST OF ALL SCHOOLS, ELEMENTARY AND SECONDARY, FROM GREATEST TO LEAST NEED IN FAMILY INCOME

B. LIST OF ALL SCHOOLS, ELEMENTARY AND SECONDARY, FROM GREATEST TO LEAST NEED IN FAMILY ECONOMIC DEPRIVATION (1960 CENSUS) AND LOW PUPIL ACHIEVEMENT (1965 ACHIEVEMENT TEST RESULTS)

Approximate Percent of Families with Less than $2000 Income (1960 Census)			Approximate Percent of Children Achieving in the Lowest Quartile (Based on School System Percentile Norms)			Average of Ranks in Columns 1 and 2		
Rank	Name of School	Percent	Rank	Name of School	Percent	Rank	Name of School	Average of 2 Rankings
1	Doyle Elem.	21.9%	1	Dort Elem.	59%	1	Doyle Elem.	2.0
2.5	Fairview Elem.	20.9	2	Kennedy Elem.	58	2	Kennedy Elem.	3.0
2.5	Roosevelt Elem.	20.9	3	Doyle Elem.	55	3	Fairview Elem.	3.5
4	Kennedy Elem.	18.0	4.5	Fairview Elem.	54	4	Dort Elem.	3.75
5	Parkland Elem.	16.9	4.5	Parkland Elem.	54	5	Parkland Elem.	4.75
6.5	Dort Elem.	14.1	6	Clark Elem.	50	6	Lincoln Elem.	7.0
6.5	Lincoln Elem.	14.1	7.5	Dewey Elem.	48	7	Clark Elem.	7.25
8.5	Clark Elem.	13.4	7.5	Lincoln Elem.	48	8	Stewart Elem.	9.0
8.5	Stewart Elem.	13.4	9.5	Lowell Junior High	42	9	Roosevelt Elem.	9.25
10	Stevenson Elem.	12.1	9.5	Stewart Elem.	42	10	Lowell Junior High	11.25
11	Walker Elem.	11.7	11	Jefferson Elem.	41	11	Walker Elem.	14.0
12	Whittier Junior High	11.3	12.5	Garfield Elem.	39	12	Dewey Elem.	14.5
13	Lowell Junior High	10.8	12.5	Martin Elem.	39	13	Emerson Junior High	15.5
14	Homedale Elem.	10.4	14	Emerson Junior High	37	14	Northern High	17.0
15	Pierson Elem.	10.2	15	Northern High	35	15.5	Homedale Elem.	17.25
16	Central High	10.0	16	Roosevelt Elem.	34	15.5	Whittier Jr. High	17.25
17	Emerson Junior High	9.9	17	Walker Elem.	33	17	Pierson Elem.	17.75
18	Oak Elem.	9.6	18.5	McKinley Elem.	32	18.5	Jefferson Elem.	18.0
19	Northern High	9.1	18.5	Oak Elem.	32	18.5	Martin Elem.	18.0
20	Hazelton Elem.	8.8	20.5	Homedale Elem.	30	20	Oak Elem.	18.25
21.5	Dewey Elem.	8.6	20.5	Pierson Elem.	30	21	Central High	22.5
21.5	Lewis Elem.	8.6	22.5	Bryant Junior High	28	22	Lewis Elem.	23.25
23.5	Gundry Elem.	8.4	22.5	Whittier Junior High	28	23	Garfield Elem.	23.75
23.5	Martin Elem.	8.4	25.0	Cook Elem.	27	24	Stevenson Elem.	24.25

Approximate Percent of Families with Less than $2000 Income (1960 Census)			Approximate Percent of Children Achieving in the Lowest Quartile (Based on School System Percentile Norms)			Average of Ranks in Columns 1 and 2		
Rank	Name of School	Percent	Rank	Name of School	Percent	Rank	Name of School	Average of 2 Rankings
25	Jefferson Elem.	8.2%	25.0	Lewis Elem.	27%	25	Hazelton Elem.	24.5
26	Southwestern High	8.1	25.0	Northwestern High	27	26	Southwestern High	25.0
27.0	Cody Elem.	8.0	27	Holmes Junior High	26	27	Bryant Junior High	27.0
28.0	Potter Elem.	8.0	29.0	Central High	23	28	Gundry Elem.	29.25
28.0	Scott Elem.	8.0	29.0	Hazelton Elem.	23	29	Northwestern High	29.5
30	Washington	7.9	29.0	Zimmerman Elem.	23	30	Holmes Junior High	31.5
31.5	Bryant Junior High	7.8	31	Coolidge Elem.	21	31.5	Cook Elem.	32.0
31.5	Longfellow Jr. High	7.8	32.5	Southwestern High	20	31.5	McKinley Elem.	32.0
33	McKinley Jr. High	7.5	32.5	Zimmerman Jr. High	20	33.5	McKinley Jr. High	34.0
34	Northwestern High	7.0	35.0	Gundry Elem.	19	33.5	Potter Elem.	34.0
35	Garfield Elem.	6.0	35.0	McKinley Jr. High	19	35	Longfellow Jr. High	34.25
36	Holmes Jr. High	5.9	35.0	Sobey Elem.	19	36	Zimmerman Jr. High	35.0
37.5	Civic Park Elem.	5.3	37	Longfellow Jr. High	18	37	Washington Elem.	35.5
37.5	Zimmerman Jr. High	5.3	38.5	Durant Elem.	17	38	Scott Elem.	36.5
39	Cook Elem.	4.9	38.5	Stevenson Elem.	17	39	Zimmerman Elem.	38.0
40	Durant Elem.	4.7	40	Potter Elem.	16	40	Cody Elem.	38.75
41	Cummings Elem.	4.3	41	Washington Elem.	15	41.5	Durant Elem.	39.25
42	Freeman Elem.	4.1	42.5	Longfellow Elem.	13	41.5	Sobey Elem.	39.25
43.5	Carpenter Road Elem.	3.9	42.5	Pierce Elem.	13	43	Coolidge Elem.	41.0
43.5	Sobey Elem.	3.9	45.0	Carpenter Road Elem.	12	44	Civic Park Elem.	41.25
45.5	McKinley Elem.	3.7	45.0	Civic Park Elem.	12	45	Carpenter Road Elem.	44.25
45.5	Neithercut Elem.	3.7	45.0	Scott Elem.	12	46	Freeman Elem.	44.75
47	Zimmerman Elem.	3.6	47.5	Freeman Elem.	9	47	Cummings Elem.	45.25
49.0	Brownell Elem.	3.3	47.5	Selby Elem.	9	48	Pierce Elem.	47.25
49.0	Merrill Elem.	3.3	49.5	Cody Elem.	7	49	Longfellow Elem.	47.75
49.0	Selby Elem.	3.3	49.5	Cummings Elem.	7	50	Selby Elem.	48.25
51	Coolidge Elem.	2.8	51.5	Brownell Elem.	6	51	Neithercut Elem.	48.5
52	Pierce Elem.	2.7	51.5	Neithercut Elem.	6	52	Brownell Elem.	50.25
53	Longfellow Elem.	2.2	53	Merrill Elem.	5	53	Merrill Elem.	51.0
54	Anderson Elem.	1.4	54	Anderson Elem.	3	54	Anderson Elem.	54.0

APPENDIX B

APPENDIX B-1

The Number of Students and Teachers by Race for All Elementary Schools During the Second Phase of the Study

School	White Students	White Teachers	Black Students	Black Teachers	Total Students	Total Teachers
Title I Schools						
1	10	20	521	11	531	31
2	59	20	1,236	34	1,295	54
3	43	15	515	13	558	28
4	29	7	469	19	498	26
5	314	21	109	3	423	24
6	4	8	550	21	554	29
7	7	9	494	15	501	24
8	9	16	636	18	645	34
Non-Title I Schools						
9	156	17	944	22	1,100	39
10	10	7	311	14	321	21
11	27	25	821	15	848	40
12	29	22	1,058	21	1,087	43
13	269	15	185	10	454	25
All Other Schools						
14	828	28	0	1	828	29
15	359	12	1	2	360	14
16	823	30	5	2	828	32
17	630	25	0	1	630	26
18	551	31	341	0	892	31
19	521	16	0	2	521	18
20	582	24	15	1	597	25
21	538	44	39	0	577	44
22	530	20	5	3	535	23
23	951	29	1	1	952	30

Appendix B-1 -- continued

School	White Students	White Teachers	Black Students	Black Teachers	Total Students	Total Teachers
All Other Schools--continued						
24	228	16	816	23	1,044	39
25	976	34	125	2	1,101	36
26	985	29	2	2	987	31
27	535	22	2	1	537	23
28	400	15	0	1	400	16
29	561	21	0	0	561	21
30	323	10	0	0	323	10
31	721	26	0	0	721	26
32	687	26	0	1	687	27
33	373	17	124	2	497	19
34	894	44	498	5	1,392	49
35	1,018	37	0	2	1,018	39
36	442	21	151	3	593	24
37	707	22	0	1	707	23
38	663	26	0	0	663	26
39	490	19	5	2	495	21
40	182	14	164	3	346	17
41	708	23	1	0	709	23
42	283	12	0	0	283	12
43	535	19	0	1	535	20

APPENDIX B-2

The Average Age, Training, and Teaching Experience of Teachers in All Elementary Schools During the First Phase of the Study

School	Total Teachers	Average Age	Average Years of Training	Average Years of Experience
Title I Schools				
1	22	36	4.2	8
2	45	31	3.9	5
3	23	33	3.8	5
4	19	29	4.2	4
5	18	39	4.2	10
6	18	32	4.2	6
7	18	35	4.3	8
8	27	38	4.5	9
Non-Title I Schools				
9	35	32	4.2	7
10	14	37	4.3	7
11	33	44	4.4	12
12	38	36	4.2	8
13	17	38	4.0	9
All Other Schools				
14	26	33	4.1	7
15	10	37	4.2	7
16	23	46	4.3	16
17	20	46	4.1	14
18	28	40	4.2	11
19	17	46	4.3	16
20	22	46	4.4	14
21	13	43	4.2	14
22	--	--	- -	--
23	32	41	4.4	11

Appendix B-2 -- continued

School	Total Teachers	Average Age	Average Years of Training	Average Years of Experience
	All Other Schools -- continued			
24	28	38	3.9	9
25	33	35	4.1	7
26	30	43	4.2	14
27	30	34	4.1	8
28	--	--	- -	--
29	15	53	4.2	25
30	11	53	4.7	23
31	25	38	4.2	9
32	23	40	4.2	11
33	19	48	4.4	17
34	43	40	3.9	13
35	34	39	4.3	11
36	18	42	4.2	12
37	21	42	4.5	15
38	16	37	4.0	8
39	14	37	4.1	8
40	13	43	4.4	10
41	22	44	4.0	13
42	17	50	4.3	20
43	18	40	4.2	11
44	9	43	4.3	10

APPENDIX C

Teacher's Number _____

School _____

PERSONAL HISTORY DATA SHEET

Instructions:

The Personal History Data Sheet is designed to accompany the Minnesota Teacher Attitude Inventory. It consists of eight questions. Check only one answer for each question, the answer which most accurately applies to you. Fill in appropriate numbers for all three blanks in Question 6.

You will note that there is an identification number on this page which corresponds to the number on your MTAI answer sheet. Do not write your name on either page.

---

1. Sex: female _____ male _____

2. Race: black _____ white _____

3. Marital Status: single _____ married _____

4. Age: thirty or under _____ over thirty _____

5. Professional Training:

   Less than a bachelor's degree ____
   Bachelor's degree ____
   Bachelor's degree plus, but less than a master's ____
   Master's degree or more _____

6. Teaching Experience:

   a. Total years not including practice teaching or internship ____
   b. Total years with this system ____
   c. Total years in this building ____

7. Grade(s) level(s) being taught:

   4th _____
   5th _____
   6th _____
   4th and 5th _____
   4th and 6th _____
   4th, 5th, and 6th _____
   5th and 6th _____

8. Subject(s) being taught:

reading _____
arithmetic _____
homeroom _____
self-contained classroom _____

DO NOT OPEN UNTIL TOLD TO DO SO

MINNESOTA TEACHER ATTITUDE INVENTORY

Form A

WALTER W. COOK
University of Minnesota

CARROLL H. LEEDS
Furman University

ROBERT CALLIS
University of Missouri

DIRECTIONS

This inventory consists of 150 statements designed to sample opinions about teacher-pupil relations. There is considerable disagreement as to what these relations should be; therefore, there are no right or wrong answers. What is wanted is your own individual feeling about the statements. Read each statement and decide how YOU feel about it. Then mark your answer on the space provided on the answer sheet. Do not make any marks on this booklet.

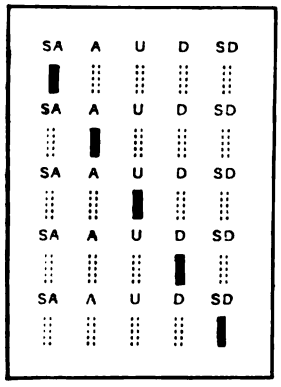
If you **strongly agree,** blacken space under "SA" .....

If you **agree,** blacken space under "A" .....

If you are **undecided** or **uncertain,** blacken space under "U" .....

If you **disagree,** blacken space under "D" .....

If you **strongly disagree,** blacken space under "SD" .....



Think in terms of the general situation rather than specific ones. There is no time limit, but work as rapidly as you can. PLEASE RESPOND TO EVERY ITEM.

The inventory contained in this booklet has been designed for use with answer forms published or authorized by The Psychological Corporation. If other answer forms are used, The Psychological Corporation takes no responsibility for the meaningfulness of scores.

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The Psychological Corporation, 304 East 45th Street, New York, N. Y. 10017

66-143TB

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

1. Most children are obedient.
2. Pupils who "act smart" probably have too high an opinion of themselves.
3. Minor disciplinary situations should sometimes be turned into jokes.
4. Shyness is preferable to boldness.
5. Teaching never gets monotonous.
6. Most pupils don't appreciate what a teacher does for them.
7. If the teacher laughs with the pupils in amusing classroom situations, the class tends to get out of control.
8. A child's companionships can be too carefully supervised.
9. A child should be encouraged to keep his likes and dislikes to himself.
10. It sometimes does a child good to be criticized in the presence of other pupils.
11. Unquestioning obedience in a child is not desirable.
12. Pupils should be required to do more studying at home.
13. The first lesson a child needs to learn is to obey the teacher without hesitation.
14. Young people are difficult to understand these days.
15. There is too great an emphasis upon "keeping order" in the classroom.
16. A pupil's failure is seldom the fault of the teacher.
17. There are times when a teacher cannot be blamed for losing patience with a pupil.
18. A teacher should never discuss sex problems with the pupils.
19. Pupils have it too easy in the modern school.
20. A teacher should not be expected to burden himself with a pupil's problems.
21. Pupils expect too much help from the teacher in getting their lessons.
22. A teacher should not be expected to sacrifice an evening of recreation in order to visit a child's home.
23. Most pupils do not make an adequate effort to prepare their lessons.
24. Too many children nowadays are allowed to have their own way.
25. Children's wants are just as important as those of an adult.
26. The teacher is usually to blame when pupils fail to follow directions.
27. A child should be taught to obey an adult without question.
28. The boastful child is usually over-confident of his ability.
29. Children have a natural tendency to be unruly.
30. A teacher cannot place much faith in the statements of pupils.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree.

31. Some children ask too many questions.

32. A pupil should not be required to stand when reciting.

33. The teacher should not be expected to manage a child if the latter's parents are unable to do so.

34. A teacher should never acknowledge his ignorance of a topic in the presence of his pupils.

35. Discipline in the modern school is not as strict as it should be.

36. Most pupils lack productive imagination.

37. Standards of work should vary with the pupil.

38. The majority of children take their responsibilities seriously.

39. To maintain good discipline in the classroom a teacher needs to be "hard-boiled."

40. Success is more motivating than failure.

41. Imaginative tales demand the same punishment as lying.

42. Every pupil in the sixth grade should have sixth grade reading ability.

43. A good motivating device is the critical comparison of a pupil's work with that of other pupils.

44. It is better for a child to be bashful than to be "boy or girl crazy."

45. Course grades should never be lowered as punishment.

46. More "old-fashioned whippings" are needed today.

47. The child must learn that "teacher knows best."

48. Increased freedom in the classroom creates confusion.

49. A teacher should not be expected to be sympathetic toward truants.

50. Teachers should exercise more authority over their pupils than they do.

51. Discipline problems are the teacher's greatest worry.

52. The low achiever probably is not working hard enough and applying himself.

53. There is too much emphasis on grading.

54. Most children lack common courtesy toward adults.

55. Aggressive children are the greatest problems.

56. At times it is necessary that the whole class suffer when the teacher is unable to identify the culprit.

57. Many teachers are not severe enough in their dealings with pupils.

58. Children "should be seen and not heard."

59. A teacher should always have at least a few failures.

60. It is easier to correct discipline problems than it is to prevent them.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

61. Children are usually too sociable in the classroom.

62. Most pupils are resourceful when left on their own.

63. Too much nonsense goes on in many classrooms these days.

64. The school is often to blame in cases of truancy.

65. Children are too carefree.

66. Pupils who fail to prepare their lessons daily should be kept after school to make this preparation.

67. Pupils who are foreigners usually make the teacher's task more unpleasant.

68. Most children would like to use good English.

69. Assigning additional school work is often an effective means of punishment.

70. Dishonesty as found in cheating is probably one of the most serious of moral offenses.

71. Children should be allowed more freedom in their execution of learning activities.

72. Pupils must learn to respect teachers if for no other reason than that they are teachers.

73. Children need not always understand the reasons for social conduct.

74. Pupils usually are not qualified to select their own topics for themes and reports.

75. No child should rebel against authority.

76. There is too much leniency today in the handling of children.

77. Difficult disciplinary problems are seldom the fault of the teacher.

78. The whims and impulsive desires of children are usually worthy of attention.

79. Children usually have a hard time following instructions.

80. Children nowadays are allowed too much freedom in school.

81. All children should start to read by the age of seven.

82. Universal promotion of pupils lowers achievement standards.

83. Children are unable to reason adequately.

84. A teacher should not tolerate use of slang expressions by his pupils.

85. The child who misbehaves should be made to feel guilty and ashamed of himself.

86. If a child wants to speak or to leave his seat during the class period, he should always get permission from the teacher.

87. Pupils should not respect teachers any more than any other adults.

88. Throwing of chalk and erasers should always demand severe punishment.

89. Teachers who are liked best probably have a better understanding of their pupils.

90. Most pupils try to make things easier for the teacher.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

91. Most teachers do not give sufficient explanation in their teaching.

92. There are too many activities lacking in academic respectability that are being introduced into the curriculum of the modern school.

93. Children should be given more freedom in the classroom than they usually get.

94. Most pupils are unnecessarily thoughtless relative to the teacher's wishes.

95. Children should not expect talking privileges when adults wish to speak.

96. Pupils are usually slow to "catch on" to new material.

97. Teachers are responsible for knowing the home conditions of every one of their pupils.

98. Pupils can be very boring at times.

99. Children have no business asking questions about sex.

100. Children must be told exactly what to do and how to do it.

101. Most pupils are considerate of their teachers.

102. Whispering should not be tolerated.

103. Shy pupils especially should be required to stand when reciting.

104. Teachers should consider problems of conduct more seriously than they do.

105. A teacher should never leave the class to its own management.

106. A teacher should not be expected to do more work than he is paid for.

107. There is nothing that can be more irritating than some pupils.

108. "Lack of application" is probably one of the most frequent causes for failure.

109. Young people nowadays are too frivolous.

110. As a rule teachers are too lenient with their pupils.

111. Slow pupils certainly try one's patience.

112. Grading is of value because of the competition element.

113. Pupils like to annoy the teacher.

114. Children usually will not think for themselves.

115. Classroom rules and regulations must be considered inviolable.

116. Most pupils have too easy a time of it and do not learn to do real work.

117. Children are so likeable that their shortcomings can usually be overlooked.

118. A pupil found writing obscene notes should be severely punished.

119. A teacher seldom finds children really enjoyable.

120. There is usually one best way to do school work which all pupils should follow.

GO ON TO THE NEXT PAGE

SA—Strongly agree
A—Agree

U—Undecided
or uncertain

D—Disagree
SD—Strongly disagree

121. It isn't practicable to base school work upon children's interests.

122. It is difficult to understand why some children want to come to school so early in the morning before opening time.

123. Children that cannot meet the school standards should be dropped.

124. Children are usually too inquisitive.

125. It is sometimes necessary to break promises made to children.

126. Children today are given too much freedom.

127. One should be able to get along with almost any child.

128. Children are not mature enough to make their own decisions.

129. A child who bites his nails needs to be shamed.

130. Children will think for themselves if permitted.

131. There is no excuse for the extreme sensitivity of some children.

132. Children just cannot be trusted.

133. Children should be given reasons for the restrictions placed upon them.

134. Most pupils are not interested in learning.

135. It is usually the uninteresting and difficult subjects that will do the pupil the most good.

136. A pupil should always be fully aware of what is expected of him.

137. There is too much intermingling of the sexes in extra-curricular activities.

138. The child who stutters should be given the opportunity to recite oftener.

139. The teacher should disregard the complaints of the child who constantly talks about imaginary illnesses.

140. Teachers probably over-emphasize the seriousness of such pupil behavior as the writing of obscene notes.

141. Teachers should not expect pupils to like them.

142. Children act more civilized than do many adults.

143. Aggressive children require the most attention.

144. Teachers can be in the wrong as well as pupils.

145. Young people today are just as good as those of the past generation.

146. Keeping discipline is not the problem that many teachers claim it to be.

147. A pupil has the right to disagree openly with his teachers.

148. Most pupil misbehavior is done to annoy the teacher.

149. One should not expect pupils to enjoy school.

150. In pupil appraisal effort should not be distinguished from scholarship.


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