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A STUDY OF ATTITUDES OF PARENTS, TEACHERS, AND STUDENTS
TOWARD THE PILOT PROGRAMS FOR GIFTED AND TALENTED
STUDENTS IN SELECTED SCHOOL DISTRICTS IN MICHIGAN

Michigan State University

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By

Belva H. Eiland

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ABSTRACT

A STUDY OF ATTITUDES OF PARENTS, TEACHERS, AND STUDENTS TOWARD THE PILOT PROGRAMS FOR GIFTED AND TALENTED STUDENTS IN SELECTED SCHOOL DISTRICTS IN MICHIGAN

By

Belva H. Eiland

The purpose of this study was to survey and compare the programs for gifted and talented students in selected school districts from those that participated in the Michigan Pilot Programs for Gifted and Talented Students in 1974-75, 1975-76, 1976-77, and 1977-78.

Data for this study were collected through questionnaires, audio-taping, personal interviews, and written documentation. The attitudes and concerns of parents, teachers, and students toward programs for the gifted and talented were vital in assessing the institutional responses to the educational needs of these students.

Parents', teachers', and students' questionnaires revealed that these groups shared favorable attitudes toward the provisions made for gifted and talented students in the selected districts. The results of responses obtained from directors of the programs revealed that many similarities as well as variations existed in the general characteristics of the programs.

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CHAPTER I

INTRODUCTION

The Problem

Gifted and talented children are those . . . who by virtue of outstanding abilities are capable of high performance. These . . . children . . . require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their potential contribution to self and society. Children capable of high performance include those who have demonstrated any of the following abilities or aptitudes, singly or in combination: (1) general intellectual ability, (2) specific academic aptitude, (3) creative or productive thinking, (4) leadership ability, (5) visual and performing arts aptitude, and (6) psychomotor ability. (U.S. Office of Education; cited in Marland, 1972, p. 10)

Americans typically have attended seriously to the needs of gifted and talented students only when there has been a societal need for social and scientific leadership. The post-Sputnik period produced the greatest flurry of activity relative to educational programming for the gifted. After waning interest on the part of many people for about ten years, national concern is beginning to focus once more on the question of how adequately American schools are developing the valuable human resources of the young who are gifted and talented. Serious public concern about seemingly irreversible inflation, endless wars, depleting supplies of energy and natural resources, poverty and overpopulation, and the need for more effective social leaders in government evidently has motivated this most recent refocusing on the educational needs of gifted and talented students. (Whitemore, 1979, p. 159)

If gifted and talented students all too often feel dissatisfied with their educational experiences in the regular classroom, their parents often express an even greater degree of dissatisfaction. In fact, the parents of the students have in many parts of the state of Michigan become so disenchanted with the schools in regard to their

provisions for students with exceptional abilities that they have formed active and even militant parent groups designed to get the schools to meet the needs of these students. It is gratifying, therefore, to find that the parents of the students in the state's pilot programs express such a high degree of satisfaction with the programs their children are in. Close to 100 percent of the parents responding to a survey form expressed a high degree of satisfaction (Michigan Department of Education, 1978).

Americans have great faith in the power of education to bring out the excellence which may be latent or imperceptible in a person, and their expectations are a clear mandate from society.

It has been determined that although there are children with remarkable talents in different economically privileged families, these talents rarely thrive in a nonsupportive family or a barren community environment (DeHaan & Havighurst, 1961). Some families either may not be capable of recognizing talent, or are unaware of what to do with gifted children. Perhaps a family can be excused for this injustice; an educational system or school cannot. It is the school's business to recognize and develop talent, regardless of parental behavior or expectations. Because the school is a major community institution for helping gifted and talented children, two indispensable functions should be demonstrated: first, the discovery of talent, and second, the enrichment of experiences and essential training for different kinds of talent (DeHaan & Havighurst, 1961).

In a democratic society it is espoused that efforts should be made to develop each individual to his/her maximum potential.

Therefore, it would seem that the neglect of the gifted and talented is an undemocratic policy because they are denied the opportunity to develop to the fullest extent in order to make use of their talents for themselves and the benefit of humankind. The ultimate consideration when recognizing gifted and talented students is the general welfare of the community at large and all inhabitants of the community; it is not to serve the special advantage of the few who are gifted. A parallel consideration is that every individual, whatever his gifts, deserves the fullest opportunities for self-realization. This point was emphasized by the U.S. Educational Policies Commission:

To say that every citizen in a democracy has the right to demonstrate his competence to make use of social opportunities is to affirm, in a limited sense, the principle of equal opportunity for all. But to insist that equal opportunities must always take the form of identical experiences is unrealistic. Efforts to impose identity of experience on individuals of differing interest and abilities are not only foredoomed to futility; they are also unfair--especially to those individuals who deviate markedly from the average; and because they discriminate against individuals in such minority groups as the handicapped and the gifted, they are undemocratic. Moreover, to the extent that such efforts succeed, they prevent the maximum development of the general welfare. The democratic ideal can be most fully attained when every individual has opportunity for educational experiences commensurate with his abilities and for vocational responsibilities commensurate with his qualifications. (Educational Policies Commission, 1950)

Many schools have initiated programs for the gifted and talented in an attempt to meet the needs of such students. Even though some are not successful, many claim a great deal of success (DeHaan & Havighurst, 1961). Successful programs are likely to be carefully and thoughtfully established. They involve a large expenditure of time and are not rushed into operation on the strength of coercion from a citizens' committee or the blazing ambition of one school person

(Durr, 1964). Effective programs require evaluation components, goal-setting procedures, analysis of methods for attaining these goals, familiarization of everyone involved, and the development of an appreciation for the proposed methodology.

The active support, effective involvement, and pertinent knowledge of all those who are either directly or indirectly concerned with the program is a major factor in a successful program for the gifted (Durr, 1964; Gowan & Demos, 1964; Rice, 1970). A good program is more likely to become a reality when teachers, administrators, and parents work together in planning it. The professional knowledge about the gifted and talented programs that school personnel may contribute may be supplemented with the kinds of parental understandings that can only come from the home. A diversity of viewpoints and a wide range of competencies, specialties, and knowledge all contribute to the successful program, and all can be viewed as the result of wide participation by numerous individuals (Newland, 1976).

The formulation of sound purposes and goals is of great concern in planning a program for the gifted and talented. The general purposes of programs for the gifted and talented may be the same as those for all students. However, before they can serve as true indicators to guide progress toward a successful program, the goals should be stated in terms of expected specific outcomes, and the outcomes that are expected of gifted students may not be identical to those expected of other students (Durr, 1964). The activities of the gifted and talented program should include a variety of learning experiences. These experiences should extend from knowledge mastery to the

development of skills, interests, aspirations, and attitudes because the gifted and talented students tend to possess qualities of learning capability and motivation that demand greater content coverage. Fortunately, these students usually have characteristics that make them want to explore widely. Goals must be established that are broad enough to take advantage of the entities that characterize these students as gifted and talented (Durr, 1964; Gowan, 1964).

Another important factor in programs that are soundly established and consistently worthwhile is evaluation, which should evolve as a direct result of the stated purposes (Durr, 1964; Shannon, 1960). This is essential both to improve understanding of the value of what is being done and to become aware of ways for improving the program. The important process of evaluation should be as objective as possible. The quality of an effective program should not be based solely on the feelings of school personnel. A feeling of well being by teachers and administrators does not guarantee an effective program because their emotional responses to a program may be based on factors that have little or no bearing on its true worth. A sincere effort must be made to obtain evidence that is least susceptible to extraneous influences. Since the purposes of the program should be stated in terms of pupil behavior, evaluation must be made in terms of changes in that behavior (Durr, 1964).

The attitudes and concerns of parents, teachers, and students toward gifted and talented students are important aspects in assessing the institutional responses to the educational needs of this population of students.

Purpose of the Study

This study was designed to survey and compare the programs for gifted and talented students in 11 of the 18 school districts that participated in the Michigan Pilot Programs for Gifted and Talented Students in 1974-75, 1975-76, 1976-77, and 1977-78. The specific purposes of this study were to:

1. Survey and compare the general nature of 11 of the 18 pilot programs reported in Michigan by the Michigan State Department and funded by the State Aid Act of 1973-74, 1974-75, 1975-76, and 1976-77. (Only 11 of these 18 school districts granted permission to be included in the study.)
2. Determine and compare parents', teachers', and students' reported attitudes toward the programs.
3. Determine if a relationship exists between the parental educational experiences, socioeconomic status of parents, and reported attitudes toward programs for gifted and talented students.
4. Determine if a relationship exists between the teachers' years of experience and their reported attitudes toward programs for gifted and talented students.

This statement of purposes of the study was used to generate the research questions for the study. These research questions are stated at the beginning of Chapter III.

Need for the Study

Gifted and talented students have been recognized throughout the world for many centuries (Gowan & Demos, 1964). They have tended to be periodically in and out of the consciousness of educators and

citizens, and consequently the provisions made for these students have been unsystematic and inadequate (Trezise, 1976). In the United States there has been a resurgence of interest in the gifted and talented as a result of many criticisms rendered toward our American school systems (Conant, 1958).

Since the more recent resurgence of interest in gifted and talented students, many school districts have established programs to respond to the needs of students who have been characterized as gifted or talented. "Until 1973, Michigan appropriated no special funds for the education of the gifted and talented. Any special programs in operation were locally funded, as are most of the districts with identified programs today" (Michigan Department of Education, 1978).

In the 1973-74 State School Aid Act, Section 47 appeared, allocating \$150,000 for pilot programs for gifted and talented students. The language of the bill was as follows:

From the amount appropriated in Section 47 there is allocated not to exceed \$150,000 to applicant districts for the purpose of experimenting with, evaluating and reporting upon programs of special instruction for children who are academically talented or gifted in terms of uniquely high intelligence or special ability to such a degree that their academic potential might not be realized in a normal instruction setting. (Michigan Department of Education, 1978)

According to the Michigan Department of Education, in 1973-74, 65 districts made application, and the following districts were funded at the indicated levels:

Cheboygan	\$13,288	Livonia	\$37,960
Flint	21,130	Niles	22,522
Lansing	21,328	Willow Run	32,772

Although these districts received their funds during fiscal year 1973-74, most of the programs were not in actual operation until the 1974-75 school year.

Section 47 was included again in the 1974-75 State Aid Act. The wording was the same, except that the funding was increased to \$250,000--an increase of \$100,000. The funds that year were used to continue support of the six original projects, and six new pilot programs were initiated: Benton Harbor, Buchanan, Dearborn, Highland Park, Kalamazoo Intermediate School District, and Union City. The second year, 84 districts made application. The 12 districts were funded at the following levels:¹

Cheboygan	\$ 9,500	Benton Harbor	\$31,000
Flint	14,100	Buchanan	24,000
Lansing	14,200	Dearborn	27,000
Livonia	25,300	Highland Park	31,000
Niles	15,000	Kalamazoo ISD	20,000
Willow Run	21,900	Union City	17,000

Again, although the funding occurred in fiscal year 1974-75, the program operation did not actually begin until the 1975-76 school year.

Although the 1975-76 School Aid Act also contained Section 47, the amount appropriated that year was reduced to \$20,000. Therefore, no new programs were initiated, but the existing 12 programs continued to receive support.

The 1976-77 School Aid Act appropriated \$200,000 for Section 47 programs. Since the initial six projects had been supported for a

¹These figures do not necessarily indicate the full program cost. Many of the local districts involved contributed local funds to the program.

total of three years, they were dropped from state funding, thus allowing six new projects to be funded.

Accordingly, in the fall of 1976, applications were sent out to all districts, and by the deadline date, 90 proposals had been received. In June 1977, the State Board of Education approved funding for the six new projects in six community categories (Metropolitan Core, Cities, Towns, Urban Fringe, Rural, and Intermediate). These districts, and the amounts they received, are as follows:

Metropolitan Core	Grand Rapids	\$17,000
Cities	Birmingham	17,000
Towns	Chelsea	17,000
Urban Fringe	Chippewa Valley	15,000
Rural	Meridian	17,000
Intermediate	Saginaw	17,000

Thus, during the 1977-78 school year these six projects, in addition to the projects in Benton Harbor, Buchanan, Dearborn, Highland Park, Kalamazoo Intermediate, and Union City, were in operation.

Even though these 18 pilot programs were funded and in operation from one to four years, there has been little categorical research conducted in terms of an entire statewide effort related to the initiation, development, expansion, and effectiveness of these programs for gifted and talented students.

There appeared to be concern regarding the usefulness of the information gained from these pilot programs for other school districts in the state of Michigan, to the State Department of Education, and to other agencies that are responsible for making decisions regarding the future of education for the gifted and talented in Michigan (Michigan Department of Education, 1978).

Limitations of the Study

The limitations of the study included the following:

The study was limited to parents of gifted and talented students, teachers of gifted and talented students, and gifted and talented students; and did not include parents or teachers of students who have not been identified as gifted and talented, or students who have not been identified as gifted and talented. The parents, teachers, and students who were included in the study were chosen because of their participation or their children's or students' participation in the program. Consequently, the findings, conclusions, and recommendations of this study should be read with the understanding that only parents, teachers, and students who were involved with programs for the gifted and talented were a part of the study. It is acknowledged that these participants in the study were very likely to have a bias that other parents, teachers, and students would not have. Parents, teachers, and students who were not involved in programs for the gifted and talented were not included in the study because of their limited knowledge of gifted and talented programs.

Only 11 of the 18 public school districts with state-funded programs for the gifted and talented responded to the study. The study was confined to those 11 public school districts.

The attitudes reported in this study were confined to attitudes as perceived and expressed by parents, teachers, and students toward gifted and talented programs in 11 school districts in Michigan.

This study was further limited by the use of a questionnaire as the method of collecting data. It should be recognized that

attitudinal scales represent the verbalized attitude that the individual is willing to express.

Since the programs studied were all partially funded by the state, it would be difficult to apply the conclusions reached in this study to similar programs in schools where funds are not specifically allocated for gifted and talented programs.

Finally, this study was not an evaluation of the quality of the pilot programs for gifted and talented students.

Definition of Terms

The following terms are defined as they relate to this study.

Acceleration: Any procedure that allows a student to progress more rapidly and complete a given school program in less time or at an earlier age than the average student.

Durr (1964) stated that acceleration has two different and commonly used meanings. One, acceleration means providing advanced learning experience for a student while he physically remains at grade level. Two, acceleration means the physical moving ahead of the student so that he completes any given segment of the school program at an earlier-than-average age.

Enrichment: An administrative procedure for providing more opportunities for the gifted child to go deeper and more widely than the average child in his intellectual, social, and artistic experience. The nature of the gifted and talented student is such that effective enrichment of his education consists not in adding more of the same content and activity to the program but in providing

experiences of greater variety or at a more advanced level so as to match his higher level of ability. It is a matter of quality, not quantity.

There are two types of enrichment:

1. Enrichment in depth, which enables a student to study more deeply the areas that are part of the regular curriculum. This means working at a more advanced level (vertical enrichment).

2. Enrichment in breadth, which, while it is not the most common, leads the pupil to study areas that are related to but not usually included in the regular course of study (horizontal enrichment) (DeHaan & Havighurst, 1961).

Gifted and talented:

Gifted and talented children are those . . . who by virtue of outstanding abilities are capable of high performance. These . . . children require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their potential contribution to self and society.

Children capable of high performance include those who have demonstrated any of the following abilities or aptitudes, singly or in combination: (1) general intellectual ability, (2) specific academic aptitude, (3) creative or productive thinking, (4) leadership ability, and (5) visual and performing arts aptitude. (Lindsey, 1980)

Grouping: This term refers to the organization of students in administrative and instructional units in order to facilitate the attainment of educational objectives.

Identification: Identification is defined as assessing the abilities and talents of students in the school and selecting those students who meet the criteria established for a program.

Pull-out technique: This is a technique by which identified students are taken out of the normal day's schedule and given classes particularly designed to meet their needs.

Overview

This dissertation is organized and presented in the following manner. In Chapter II a review of the literature is presented. This review emphasizes those studies that have been conducted which relate to gifted and talented students. These studies are found in journals and doctoral theses.

Presented in Chapter III is the design of the study, which includes the sample population upon which the study was based. Also in Chapter III the operational measures are described. Finally, the design and methods of analysis are discussed.

The following chapter is an attempt to provide an overview of the pertinent literature involving programs for gifted and talented students as they relate to this study.

CHAPTER II

A REVIEW OF THE LITERATURE

A review of the literature for the study necessitates an investigation of the previous research done in the area of correlational studies of attitudes of superintendents, parents, teachers, students, and laymen toward special programs for gifted and talented students. The review further necessitates an investigation of the three administrative approaches (or prototypes) that are the most often used in meeting the needs of gifted and talented students, and some of the important factors to be considered in any program for the gifted and talented. It is hoped that this review of literature presents a framework that will be useful in the subsequent examination of data in this study of programs for gifted and talented students.

Parents', Teachers', and Students' Attitudes Toward Programs and Special Classes for Gifted and Talented Students

The following studies describe parents', teachers', and students' attitudes toward programs and special classes for gifted and talented students.

One of the earlier studies of parental attitudes was conducted by Frazer (1963). This study investigated parental attitudes toward the special program for gifted sixth-grade students. An attempt was made to establish those factors that contribute to the acceptance of

special classes for gifted sixth-grade students and to identify and cite the reasons for parental acceptance or rejection of the special program. It was found that a stable community, satisfied with the status quo, was reluctant to accept new ideas. The program was much more readily accepted by parents of the laboring class than by the managerial and professional group. These findings revealed that the higher the educational level of the parents, the greater the number who opposed the class. Furthermore, it was revealed that parents felt the success of the class for gifted students was due largely to the efforts of the teacher.

Myers (1963) conducted a study to determine if educational provisions for gifted students are related to parental attitudes toward local schools. In this study a comparison was made between the attitudes of parents of gifted children and those of parents of nongifted students from two communities. Provisions were made for gifted students in only one of these communities. The findings suggested, though inconclusively, that attitudes toward local schools held by parents of gifted children were related to special provisions for the education of their students. The parents of gifted and nongifted students in the community that did not have a special program for the gifted tended to be less favorable toward the local schools.

Dunn (1969) conducted a study of the attitudes of parents concerning a program for gifted students to determine specific attitudes that may contribute to the acceptance, rejection, or modification of a program for the gifted. Comparisons were made between Catholic-school parents and public-school parents. This study revealed that

parents of gifted children as a whole overwhelmingly endorsed the program. These findings also indicated that variables of sex and socioeconomic level had no effect on parental attitudes. The most favorable responses were related to enriched curricula, ability grouping, stimulating presentations, offering one or more foreign languages, challenging material, and willingness to repeat the decision to enroll the child. A desire to continue the program was expressed by 92 percent of the parents. Less-favorable attitudes were associated with location of classes, lack of transportation, limited opportunities for after-school activity, the "gifted" label, excessive homework, and broken neighborhood friendship patterns.

A study conducted by Gregory (1975) involved gifted students, both participants and nonparticipants in a gifted program, their parents, and other community leaders. An attempt was made to determine (1) the types of ability and knowledge valued as a goal or objective in educational offerings for the gifted, (2) the value of providing different educational offerings for gifted high school students, (3) the conditions that might discourage student participation, and (4) the value of various types of programs or educational offerings provided for gifted high school students.

The findings of this study revealed that all groups agreed that (1) a variety of qualitatively different educational offerings should be provided for gifted and talented high school students; and (2) there were conditions that discouraged student participation in programs for the gifted, and changes or modifications to improve student participation in these programs, as well as program evaluation,

should reflect the views of the gifted students, both participants and nonparticipants in programs for the gifted, their parents, and community leaders.

Smith (1959) focused on the expressed opinions of samples of several populations in our society with regard to how the educational needs of gifted students are being met at the secondary level and what these several populations think should be done to meet the needs of students. The findings revealed that most respondents were in favor of providing some special consideration for the gifted. They also favored the selection of teachers according to particular qualifications.

Stewart (1972) conducted a study to investigate attitudes of superintendents concerning programs for gifted students. This study was an attempt to measure attitudes that were grouped into five major areas: (1) philosophical approaches, (2) program development, (3) staff and pupil selection criteria, (4) specific teacher competencies, and (5) current status and community influences. The findings indicated that superintendents expressed the lack of financial resources as the main factor that has hindered the expansion of and development of programs for the gifted and talented in Alabama.

Caraway (1959) investigated the Broughton High School Program for gifted students in an attempt (1) to discover materials and procedures that could be used by other intellectually gifted secondary-school students, (2) to determine the effectiveness of the program on academic achievement of those students in the special classes for the gifted, and (3) to determine the strengths and weaknesses of the

program. Results of this investigation seemed to indicate that gifted students have different academic needs and interests from the "average" students in terms of classroom objectives, materials, and procedures.

This review of selected literature seemed to indicate that parents tend to endorse the provisions made for gifted and talented students. They may tend to develop specific attitudes toward local school districts because of the special provisions that are made for students; therefore, parents of nonparticipants may tend to be less favorable of special programs for gifted and talented students than participants' parents.

Factors that may contribute to the acceptance, rejection, or modification of gifted programs were related to the curriculum, group patterns, materials and procedures, retention of students, location of classes, transportation, opportunities for after-school activities, labeling of students, and the effects of the program on students' social relationships. The organization of the program should reflect the views of the students, parents, and the community.

There is a growing recognition of the importance of attitudes in meeting the needs of gifted children. Attempts are being made to measure and evaluate objectively and statistically factors such as mental capacity, physical development, hereditary background, and environmental influence and to determine their effects on the academic achievement of gifted children.

Educators tended previously to consider mainly the mental capacity of gifted children. However, mental capacity is but one

factor among a multiplicity of traits that these children or any other children possess that appear worthy of careful examination. Educators have begun to analyze the importance of the environmental influence.

There is an awareness that children come to school with attitudes toward the social institutions and toward a variety of other things. Peachman (1942) purported that hereditary and physical factors account for some part of the depth and intensity of children's attitudes, but the environment probably plays the major role. The school may be able to do very little about some factors that affect children's attitudes, but school personnel should be alert to detect the presence of these factors that affect children's attitudes and to recognize the possibility of their effect on the achievement of children. Since the school is directly responsible for some attitudes, it should approach the difficult task of endeavoring to foster the most useful and desirable attitudes. Educators contend that attitudes toward scholarship and intellectual life seem to affect the quality of the students' academic accomplishments.

The success of a program for gifted students is directly related to the amount and kind of active support, effective involvement, pertinent knowledge, and attitude of members of the community, the board of education, the administrative directors of the educational system, and the local school faculty.

In reports on classes for the gifted in Cleveland, Goddard (in Peachman, 1942) recognized the presence of certain undesirable attitudes toward special classes but denied the presence of undesirable

attitudes within the classes themselves. The accusation was made that segregated classes encourage conceit; however, he failed to find evidence of such attitudes among children who had participated in such classes. Goddard believed that when undesirable attitudes were found in children they were usually attributed to conscious fostering by parents. However, Peachman asserted that it remains the responsibility of the school to attempt to alter these attitudes by teachers and parents uniting to remove egotism whenever it exists in classes for the gifted.

Dye (1956) made a comparative study of a group of gifted pupils and a group of average fifth-grade pupils for the purpose of (1) determining the attitudes of the gifted child toward the school, the curriculum, and the teacher; and (2) determining if there were important differences in attitudes of gifted and average children. The results of the study seemed to indicate the following: (1) The majority of both gifted and average students appeared to approve of their teacher. (2) A higher ratio of gifted students were unhappy in school compared to the ratio of average students who were unhappy in school. (3) Although both the gifted and the average groups appeared to have favorable attitudes toward their teacher, school, and curriculum, the gifted group was almost consistently more critical than the average group.

The results of this study seemed to imply that the kinds of attitudes a person develops are dependent on the extent to which his inner drives and urges are satisfied in his daily experiences. The school organization and program should encourage attitudes that will

be satisfying to the child. They should afford him an opportunity to fulfill his wants and interest in a socially acceptable way and help him to form habits of behavior that will become so imbedded that desirable attitudes may function in him for his own welfare as well as for that of the group.

Stendler (1951) pursued a study of social-class differences in parental attitudes toward school at grade one. She hypothesized that there are social-class differences in parental belief in and support of the school at grade one. Her findings seemed to indicate that a child's chances of attending preschool decrease the further down the social ladder his family is. She suggested that the results of this study not be interpreted solely in terms of the economic factor but may be due to differences in how social classes prioritize schooling. With regard to educational aspirations, parental expectations for children seem to be less ambitious for the lower socio-economic class.

McGehee and Lewis (1940) conducted a study of parental attitudes of mentally superior, average, and retarded children. The study was designed to investigate differences in the attitudes of the parents of superior, average, and retarded children toward the child and the home situation, and, if differences existed, to determine the nature of those differences. Their findings seemed to indicate that the differences between superior and retarded children could not be set forth merely on the basis of mental ability. As a result of these findings, they concluded that the retarded child is also handicapped in many cases by parents whose attitude toward him and

the home is negative, whereas the gifted child is apt to be aided by parents whose attitudes may be rated as superior. Because of the importance of parental attitudes in the development of a child, undesirable parental attitudes may contribute to personality aberrations and school failure. In contrast, desirable parental attitudes may tend to act as a positive force in the mental health and academic success of the child.

Hamilton (1963) conducted a study of some general attitudes and opinions of parents, teachers, and children about the characteristics of gifted children and the instructional programs schools provide for them, and to ascertain the degree of relationship of specific variables to expressed attitudes. As a result of the study, he concluded that (1) Schools will be successful in fulfilling their obligations to gifted children if they formulate their objectives with consideration of the attitudes of the people involved. (2) Programs should not be initiated until teachers are specially trained about the nature of individual differences. (3) Schools should proceed with caution and not make abrupt changes in the existing programs. (4) Schools should avoid presenting innovations as being new or unique. (5) There should be inservice training for teachers, and teachers should assist in the formulation of the objectives of the program. (6) Explanations should be made to parents in terms that are meaningful. (7) New labels or names should be avoided; the term "Gifted children's classes" is less desirable than simply "special classes," "special-interest classes," or "advanced classes." The identification of children and labeling them as gifted or talented

should be avoided. Another group whose attitudes have great effect upon gifted children is the educational group, which includes those who work directly and indirectly with such children. Teachers must take care not to impose their values on these children, and at times it may be necessary to alter their own attitudes.

Teachers vary a great deal in their attitudes toward gifted children. Many of them recognize the facts of individual differences and how important it is to adapt the learning environment to satisfy those differences by using a variety of materials and techniques to help to do the job. Other teachers may ignore the high-ability students or teach them as they would any average child. They may recognize certain characteristics in children and do not attempt to meet their needs because of other demands in the classroom, such as the slow learner and discipline problems.

DeHaan and Havighurst (1961) described the teacher's attitude toward the education of the gifted as "crucial." The teacher will be able to help gifted children if he is sensitive to their needs and willing to make changes in order to give them what they need.

The importance of the teacher was summed up well by Freehill (1961) when he stated that "nothing in the home matters as much as the parents and nothing in the school matters as much as the teacher." Parents and teachers as surrogate parents are dynamic influences in the child's life.

We may assume that when our schools recognize and make provisions for individual differences of all children, better opportunities should result for the gifted.

Jacobs (1972) investigated teachers' attitudes toward gifted children through the use of a questionnaire. He attempted to develop a measure for teacher attitudes toward the gifted and also to determine if their attitudes are positive or negative. His findings revealed that the attitude of the kindergarten and first-grade teachers, who are very influential in the early school contact of young children, was negative. He concluded that the impact of this attitude on the child's acceptance of his high ability may be undesirable because the gifted child may subtly be informed by the teacher that one's brightness is not as acceptable as the behavior of the less bright, more normal child. He further concluded that teachers as well as others in society must be cautious not to encourage our gifted to conceal their abilities by attempting to recognize, guard against, and help modify those attitudes that tend to imply that giftedness is less than desirable.

According to research, one may assume that the attitudes of teachers influence the attitudes of the children whom they teach. Haring, Stern, and Cruick (1958) suggested that if through certain educational techniques one can change the attitudes of classroom teachers toward a realistic acceptance of gifted children, these attitudes of acceptance on the part of teachers will also influence children in the direction of realistic acceptance.

A study of teacher attitudes toward special classes for intellectually gifted children was made by Justman and Wrightstone (1956). They attempted to determine the extent of the acceptance of intellectually gifted children classes by teaching personnel.

According to their findings, generally younger teachers and teachers with intellectually gifted children experience showed more favorable attitudes than teachers who had served in the school a greater number of years and who lacked experience with classes for intellectually gifted children. The organization of classes for the gifted and talented may cause some deviation from normal school practices, and the extent to which these classes are accepted by the teaching staff is an important factor in assessing the teacher's contribution to the success of the gifted child.

Smichens and Sellin (1976) made a study of 116 graduate students in education toward attitudes about mentally gifted learners. The specific dimensions of this study included (1) willingness to support services, (2) willingness to teach, and (3) preferred levels of interaction. They also attempted to identify the effect of certain variables regarding teacher attitudes. These correlates were (1) sex, (2) curriculum preference (i.e., elementary vs. secondary), (3) previous experience, and (4) perceived traits. Their findings implied that (1) sex and elementary vs. high-school orientation had relatively little effect on dimensions of attitude, (2) teachers of gifted students need special training, (3) regardless of the type of intimacy of contact, there was a marked preference for interaction of the respondent's own child, and (4) the overall image of these learners was of a learner who was desirable to teach but who had no special needs for service.

A number of authorities have identified the importance of acceptance and positive attitude toward the gifted. It seems basic

that a teacher of the gifted ought to have a favorable attitude toward the gifted child because unfavorable attitudes may be observed by the child and may result in his developing a negative attitude toward learning.

Wiener and O'Shea's study (1963) was designed to (1) indicate attitudes held by teachers, supervisors, university faculty members, and university students toward the gifted and (2) to note the relationships between certain selected variables and attitudes toward the gifted. Their findings indicated that the supervisors were the most favorable, while the administrators were slightly less favorable. The university faculty members were somewhat less favorable than the administrators, and the teachers and students were the least favorable of all groups studied.

The results indicated that there was a highly significant relationship between attitude toward gifted children and scholastic aptitude of the teachers. There was no relationship between age, sex, degrees held, field, income, or number of years teaching and the faculty members' attitude toward the gifted. There was no relationship between age, income, years as administrators, position, grade level, or programs for the gifted in school and the administrators' attitude toward the gifted. The male administrators were more favorable toward the gifted than were the female administrators. There was a significant relationship between educational degrees held and attitude toward the gifted. The administrators with doctor's degrees were more favorable toward the gifted than were the administrators with bachelor's or master's degrees. There was a significant

relationship between the existence of classes for the gifted in school systems and attitudes toward the gifted. The administrators with classes for the gifted in their schools were more favorable toward the gifted than were administrators who did not have classes. There was no relationship between age, sex, degree, income, number of years as a supervisor, or experience in supervising the gifted and the supervisor's attitude toward the gifted. There was no relationship between age, sex, income, number of years as a supervisor, or experience in supervising the gifted and the supervisor's attitude toward the gifted. There was no relationship between age, sex, income, number of years of experience, or grade level and the teachers' attitude toward the gifted (Wiener & O'Shea, 1963).

The results of this study seem to indicate that understanding and familiarity with gifted students affect attitudes, and if those persons who most directly influence the attitude of students do not display a favorable attitude, improvement in student attitudes and understanding may be limited.

Identification

Many educators agree that gifted and talented students have potential abilities of an outstanding or unusual nature and that these abilities can be enhanced by special opportunities. If our schools are going to be responsible for enhancing these potentially outstanding abilities, we need the best available measure to identify and to arrive at an assessment of these pupils' potential which is as accurate as possible, so these potentials can be turned into future productivity.

Rice (1970) and Barbe and Renzulli (1975) concurred that the primary goal of identification procedures ought to be the selection of the broadest possible range of gifted students; it stands to reason that selection committees ought to be composed of a variety of professional and talented members. Rice further suggested that general identification committees in schools should include teachers from various subject disciplines, administrators, school psychologists, and specific community experts. Most professional educators in the school ought to be in contact with the selection committee at some time since (1) nominations should be openly competitive, (2) screening procedures should be circulated among all teachers during annual survey periods, and (3) in-service training for diagnosis and talent development should be open to all teachers.

The process of identification should begin at the kindergarten level, and should be a continuous process extending through the grades (Martinson, 1965; Rice, 1970; Witty, 1971). An interruption in this process occurs at the time of certification; before this interruption the identification process tends to be historical. Data concerning the individual's development are collected and assessed in terms of his various potentialities, with special emphasis on his mental abilities.

Gowan and Demos (1964) recommended some principles that should prove helpful as guidelines. They stated, "It is first important that the identification has a purpose and that some special activities with the gifted should flow from their identification." They further suggested that the process of organizing a program for the gifted should

succeed explorations by teachers of the best ways to meet the needs of gifted children. The program should be the consequence of good guidance and faculty morale. It should fit into an existing program for all children. Last, identification should disturb as little as possible the child in his personal and social relationship. It should not cause self-consciousness, parental conflicts, or unfavorable publicity.

The following are suggested procedures to be used in the identification process, in the order of preference, according to Gowan and Demos:

1. Periodic evaluation to determine retention in program
2. Intelligence quotient as measured by group test
3. Reading grade placement
4. Recommendation of subject teacher
5. Review and approval of record by counseling staff
6. Score on standardized achievement test
7. Composite scores of various subject fields
8. Previous grades, all subjects
9. Previous grades, specific subjects
10. Parental approval
11. Intelligence from individual test
12. Social-emotional stability from teacher judgments
13. Recommendation of teacher outside subject field

Kough (1960) stated that "standardized tests and teachers' observation are the two means by which schools can identify intellectually gifted students." He contended that some abilities are better measured by objective tests, others by observation, and still others by a combined approach. Each of these methods has its own limitations; therefore, a good identification program should never rely on a single technique, but on a wide variety of criteria.

Gallagher (1976) did not favor using teacher observations for identifying gifted children. He contended that teachers make a

sizable number of errors in attempting to identify gifted students. First, some tend to identify many students who tests indicate are not gifted. Second, they do not identify some students who tests indicate are gifted. Another error that teachers have been known to make is in identifying most children who come from middle-class and professional families.

Vail (1979) contended that one reason for errors in teacher identification may be due to the teacher's expectation of gifted students to be cheerful and enthusiastic in responding to the classroom program. Many of these students may be willing to conform to routines, whereas others may resist. Consequently, some may be regarded as behavior problems. Other gifted children may be labeled slow learners because they are bored and do not respond to classroom activities. Thus, the teacher may overlook these children. However, those gifted children who are hardest to identify are usually the ones who are most in need of special help.

Since research has shown teacher judgment to be fallible, to decrease the possibility of teacher misjudgment, inservice training for teachers concerning the behavioral characteristics of children is needed.

McMillan (1976) agreed that test administration should be combined with observation and nomination by teachers, parents, and peers. The intelligence, achievement, and diagnostic tests may be used as means to measure aptitude, creativity, personality, and interests. He also favored the use of self-nomination by gifted children because interest and motivation play critical roles in achievement

and, conversely, in underachievement. He cautioned against comparing test scores as a means of choosing students for participation in gifted and talented programs because an IQ of 130 is often cited as the "cut-off" score for inclusion in gifted programs. However, because intelligence tests vary in their results (for example, Stanford-Binet IQs average seven points higher than Wechsler IQs), this "cut-off" score is not recommended. He further contended that giftedness may not show up in test scores since tests tend to identify intellectual ability and specific academic aptitude. Certain characteristics of giftedness may be measured by tests, including creative thinking, leadership ability, visual and performing-arts ability, and psychomotor skills.

Many authorities have agreed that the best possible method of identifying gifted and talented children is the systematic administration of group intelligence and achievement tests, plus inservice training for the teachers concerning the behavioral characteristics of these children. Even with these methods, it is possible that some gifted and talented children may be missed, but anything less than these procedures may assure that many potentially high-ability children will be ignored.

Staff Selection

The quality of instruction in any educational program depends largely on the quality of the teachers themselves, for what the pupils learn and the attitudes they form will depend in large part on the guidance they have received from teachers. Teachers help pupils to

determine goals, establish values, select learning experiences, and choose methods, and they serve as examples or models. Freehill (1963) and Crow (1963) proposed that because the gifted and talented child has made good learning progress on his own throughout the years, he often has incentive and capacity to pursue learning on his own. With respect to maximizing his learning in thinking strategies, uncommon knowledge, and sophisticated methodologies, it is necessary to find teachers who are equipped to handle such learning inputs.

Staffing patterns may be complicated by such factors as scarcity of resource specialists, lack of time on the part of highly productive intellectuals to devote to personal interaction with the gifted and talented student, or failure of professional educational institutions to capture their share of intellectuals (Rice, 1970).

The U.S. Office of Education suggested teaching fellowships and inservice training as major needs to "better prepare" teachers of the gifted and talented. Sanderlin (1973) pointed out that in 1971 only the University of Georgia, Pennsylvania State, Kent State, George Peabody College, the University of Illinois, California State University at San Diego, and the University of Connecticut were prepared to give graduate degrees in gifted education. More recently, other institutions of higher learning have initiated similar programs (e.g., Michigan State University initiated a program in 1978).

The teacher's intellectual capability should be appropriate to the educational level of the pupils. This is important for three reasons: First, it is important that no communication gap exist

between the child and teacher. Second, the teacher should be capable of understanding the concepts essential to the learning of the child. Third, the teacher should be sufficiently psychologically insightful and intellectually competent to understand and work with gifted and talented children in their necessary progress from behavior that involves higher-level conceptualization (Newland, 1976).

Hildreth (1952) suggested that the gifted and talented child needs a gifted teacher. A rarer degree of competence is needed by the teacher who attempts to direct the learning of gifted and talented students. Hildreth further asserted that there is little documented evidence to prove that teachers who are considered generally excellent teachers would be excellent teachers for gifted children. Other educators have agreed that the teacher of the gifted and talented child should himself be gifted; however, this means that he should have enough emotional balance and enough advantage from experience to accept and work with students who are brighter than himself.

According to Mirman (1964), it seems reasonable and logical that we consider teacher qualifications in terms of the characteristics of the gifted and talented children themselves; however, to be able to provide gifted teachers for these students may be advantageous--it seems almost an impossible goal to achieve. Although good scholarship and a wide cultural background are important, it is not suggested that the teacher possess expertise in all areas of knowledge in which gifted children may be interested.

Conant (1958) stated that the teacher of gifted students should have in exceptional degree some of the qualifications expected

of all teachers, e.g., a good mind, broad intellectual curiosity, creativity, energy, experience, enthusiasm, emotional balance, personality, and a deep interest in students as individuals.

Witty (1951) suggested that the main concern of teachers of gifted and talented children should be to help each child develop his potentialities. To do this he should gain an understanding of child development, and he should learn the counseling and group-work techniques appropriate to the informal classroom. Recognizing the importance of parent-child relations and of neighborhood influences, he becomes acquainted with parents and community life.

Gifted and talented students need teachers with special traits and skills. Not every teacher can teach these students successfully, but many can. Even teachers with all or most of the desired traits should have special training in meeting the needs of the gifted and talented (Epstein, 1979).

Because of the vital role that staff members perform in determining goals, establishing values, selecting learning experiences, choosing methods and materials, and serving as models for students in gifted programs, these persons appear to be of utmost importance in the success or effectiveness of the gifted programs. However, the importance of trained personnel and the time factor seem to be very pertinent areas that should be considered in the process of organizing a program for gifted and talented students.

Grouping

According to Gowan and Demos (1963), essentially all programs for the gifted and talented are enrichment programs that are designed

to provide for individual work, for differentiated assignments, for greater depth of learning, or for more rapid pace. Each seeks to enrich by providing more or different learning opportunities. These arrangements may be categorized into groups: grouping, acceleration, and enrichment.

Many educators advocate meeting the needs of all students by bringing together students who have similar intellectual ability for all or some portion of their educational experience. By grouping students this way, the range of individual differences is reduced and permits teaching methods and learning experiences that are appropriate to the ability level of the students. It enables the teacher to devote more time to gifted students than is possible when there are slower students who need help.

According to Shertzer (1960), grouping may result in the development of more realistic self-concepts among gifted and talented students. Studies by the Talented Youth Project revealed that when bright students were moved from broad- to narrow-range groups, their self-estimates tended to go down and the gap between their perception of their present status and their desired status increased, thus leaving psychological space for improvement. This may be reason to support the argument that grouping does not foster conceit and snobbery in gifted and talented students.

Anderson (1961) was supportive of the above findings because he contended that grouping of gifted students may cause desirable changes in self-attitude, both for the gifted and the average. However, working in a special group may give the gifted student an

opportunity to see himself more realistically in relation to his peers in ability. There is no evidence to support the notion that grouping has any adverse effects on the social or personal attitudes or behavior of children. Anderson further asserted that "grouping is a facilitator of better learning experiences for bright children, but it does not, per se, result in greater achievement in the basic skills or in general content without specifically designing varied academic programs for the various ability levels." Moreover, DeHaan (1961) and Newland (1976) agreed with Anderson's suggestion that grouping not be considered on the basis of general abilities, but instead it should be related to specific objectives and kinds of abilities. Specific situations, specific aptitudes, and specific interests of children should be taken into consideration.

Some authorities have suggested that gifted children tend to select their playmates and friends from their intellectual peers. However, Anderson stated that broad-range grouping does not foster greater mutual acceptance among children of various ability levels. Mann (1957) found that gifted children both chose and rejected typical children. Typical children also seemed both to prefer and to reject their own. Both the acceptance and rejection seemed to be stronger within ability groups than across them.

Torrance (1965) described the results of many surveys on grouping as crude and undifferentiated, and because these results have not been uniformly favorable and many important goals of educating gifted children have not been considered in the evaluations, the

results have indicated that grouping does not solve automatically the problems of individualizing instruction.

An increasing number of educators favor some form of grouping. Many of them, like MacLean (1956), have agreed with the policy of placing gifted students in special classes at an early age, but have emphasized that there are ways of including these students in school activities involving them in heterogeneous relationships as an integral part of their education.

Torrey (1956) stood against grouping on the ground that it solidifies socioeconomic differences. He advocated the use of better teaching methods in which the child is allowed to progress at his own rate.

Some writers have felt that grouping encourages competition rather than cooperation and that the competitive spirit should not exist in the democratic concept of the school. Fontaine (1941) saw class distinction as hazardous and believed that grouping is more likely to develop social misfits than leaders. Hinckley (1956) criticized the grouping of pupils as a hampering element for a wholesome development. He suggested providing special classes for the gifted during study period.

Gowan's (1964) summary of research conducted by Laney and LeHew in 1958 is an excellent review of reasons given for grouping and also against grouping. They are as follows:

For grouping:

1. Assists the teacher in providing a program of greater depth or breadth by more closely grouping intellectual or creative peers.

2. Talented students in a relatively homogeneous group will find it more stimulating and interesting to explore new fields and ideas experimentally and critically.
3. Since a relatively homogeneous group of talented students can cover routine material more quickly, much time is left for the teacher to guide activities of a creative nature.
4. The teacher also has time for enriched group out-of-school activities that might not be suitable for a heterogeneous class.
5. A relatively homogeneous group of talented students can help its members develop more realistic self-concepts. Working in a special group gives the talented student a chance to see himself in relation to his peers in ability. In addition to recognizing his strengths, he also becomes aware of some of his shortcomings.
6. The intellectually gifted child tends to select his playmates and later, his friends from his intellectual peers. It is probable that talented people tend to choose as friends those whose talents lie in the same area. If this is true, the youngster's concept of himself should be related to the kind of people with whom he is going to spend most of his life.
7. Grouping of talented students stimulates greater efforts since "success" in relation to others is not as easily achieved as it would be in a regular classroom.
8. Intellectually gifted students are likely to be discouraged when they find that in college they are no longer outstanding. They might be better prepared to cope with the problem of being in an exceptional group if they had this experience while in high school.
9. Better study habits are established by a program which enables each student to work as nearly to capacity as possible most of the time.
10. Research has shown the desirability of acceleration with the gifted.
11. Restores confidence of slower pupils.

Against grouping:

1. Special grouping will foster the development of an inflated sense of self-importance and may lead to their use of talents in endeavors not closely related to the needs of society.

2. Ability grouping results in a loss to the less highly endowed students because boys and girls not in the special group need the stimulation of ideas and products of the abler students.
3. Grouping on the basis of ability is undemocratic. It develops snobbery in the segregated youngsters out of a sense of belonging to an elite group, or being better than average.
4. Segregation prevents adequate training of the talented individual for leadership because only if leaders have constant and close contact with their followers can mutual communication and understanding result.
5. Segregation of the talented may result in excessive competition, assignments, and overwork, which in turn may result in lessening of participation in extracurricular activities or worthwhile out-of-school pursuits.
6. Due to inadequate methods of identification, the wrong students are sometimes picked for special groups.

There does not seem to be any clear-cut generalizable findings that indicated either an overall desirability or undesirability of the practice of grouping, at least so far as its value for the gifted and talented is concerned. There is conflicting evidence of usefulness in producing improved scholastic improvement in gifted and talented students, and almost uniformly unfavorable evidence for promoting scholastic achievement in average or low-achievement groups.

The effect of ability grouping on the affective development of children is to reinforce favorable self-concepts of those assigned to high-achievement groups, but also to reinforce unfavorable self-concepts in those assigned to low-achievement groups (Findley & Bryan, 1971).

Enrichment

Enrichment is an administrative procedure for providing more opportunities for the gifted child to go deeper and more widely than

the average child in his intellectual, social, and artistic experience.

The concept of enrichment arises from the fact that the usual educational provisions are not particularly satisfying, and they are perhaps too scanty for inquiring minds with insatiable curiosity and lively interest in learning. The awareness of these students' needs has probably developed because of the demands of society and of the gifted and talented students themselves for more and better education. When students are prepared to learn at a greater speed and at a higher level, it becomes the responsibility of the administrator and teacher to provide new content and new activities for these students. Providing more of the same materials is not the answer to the problem of enrichment.

Freehill (1961) contended that it is improper to consider enrichment as though it were a special approach to meet the needs of gifted students because all of the processes are for the purpose of enrichment. Actually, it is a component of all programs for gifted and talented children. Other supporters of enrichment have contended that variety and exploration are more significant to the gifted than are precision and intensive work. Enrichment opportunities should be provided in terms of breadth and depth in addition to regular classroom work.

Some proponents of enrichment favor it without acceleration. Perhaps this is so simply to avoid the plans that require grouping or acceleration of students. It stands to reason that enrichment may degenerate into busy work for gifted and talented students.

According to Gowan and Demos (1964), enrichment in heterogeneous classes requires the following conditions:

1. A class size of not more than 25 students
2. A specially trained teacher or a special teacher consultant
3. Extra materials, supplies and books
4. Freed time for the teacher to make special preparation
5. A good program of identification and guidance

Kough (1960) stated that enrichment within the regular classroom requires few, if any, additional expenditures or administrative alterations. On the contrary, Gowan and Demos perceived enrichment in the heterogeneous classroom as one of the most expensive ways of meeting the needs of the gifted. They contended that enrichment as a procedure for educating the gifted, if properly done (with release time, special teachers, and special materials), practically amounts to individual tutoring. When done in this manner, it is obviously effective. They further purported that it is relatively easy for an administrator to make suggestions to teachers to enrich their programs, but unless the above conditions are being met, there can be no basis for feeling that a valid enrichment program is in effect.

Proponents of regular classroom enrichment have argued that an enrichment program allows gifted students to stimulate other students intellectually; consequently, to remove these children from the classroom would eliminate a source of stimulation for other children. They also have argued that the intellectually gifted are not necessarily more advanced physically and socially, and therefore it may be to their benefit to remain with their own age group. In contrast to the above advantages of enrichment, other educators have argued that enrichment may force both the gifted students and the slow students

into the pattern of the average student because the gifted students may become bored and not achieve to their full capacity, whereas the slow students may become frustrated because they cannot work up to the class standards.

Proponents of enrichment have further presented a philosophical argument for classroom enrichment on the basis that it is more democratic than the other provisions that can be made for gifted students. It eliminates the problems of segregating children, and there makes for a more real-life situation with children of different intellectual abilities. In opposition to the above statement, according to research, those who oppose enrichment reject its democratic value because they feel the home and community contact play an important role in the development of wholesome social attitudes.

Still another advantage claimed for classroom enrichment is that it necessitates more individualized instruction for all students. Some opponents of classroom enrichment have argued this point of view because it depends too much on individualization of education, which is almost an impossibility under our present system. Enrichment is favored by still others, namely teachers and administrators, because they feel that within this technique it is possible to make use of grouping and acceleration. Others have contended that gifted children may develop a feeling of superiority over the average members of their class because it may be very easy for them to excel, whereas if they were placed in groups with children who possess similar intellectual abilities, they might gain a more realistic perspective of their abilities.

It seems apparent from the number and the nature of controversies about the advantages and disadvantages of enrichment that much additional research needs to be conducted in order to resolve the relative merit of this approach when compared with other practices being used to meet the needs of gifted children.

Acceleration

Any procedure that allows a student to move more rapidly and complete a given school program in less time or at an earlier age than the average students may be referred to as acceleration. It is based on the philosophy that gifted students should not be restricted to working at the same pace as other students of a similar age group, but should be allowed to progress to more challenging work.

It has been proposed as a practical rather than an ideal device for extending the educational horizons of gifted students because it can save student time, it is easy to administer, it is comparatively inexpensive, and it does not require differentiation of the curriculum. Gallagher (1975) maintained that the methods used for acceleration are widely varied and the results almost always successful. This is not to imply that because many evaluation reports are favorable, the practice is either widely used or widely accepted.

A number of school systems have attempted to practice acceleration in their secondary and elementary schools. One method of accelerating gifted students is to allow them to begin school at an earlier age than average students. Investigators have noted that the strict chronological age requirement for first graders has little or

nothing to recommend it from a research viewpoint. The arbitrary chronological age limit now used by school systems does not take into account either advances in teaching or the wide range of individual intellectual differences in children with a chronological age of six (Gallagher, 1976; Ward, 1975).

The results of evaluation of early-admittance programs have been very favorable in Massachusetts, Pennsylvania, and Nebraska. Children who were admitted early as a group were superior or equal in characteristics to those children admitted at the regular age (Gallagher, 1976).

Grade skipping is another means of acceleration, which is what many members of society think about when acceleration is mentioned. Some educators consider this practice as the least desirable because of the possibility of a child missing basic information that is taught in the grade to be skipped.

Another means of acceleration is having ungraded groups in the primary grades so that sections of students can complete a particular curriculum in less time and proceed ahead in the school program.

Gallagher (1975) stated that the available research indicates clearly that moderate acceleration in the elementary school does no noticeable harm to the gifted and talented child and has shortened his academic operation by one-half to one year.

As a result of NEA research, Anderson (1961) stated, "The research testimony as to the advantages of acceleration is weighty, consistent, and continuous over several decades." This administrative procedure has been approved by authorities such as Terman and Oden

(1954), who studied the effects of acceleration on a group of more than one thousand students with IQs above 140. Terman and Oden advocated acceleration since promotion is based primarily on mental age. They further suggested that these gifted students should be admitted to college at the age of 17 at the latest.

Morgan (1957) suggested acceleration for students with Stanford-Binet IQ scores of 135 or higher when (1) the child is working at or above grade level in reading, arithmetic, spelling, and computation; (2) the physical variations are above mean for modal age of grade; and (3) it is acceptable by parents.

Pressey (1962), a proponent of acceleration, according to Anderson, was in agreement with Terman and Lehman when he stated that gifted students should progress more rapidly than the average young person and should get into their productive careers earlier than occurs with the lockstep because for some fields of endeavor, especially science and math, greatest productivity is achieved during the twenties, chronologically.

Anderson (1961) reported that (1) available research does not indicate that acceleration is the best method for meeting the needs of gifted and talented students; however, it is a desirable and practical one; (2) the amount of acceleration has not been established; (3) acceleration should not take place with students whose IQ is below 130; (4) when acceleration should take place is in doubt, but three periods for it have been developed in the American school system: (a) early entrance, (b) grade or junior high school, and (c) advanced placement or acceleration into college.

Terman (1954) recommended acceleration of no less than one year and no more than two years as the most satisfactory procedure for gifted and talented students. He further stated that opponents of acceleration argue that acceleration (grade skipping) intensifies the problem of social adjustment, promotes bookishness, is detrimental to physical and mental health, and leaves gaps in the child's academic knowledge and skills although there is little evidence in support of such contentions.

To adopt the practice of acceleration necessitates extensive testing of students, which in turn requires adequate psychological services. If a school system is lacking these services, this may become a barrier to administrators' acceptance.

It seems reasonable to conclude that all decisions about accelerating students should be made on an individual basis in the light of reliable information about the particular students. Establishing wholesale policies for or against this administrative procedure would seem to be unwise.

Evaluation

The initiation of a program is only the beginning step of meeting the needs of gifted students. Yet too often further steps are not taken, since everyone feels that "something is being done for the gifted." Unfortunately, it is not enough to know that something is being done; it is crucial to know that what is being done is effective and what ways it might be improved.

Evaluation is an integral part of every program that is organized for any educational objective. Therefore, it seems feasible to initially organize these programs so that evaluation can occur continuously and naturally in order to determine areas that need improvement, modification, expansion, and deletion.

DeHaan (1960) contended that program evaluation should be based on clear objectives that are outlined early in the program. Plans should be made beforehand concerning expected student attainments and what the program should be in order for the evaluation to be valid in terms of whether or not the original objectives have been achieved. Evaluation must also be concerned with personnel, curriculum, methodology, administrative structure, and educational resources.

The process of evaluation should include growth in achievement in specific subject-matter understandings, critical thinking, interests and motivation, social attitude, and ability to work with others. Therefore, many who consider programs in terms of possible growth feel that great dependence on test evaluation could be detrimental because standardized tests may not be appropriate for measuring all the outcomes of a gifted program.

Gowan and Demos (1964) suggested some areas of concern in any general-consideration evaluation. They are:

1. Clarification of criteria from general to specific and from long term to short term
2. The general experimental design or methodology
3. The source of data and techniques of data collection

They further suggested (1) the use of reaction surveys and direct measurement. The simplest kinds of surveys may come from just

asking the gifted and talented students about their reactions to the educational environment. These reactions are useful for spot evaluation and as hints to program modification and improvement. This is the quickest and easiest way to detect and eliminate problems in a program. (2) The use of direct experimental evidence to evaluate special programs for gifted and talented children. These studies should involve measurements upon criterion groups where certain variables have been controlled and a before-and-after measurement is used.

Halpert and Vredevoe (1965) recommended that any program for gifted and talented children should provide for the identification, diagnosis, prescription, motivation, freedom, flexibility, and evaluation of the program. They emphasized the importance of freedom and flexibility to students so they can strike out into creative and pioneering experimentation and intellectual activities. They further emphasized that no instrument can be designed that would fit all cases, but certain common criteria must be recognized in order to appraise the efforts of a program.

According to guidelines suggested by Halpert and Vredevoe, evaluators should constantly direct their attention to three points: (1) the school's philosophy and objectives, (2) characteristics of students and community, and (3) the wide range of potentials that should be conceived of when thinking about gifted and talented students.

Shertzer (1960) asserted that in an evaluation of the effectiveness of a program for gifted and talented students, the school's total climate is highly important. For this reason, evaluative

information should be obtained from as many participants as possible--students, teachers, counselors, administrators, and parents.

Evaluation involves the descriptive act of stating what essential components are present or absent in a program and then making judgments as to whether such components are functioning properly. If certain important components are absent, the discovery can serve as the stimulus for incorporation.

CHAPTER III

METHODS AND PROCEDURES

The plan of this study was to determine and compare the reported attitudes of parents, teachers, and gifted and talented students toward the gifted and talented programs funded by the state of Michigan in 18 school districts in Michigan. These school districts were:

Cheboygan	Benton Harbor	Grand Rapids
Flint (Beecher)	Buchanan	Birmingham
Lansing	Dearborn	Chelsea
Livonia	Highland Park	Chippewa Valley
Niles	Kalamazoo ISD	Meridian
Willow Run	Union City	Saginaw

Letters were written to superintendents of these school districts requesting permission to include them as part of the present study. Of the 18 school districts that were funded and piloted by the state of Michigan, permission was granted by superintendents, directors, or other school personnel representing 11 school districts. These districts were:

Cheboygan	Willow Run	Chippewa Valley
Flint	Dearborn	Meridian
Lansing	Birmingham	Benton Harbor
Niles	Chelsea	

They comprised the population for the present study.

Research Questions

The purposes of the study were listed in Chapter I. The statement of the purposes was used to generate the following research questions:

1. What are the general characteristics of 11 of the 18 pilot programs reported in Michigan by the Department of Education and funded by the State Aid Acts of 1973 through 1977?
2. What are the attitudes of parents, teachers, and students toward gifted and talented programs in which they participated?
3. What is the relationship between educational background, socioeconomic status, and attitudes of parents toward programs for gifted and talented students?
4. What is the relationship between the teachers' years of experience and their reported attitudes toward programs for gifted and talented students?

The procedures developed for determining the attitudes of the participants in this study were as follows:

1. A list of questions concerning gifted and talented programs for directors was developed.
2. A questionnaire to submit to parents, teachers, and students in 11 school districts was devised.
3. A list of schools that participated in the Michigan Pilot Program from the State Department of Michigan was obtained.
4. The superintendents of the involved school districts were contacted requesting permission to include the district in the study and requesting the name of a contact person in the district.

5. A line of communication with the proper contact person in each school district for the purpose of scheduling times for administering the questionnaires was established.

6. A list of questions concerning the gifted program was mailed to contact persons.

7. Questionnaires were mailed to contact persons in some districts, while others were mailed to parents and teachers. Other questionnaires were administered by the investigator.

8. Responses to questions were received from contact persons in the form of tapes, personal interviews, and written documentation.

9. Questionnaires were received from parents, teachers, and students.

10. Additional information relative to the 11 participating schools was obtained from "Information on Michigan's Pilot Programs for the Gifted and Talented, 1978," provided by the Michigan Department of Education.

11. A system of treating obtained data was devised, as shown in the section on Treatment of the Data.

Questionnaires

Because no attitude scale could be identified that could be directly employed or readily adapted for this study, questionnaires were developed for the purpose of gathering the attitudes of students who were currently participating in or who had participated in the gifted programs, their parents, and teachers toward the programs for gifted and talented students.

The questions used in the questionnaires were adopted from Musgrove and Estroff (1977), Batesman (1943), Silance and Remmers (1934), and the Michigan Department of Education (1978). The primary sources from which the majority of the statements in the questionnaires were adopted were attitude scales previously developed by Musgrove and Estroff (Gifted Attitude Scale) and the Michigan Department of Education (Michigan Department of Education's Instrument for Determining the Attitudes of Students Involved in Michigan's Section 47 Projects Toward the Projects and the Instrument for Determining the Attitudes Toward the Pilot Projects of Parents Whose Children Are Involved in the Section 47 Projects).

As a result of the administration of Musgrove and Estroff's Gifted Attitude Scale, a Kuder-Richardson reliability coefficient (α) of .91 was obtained. Mehrens (1973) stated that "attitude scales, by and large, have reliabilities around .75. This is much less than those obtained for cognitive measures, and hence the results obtained from attitude scales should be primarily for group guidance and discussion." Consequently, the Musgrove and Estroff questionnaire should be viewed as reliable as perceived by Mehrens.

Statements from the three scales were examined to obtain their frequency of occurrence. Those statements that occurred most frequently on the three scales were revised and adopted for use in this study.

The reliability of the questionnaires developed for this study was determined from the administration of the questionnaire to the population of this study and is discussed in Chapter IV.

A Likert-type summative five-choice format was developed, which was based on the work of Oppenheim (1966), Lemon (1973), and Fishbein and Ajzen (1975). These choices ranged from 1 = strongly agree, 2 = agree, 3 = undecided, 4 = disagree, to 5 = strongly disagree. Likert's primary concern was with unidimensionality--that is, making sure that all items in each cluster would measure the same thing.

According to Oppenheim, there are a few disadvantages of a Likert scale; it was pointed out, however, that the advantages outweigh the disadvantages. The reliability of the scale tends to be good because of the greater range of answers permitted to respondents. A reliability coefficient of .85 is often achieved. Apart from their relative ease of construction, these scales have two other advantages; first, they provide more precise information about the respondent's degree of agreement or disagreement, and respondents usually prefer this to a simple agree/disagree score. Second, it becomes possible to include items whose manifest content is not obviously related to the attitude in question, so that the subtler and deeper ramification of an attitude can be explored (Oppenheim, 1966).

Lemon (1973) supported a summative scale by emphasizing the implications of its significance in assessing the opinion statements a person is willing to endorse. The significance of summative scaling is that it assumes that attitudes can be assessed by counting the number of pro- or anti-opinion statements a person is willing to endorse rather than trying to identify the statement that is ideal for the person as a statement of his opinion.

Population

The population for this study included the parents, teachers, and the gifted and talented students who participated in the pilot programs for gifted and talented students in Michigan from the following school districts.

Benton Harbor is a port, industrial, and commercial city in southwestern Michigan, in Berrien County, 187 miles west of Detroit. The population of 16,481 residents depends on the industrial activities, research, engineering, and the production of automobiles. It is composed of a school population of approximately 10,349 students.

Birmingham, a city in southeastern Michigan, is in Oakland County, 15 miles north of Detroit. The city, with a population of 26,170, is largely residential but has some manufacturers. The school population is approximately 12,354.

Cheboygan, a port city in northern Michigan, the seat of Cheboygan County, is 150 miles north of Bay City. The city, with a population of 5,553, is a dairying, mixed farming, resort, and industrial area. Cheboygan has a school population of approximately 2,911 students.

Chelsea, an industrial village of approximately 4,000 persons, in Washtenaw County, is located some 20 miles west of Ann Arbor. It has a school population of approximately 2,647 students.

Chippewa Valley is a Macomb County urban-fringe district, northeast of Detroit and immediately west of Mt. Clemens. It is currently undergoing a rather rapid population growth as the

metropolitan area expands. There is a school population of approximately 5,700 students.

Dearborn, a city in southeastern Michigan in Wayne County, is 10 miles west of the center of Detroit. Residents of the city are employed in industries in administrative, research, and manufacturing capacities. It has a population of 104,199. The student population is approximately 17,075.

Flint, a city in southern Michigan, the seat of Genessee County, is 58 miles northwest of Detroit. It is one of the world's leading centers for the manufacture of automobiles. The city has a population of approximately 193,317. The student population is approximately 40,255. Flint has a community-school plan financed in the city by the Mott Foundation through a grant to the board of education. Each city school is kept open at night and during the summer for community activities.

Lansing, the capital of Michigan, is situated in Ingham County, in the south-central part of the Lower Peninsula. It is about 80 miles northwest of Detroit. The majority of the city's industries are devoted to automobiles. Lansing has a population of 131,546; approximately 31,505 of this population are students.

Meridian is a rural, large lake area with a school population of 2,200 students. Most residents are employed in Midland for the Dow Chemical Company or Dow-Corning Corporation.

Niles, a city in Berrien County, is in the southwest section of Michigan, 48 miles southwest of Kalamazoo and 10 miles north of South Bend, Indiana. It has a population of approximately 30,000

residents. Most residents are middle-class white- or blue-collar workers. Numerous businesses and industries are located in the community, giving Niles an urban, business-centered atmosphere.

Willow Run serves approximately 4,200 students, kindergarten through twelfth grade. It is located in southern Michigan on Interstate 94, approximately 35 miles west of Detroit and 7 miles east of Ann Arbor. From the air there is no apparent delineation between the Willow Run Community School District and the City of Ypsilanti.

These districts were assigned letter designations for identification purposes in the study.

The sample consisted of 943 respondents. Initially, 1,030 questionnaires were mailed or delivered and 943 were returned. Of this number, 508 were students, 283 females and 225 males, whose grade levels ranged from first to ninth grade. Three hundred three were parents of gifted and talented students, and 132 were teachers. All 943 respondents' questionnaires were included in the tabulation.

There was a strong attempt to obtain responses from as many students, parents, and teachers as possible. In the case of students, a good representation was obtained. The results were less successful with parents, and with the teachers there was even less success. The reason for the reduced success ratio in the parents and teachers may have been related to the fact that the student questionnaire was administered directly by the teachers or director of the program, whereas the parents' and teachers' questionnaires were mailed and thus more flexibility existed in their responses.

Seven of the 18 districts contacted did not agree to participate in the study for the following reasons:

District L--There was no response to any of the communications requesting permission to include them in the study.

District M--The gifted and talented program was involved at the time with two evaluation studies: one by the State Department of Education and one by the school district. It was indicated that this study would involve gathering data from the same population included in the other two studies.

District N--The contact person indicated that the program was no longer in operation.

District O--The contact person in this district stated that the project was no longer state funded, and because of many commitments at the time, they could not participate in the study.

District P--This district declined to be involved because of the data-gathering techniques, which would necessitate their identifying specific students and revealing their addresses.

District Q--Initially, permission was granted by the superintendent to include the school district in the study, but no response was received to the request for the name of a contact person.

District R--No response was received from this district after several requests.

The districts that did not participate in the study can be described as follows:

District L, a district in southwestern Michigan, has a student population of approximately 3,000. Auto parts and insulation materials are manufactured in the city.

District M is located in a city in western Michigan. It is an industrial and marketing center. The city has a population of approximately 200,000, of which approximately 36,000 are students.

District N, a district located in a suburb of Detroit that encompasses 2.9 miles, has a population of approximately 30,000. This school district has approximately 7,000 students. The city has a large number of students from low-income families.

District O includes five counties in southern Michigan. The gifted and talented program is consultive in nature.

District P is located in southeastern Michigan, west of Detroit. The city has a population of approximately 115,000. The school population is composed of approximately 22,000 students.

District Q is an intermediate school district, which serves 13 school districts and parochial schools; serving 58,000 students, including those of rural, suburban, and inner-city backgrounds. The program is consultive in nature.

District R, a district located in southern Michigan, has a student population of approximately 1,400 students. It is in an agriculture and dairying area.

Procedures for Data Gathering

The data used in this study were collected from four sources: the parents of participants, the teachers of participants, the gifted

and talented students, and the directors of the programs. Table 1 summarizes the procedures used to collect data.

Treatment of Data

Data reported by district contact persons were tabulated and analyzed. The data collected from the parent, teacher, and student questionnaires were analyzed by doing a frequency distribution of the responses on all items and determining the mean response of the group for the purpose of describing and comparing the attitudes of the sampled population. Scale scores were calculated and scale means and variances were analyzed in order to characterize the attitudes of the sample and to determine the variability of responses.

Cronbach's alpha reliability analysis was performed on the items in each scale to determine the degree to which items in a category measured the same underlying attitude.

The statistical technique, multivariate analysis of variance (MANOVA), was performed between parent, teacher, and student questionnaires to determine if the three groups differed in their responses on three common attitude categories.

Finally, cross-tabulations of the category items on the questionnaire with the educational and income levels of the responding parents were made. Further cross-tabulations were performed on the teachers' experience and category items. Chi-square tests were performed on each cross-tabulation to determine if category responses were independent of the demographic variables.

Table 1.--Summary of procedures for data gathering.

District	Parents	Teachers	Students	Director
A	Questionnaires mailed to parents.	Questionnaires mailed to director.	Questionnaires mailed to director; director administered questionnaire.	Questions mailed to director. No response. Data received via telephone.
B	Questionnaires mailed to director. Returned by parents through U.S. mail.	Questionnaires mailed to director. Returned through U.S. mail by teachers.	Questionnaires mailed to director. Director administered questionnaire.	Questions mailed to director. No response. (Telephone number was unavailable.)
C	Questionnaires mailed to principal. Returned by parents through U.S. mail.	Questionnaires mailed to principal. Returned through U.S. mail by teachers.	Questionnaires mailed to principal. Teachers administered questionnaire.	Questions mailed to principal. A mimeographed description of program was received.
D	Questionnaires mailed to director. Returned by parents through U.S. mail.	Questionnaires mailed to director. Returned through U.S. mail by teachers.	Questionnaires mailed to director. Director administered questionnaire.	Questions mailed to director. Returned completed.
E	Questionnaires mailed to parents. Returned by parents through U.S. mail.	Questionnaires mailed to director. Returned through U.S. mail by teachers.	Questionnaires mailed to director. Director administered questionnaire.	Questions mailed to director. Returned completed. Received additional document.

Table 1.--Continued.

District	Parents	Teachers	Students	Director
F	Questionnaires mailed to parents. Returned by parents through U.S. mail.	Questionnaires mailed to director. Returned through U.S. mail by teachers.	Questionnaires mailed to director. Director administered questionnaire.	Questions mailed to director. Two descriptive documents were received.
G	Questionnaires mailed to principal. Returned by parents through U.S. mail.	Questionnaires mailed to principal. Returned through U.S. mail by teachers.	Questionnaires mailed to principal. Returned by principal.	Questions mailed to principal. No response. Data received via telephone.
H	Questionnaires mailed to parents. Returned by parents through U.S. mail.	Questionnaires mailed to teachers. Returned through U.S. mail by teachers.	Questionnaires mailed to parents. Returned by parents through U.S. mail.	Questions were answered via telephone.
I	Questionnaires mailed to director. Returned by parents through U.S. mail.	Questionnaires mailed to director. Returned through U.S. mail by teachers.	Questionnaires mailed to director. Director administered questionnaire.	Questions mailed to director. Returned completed.

Table 1.--Continued.

District	Parents	Teachers	Students	Director
J	Questionnaires mailed to director. Returned by parents through U.S. mail.	Questionnaires mailed to director. Returned through U.S. mail by teachers.	Questionnaires mailed to director. Director administered questionnaire.	Questions mailed to director. A tape-recording was returned.
K	Questionnaires delivered to teachers by surveyor. Returned by parents through U.S. mail.	Questionnaires delivered to teachers by surveyor. Returned through U.S. mail by teachers.	Questionnaires delivered by surveyor. Surveyor administered questionnaire.	Questions mailed to director. Data gathered via telephone.

Space was provided on the parent and teacher questionnaires to make unstructured reactions to the gifted and talented program. These responses are presented unedited.

CHAPTER IV

ANALYSIS OF DATA

Research Question 1: What are the general characteristics of 11 of the 18 pilot programs reported in Michigan by the Department of Education and funded by the State Aid Acts of 1973 through 1977?

Program Prototype

The following data pertain to the general characteristics of the 11 responding districts' programs. These data were obtained as a result of questions directed to the designated contact person in each district surveyed.

Of the 11 districts that responded, districts designated A, B, C, D, E, F, G, H, J, and K had pull-out or partial pull-out enrichment programs. These programs were those in which identified students were taken out of the normal day's schedule and given classes particularly designed to meet their needs. In districts A, C, D, H, and J, the students were transported from their schools to another site for enrichment classes. The enrichment class in district K was operated in each of the six elementary schools in the district. Of the districts that had pull-out enrichment programs, districts F and B operated programs in the senior high school. District F had an alternative language arts program, and district B had a personalized education plan based on students' special interests, abilities, and educational

goals. In this program, volunteer mentors (counselors or teachers) were used. Districts A and E operated programs in the junior high school.

District C operated two self-contained traditional-type classrooms to which students were transported within the district from four elementary schools. In this district, siblings were permitted to attend the same school so brothers and sisters could be housed together.

In district F, the enrichment program was in operation in all grade levels, 1-12. This program was facilitated by a "catalyst teacher." District F used the term "catalyst teachers" to refer to members of its staff who had classroom responsibilities and acted as a liaison between the local staff and central office. In the elementary buildings the catalyst teacher was released from other assignments one-half day on alternate weeks to perform his/her responsibilities, while secondary catalyst teachers and counselors had one hour per school day for this function.

In district I, the academic component was comprised of student participation in a predominantly self-contained classroom environment. The program included both the artistically and musically talented, as well as academically gifted students. The artistically talented and musically talented program employed an after-school and weekend format.

District K reported that it operated the enrichment program in each elementary school and in one junior high school. A "Discovery Center" was located in each elementary building, where the students

participated in "directed studies class." The overall responsibility for the center was assigned to a regular staff member appointed by the building principal. A full-time paraprofessional was employed to operate each center. The paraprofessional acted as liaison with the classroom teacher and kept necessary records, including student progress on instructional objectives.

Finally, district G reported that it operated an enrichment program in three schools; however, the information obtained concerning this program was very limited because the program had been discontinued.

Identification Procedures

The procedures used for identifying students for the gifted and talented programs were generally somewhat similar across districts. All districts reported that they used parents', students', and teachers' recommendations to some extent. The scores from achievement tests were used to identify students in ten districts. District F used the results of two or more group intelligence tests in combination with achievement test scores. In this district, highly creative and talented students who demonstrated exceptional ability in their individual areas of interest, in the judgment of professional personnel, were considered for the program. In a somewhat different approach, district H reported that at least 10 percent of the students with SAT scores at local norms and who combined low socioeconomic factors with a capacity to do independent work and interest in extracurricular activities, depending on teacher and principal judgment, were taken into consideration in selecting participants.

In district E, the selection process involved the nomination of participants by parents, teachers, the student, and the peer group, and the final selection was made by a majority vote of a committee composed of the director of special education, the assistant superintendent of instruction, a citizen selected from the middle-school advisory committee or by the board of education, a middle-school principal, and a middle-school teacher.

District H indicated that after students had been nominated by parents, teachers, and peers, the final selection was made by the quadrant principal, the home-school principal, and the program coordinator by drawing from a pool of eligible students. District H used the term "quadrant principal" to refer to the director of each of the four components into which the school district was divided for elementary education.

District J reported that it used the Balwin Identification Matrix and the Renzulli Checklist to select students for participation. The Balwin Identification Matrix consists of the results of eight tests: (1) Standardized Intelligence Tests, (2) Achievement Test Composite Score, (3) Achievement Test--Reading Score, (4) Achievement Test--Math Score, (5) Learning Scale Score, (6) Motivational Scale Score, (7) Creativity Scale Score, and (8) Leadership Scale Score and Various Teacher Recommendations. The Renzulli Checklist is a method for rating behavioral characteristics of superior students, consisting of ten scales: (1) Learning Characteristics, (b) Motivational Characteristics, (3) Creativity Characteristics, (4) Leadership Characteristics, (5) Artistic Characteristics, (6) Musical Characteristics,

(7) Dramatics Characteristics, (8) Communication Characteristics--Precision, (9) Communication Characteristics--Expressiveness, and (10) Planning Characteristics.

The procedures that appeared to be common among the districts surveyed for identifying and selecting students for the gifted and talented programs are shown in Table 2.

Goals for Students

The goals set for students tended to vary among the reporting districts. According to the Michigan Department of Education (1978), early in the 1976-77 program year, the directors of the 12 projects and some of their staff members attempted to identify a set of program objectives that would apply to all of the pilot programs and, indeed, could be considered appropriate objectives for almost any program for the gifted and talented. A set of seven objectives was agreed upon. They are:

1. Eighty percent of the students involved in the Michigan pilot projects for the gifted and talented will indicate positive attitudes toward the projects, as measured by an attitudinal survey prepared by the state program coordinator and administered toward the close of the school year.
2. Eighty percent of the parents of students involved in the pilot projects for the gifted and talented will indicate positive attitudes toward the projects, as measured by an attitudinal survey prepared by the state program coordinator and administered toward the close of the school year.
3. Eighty percent of a random sampling of the students involved in the pilot programs will attain a satisfactory score on an "Excellence Scale," when the students' products are individually rated by a group of three judges.
4. Eighty percent of a random sampling of the students involved in the pilot programs will attain a satisfactory score on a scale designed to ascertain students' ability to gather and

Table 2.--Procedures for identifying and selecting students that were common among surveyed districts.

District	Procedures						
	Achievement Test	Intelligence Test	Former School Performance	Reading Level	Parent Recommendation	Teacher Recommendation	Student Recommendation
A	X	X	X	X	X	X	
B							
C	X	X			X	X	
D	X	X			X	X	
E	X	X	X	X	X	X	X
F	X	X	X	X	X	X	X
G	X	X		X	X	X	X
H	X	X	X	X	X	X	X
I	X	X		X		X	
J	X	X				X	
K	X	X			X	X	X

report data, when a student product is rated on the scale by the student's project director or teacher.

5. Eighty percent of a random sampling of the students involved in the pilot programs will attain a satisfactory score on a Process/Product "Creativity Scale," when the student projects are individually rated by a group of three judges.
6. Eighty percent of the students involved in the pilot programs will indicate a favorable reaction to teaching strategies designed to encourage creativity, as measured by an instrument prepared for this purpose.
7. One hundred percent of the pilot project directors in the Section 47 Program will submit at the end of the program year a record of the contacts made to them as a result of their involvement in the state effort.

Because these programs were diverse in nature, each program had its own goals and objectives and was located at a variety of grade levels. While it might be expected that the ultimate goals of the programs for gifted students would be similar, a noticeable lack of common terminology used in describing the goals set for students was revealed.

Districts A, H, I, and J stated the students' overall goals to be completing projects and group dynamics. Students were expected to develop skills to expand educational, social, and cultural learning through components that included group learning, group thinking, value clarification, independent projects, persuasion skills, and logical and creative thinking.

The goals established for students in districts C, D, and K were to do research and to pursue projects.

In district E, the goals for students were to develop initiative and ability to plan personal programs, to provide opportunities for students to work in small groups with others of similar ability,

to provide students with an individualized challenging program, to improve attitudes of gifted students, and to develop decision-making skills.

District F reported that its students were to make extensive use of the media resources, do exploratory activities, do in-depth studies, and make use of creative pursuits and challenging experiences through personalized programs.

Similarities in the goals established for students in the sample districts are shown in Table 3.

Teacher Qualification

School districts A, C, F, G, and K indicated that no special qualifications were required for teachers of the gifted in their gifted and talented programs.

District E required that the teacher of the gifted express a desire to teach gifted students, possess successful teaching experience, and also have experience in teaching gifted or advanced students.

Districts J and D required that teachers take some courses in gifted education.

District H required the teacher of the gifted and talented program to have a master's degree, experience, and creative ability.

The only requirements for teachers in district I were that they be intelligent and interested in gifted education.

The above findings seem to indicate that extensive qualifications were not required of teachers of the gifted. According to Gowan

Table 3.--Similar goals established for students in the sample districts.

Goals	Districts										
	A	B ^a	C	D	E	F	G ^a	H	I	J	K
1. Increase opportunities for academic growth	X		X	X	X	X		X	X	X	X
2. Improve extensive development of academic skills	X		X	X	X	X		X	X	X	X
3. Improve work and study habits	X		X	X	X			X	X	X	X
4. Expand interests			X			X		X		X	X
5. Increase opportunity for individual rate of growth	X		X	X	X	X		X	X	X	X
6. Improve personal, social and emotional development	X		X		X	X		X		X	X
7. Improve production through improved intellectual climate	X		X	X	X	X		X	X	X	X
8. Improve educational motivation	X				X	X		X		X	X
9. Enhance appreciation of the creative process	X		X			X		X	X	X	

Note: Of the goals that were established for students and reported by each district, this table shows those goals that were common among the districts.

^aDistricts B and G did not respond.

and Torrance (1971), despite a vast amount of research, too little is still known about the qualifications and characteristics of effective teachers in general, let alone those of the gifted. However, among those districts that required special qualifications of teachers for the gifted, these qualifications involved five factors. These were: (1) some preparation in gifted education, (2) experience, (3) intellectual background, (4) desire to work with the gifted, and (5) creativity.

Provisions Made for Inservice for Staff and Parents

Provisions were made for inservice programs for staff and parents in order to formulate plans for the pilot programs in most districts surveyed.

Districts D, E, F, G, and K provided inservice time for classroom teachers and parents. Regular meetings were held for teachers, and planning and review sessions were held with parents. Some staff inservice was conducted during regular staff meetings. District D used consultants from a nearby university. District J reported that inservice was provided for teachers by means of consultants. This was later discontinued due to shortage of funds.

In district H, no formal inservice was held; however, they did have a parent advisory committee.

Teachers in district A were trained to use the Memphis Clue format and later individual conferences with parents. Memphis Clue format includes group dynamics, discussion groups, creative thinking, persuasion skills, logical thinking, values clarification, independent

projects, and mini-courses. Each of the components incorporates many of the skills associated with reading, listening, writing, and speaking.

District I provided inservice by holding regular meetings for teachers and later sessions were held for teachers and parents.

Districts B and C did not report any form of inservice for staff and parents.

From these responses, it can be seen that most districts involved parents and teachers in the initial planning of the gifted and talented programs. All districts except two indicated that parents, teachers, and administrators were initially involved in the general scheme of the program through workshops or inservice meetings. In most districts, advisory committees were formed to offer advice on the implementation and development of the programs.

Program Evaluation

During the first three years of the existing programs, evaluation was performed by personnel from the State Department of Education. Thereafter, evaluations by local staff members were conducted, and the results were presented to the districts' boards of education or the districts' administration and used to make modifications in program structure and goals (Michigan Department of Education, 1978).

Selection of Directors

In the districts surveyed, much variation occurred in individuals assigned to the role of supervisor. Indeed, some of the districts reported they did not have directors. In district A, the

special education director was in charge of the gifted and talented program. In district I, a principal wrote the program and became the director after the program was funded.

In district F, the director of elementary and secondary education, assisted by a resource teacher, coordinated the program.

Districts J, E, and K indicated the directors were chosen by the director of elementary education or by the head of the curriculum department.

The assistant superintendent appointed the director in district G.

A teacher was nearing retirement in district H and expressed an interest in gifted students and was chosen to work with these students. After the teacher's retirement, the present director was chosen.

In district C, a staff member expressed interest in gifted education and was chosen as the director.

Districts D and B did not indicate the way in which their directors had been chosen.

Most districts reported that their director had been chosen by the central administration in the pilot programs.

Percentage of Director's Time Designated Toward
the Gifted and Talented Program

Four districts--G, H, J, and K--reported that the directors spent one-half time as director of the gifted and talented program. In district H, the director spent one-half time as director and one-half time as teacher of the gifted students.

In district A, no particular percentage of time was allotted to the directorship of the program. The person in charge was also the special education director.

In district E, the director spent two-thirds time as teacher of gifted students and one-third time as consultant for the gifted program.

In district I, the respondent indicated he was an elementary principal as well as being in charge of the gifted and talented program, which was an unpaid extra assignment.

District C reported that the principal was the director of the gifted and talented program.

In districts E and D, 100 percent of the director's time was spent with the gifted and talented program.

District B did not indicate the percentage of time the director spent with the program.

There did not appear to be any commonality among the school districts surveyed as to the percentage of the director's time designated toward the gifted and talented program. This seemed to be related to the organizational structure of the school district.

Model of Curriculum

Four districts--F, H, I, and J--used the Renzulli Enrichment Triad Model of curriculum, which includes sections entitled "General Exploratory Activities," "Group Training Activities," and "Individual and Small Group Investigations of Problems." The latter two are considered to be appropriate for all learners; however, they are also

important in the overall enrichment of gifted and talented students for at least two reasons. They claim to deal with strategies for expanding student interests and developing the thinking and feeling processes, and for this reason they are viewed as necessary ingredients in any enrichment program. These two types of enrichment represent logical input and support systems for Type III Enrichment, which is considered to be the only type that is mainly appropriate for gifted students. Type III Enrichment, entitled "Individual and Small Group Investigations of Real Problems," is the major focus of the model and is intended to imply that approximately one-half of the time that gifted students spend in enrichment activities should be devoted to these types of experiences (Renzulli, 1977).

The Memphis Clue format was used by district A. The Memphis curriculum includes using a variety of components that expand educational, social, and cultural learning. The model components include group dynamics, discussion groups, creative thinking, persuasion skill, logical thinking, values clarification, independent projects, and mini-courses. Each of the components incorporates many of the skills associated with reading, listening, writing, and speaking (State of Michigan, 1978).

Four districts--D, E, G, and K--reported they used no particular model of curriculum.

Districts B and C did not indicate the model of curriculum, if any, used in their gifted and talented program.

Duration of the Program

Of the 11 districts surveyed, three school districts--K, H, and C--reported their gifted and talented program had been in operation for five years. One of these districts, K, indicated its elementary program had been in operation for five years and the junior high school program had been in operation for four years.

In two districts, A and F, the program had been in operation for three years as funded. It operated on local funds for one year, during the 1978-79 school year.

Four districts--I, D, E, and B--had operated gifted and talented programs for two years as of 1979. One of these districts, E, said its middle-school program had been operating since 1977-78 in grades 6-8.

District G reported the program had been terminated after one year because of the lack of funds.

How the Programs Were Funded

The programs in all districts surveyed were funded under the State Aid Act, Section 47, for the first three years. Seven of the districts' programs were funded locally, as of the 1979-80 school year. District B reported it was funded the first year partially by the state, and the remainder of the budget was divided among the five participating districts in the consortium. The consortium provided the community and staff of the participating districts with the support and expertise necessary for the development, implementation, and maintenance of individual gifted and talented programs.

District E's elementary gifted and talented program was funded locally, whereas the middle-school program was largely funded by Section 47.

Population of Student Participants

The response by school district of the size of the population served is shown in Table 4.

Table 4.--Population of student participants.

District	Elementary	Secondary	Grades	Percent	Total
A	180	125	2-6 7-8		305
B	--	--	--	--	--
C	50		3-6		50
D	50		K-5		50
E	75	60	1-5 6-8		135
F	80	60	1-5 6-8		140
G			4-12		190
H ^a	160		1-6		160
I			4-6	10	
J			2-3		
K			K-12	5-10	

^aThis district serves 160 students per semester.

Table 4 shows the number of students served, according to the responding districts. As indicated in the table, some schools indicated the number of students served according to elementary/secondary levels and grades, whereas others indicated the grades of students served, and still other districts indicated the percentage of the school's population and the grades served. One district did not disclose the number of students served.

Modifications Made in Programs

Many of the districts involved in the study reported that their program had been modified since inception. District I indicated after two years of operating the gifted and talented program, the district's personnel were pleased with the present operation and felt that few, if any, modifications were necessary.

District A reported that some modifications had been made in its program. It had discontinued the use of ability testing in identifying students for the program. Modifications had been made in the seventh- and eighth-grade honors program, an alternative language arts and reading program.

District D reported that no major modifications had been made. However, the program had been adjusted to fit the interest and abilities of the students. Attention had been given to the amount of time students were out of the regular classroom.

Modifications had been made in the curriculum in district H. The curriculum had been limited to include science, social studies, math, and art, interrelated with the learning-center approach.

Various changes had been in district C, which included a change in staff in the upper-elementary classroom. The directorship had changed from the curriculum director to the two teachers involved. The art, music, and physical education programs for gifted and talented students had been discontinued as a result of a millage defeat.

District E had made changes in the middle-school program by dropping the pull-out procedures in favor of tracking gifted and talented students into two subjects, math and science, at the sixth- and seventh-grade levels, and tracking eighth-grade gifted and talented students in four classes, math, science, social studies, and language arts, depending on individual needs. Plans had been made to add acceleration with enrichment because of increased time in the program.

Two districts, B and K, indicated the possibility of expanding the program to include the junior and senior high programs to all schools by 1981-82.

It was reported by district J that within a year it planned to use some of the formative data that had been gathered to alter the program.

Modifications that had been made among the districts involved in the study included:

1. Expansion to include more students in the program
2. Change in the curriculum
3. Devised methods of identification of participants in the program
4. Scheduling
5. Change in personnel
6. Use of facilities and community resources

Research Question 2: What are the reported attitudes of parents, teachers, and students toward gifted and talented programs in which they participated?

Questionnaire Responses

The following data pertain to the results of the questionnaires administered to parents, teachers, and students. These data are based on a total of 943 respondents from 11 school districts in the state of Michigan.

Two groups of data were obtained and analyzed from the three questionnaires. Data from the parent and teacher questionnaires were analyzed together because of the similarity in the design of the categories and the items. The gifted and talented were referred to as "my child" on the parent questionnaire and "the student" on the teacher questionnaire. Because of the limited number of categories and the design of the items on the student questionnaire, it was necessary to analyze these data separately.

In analyzing the responses, an effort was made to determine the level of parent, teacher, and student acceptance of the programs for gifted and talented students. This was accomplished by means of a frequency distribution of the responses on all items on each of the three questionnaires. The frequency distribution, percentage for each item, mean, and standard deviation are shown in Tables 5, 6, and 7. Comparisons are made between mean responses, without reference to individual responses.

Results of the Parent and Teacher Questionnaires

Category I: Response to Program Characteristics

This category comprised the attitudes parents and teachers held relative to the specific characteristics or qualifications of the gifted and talented program. Parents were more favorable to the specific characteristics of the gifted and talented program than were teachers, based on a comparison of mean scores for all items in the category (Tables 5 and 6).

My child (students) would benefit more from a program within the home building where students can move through the school years faster. Thirty-eight percent of the parents agreed that students would benefit more from an acceleration program within each building, whereas 37 percent disagreed and 24 percent were undecided (mean of 3.0; Table 5-1). In contrast to the parents' attitude toward the same item, 8 percent of the teachers as a group agreed while 73 percent disagreed, and 19 percent were undecided. As a group, teachers did not favor offering the gifted and talented program within each building, while parents as a group were undecided about this question.

The methods by which students are identified for participation in the program are according to some well-planned procedures. Parents responded favorably to the identification procedures used to choose participants in the program. Sixty-one percent of the responding parents agreed that the methods by which students were identified for participation in the program were according to some well-planned procedures, while 28 percent of the parents were undecided. Fifty percent

of the teachers agreed on the procedures, while 33 percent of the teachers rejected the item and 17 percent were undecided (mean of 2.8; Table 6-2).

The methods used to select students from those identified as qualified for this program are satisfactory. The methods used to select students after being identified for the program were supported by 65 percent of the parents; however, 23 percent were undecided, while 11 percent disagreed. Teachers as a group were relatively less supportive of the methods used to select identified students for the program. Only 45 percent of the teachers supported the item, 41 percent of this group rejected the item, and 11 percent were undecided (mean of 3.0; Table 6-3).

Approximately 90 percent of the school districts surveyed indicated some specific identification and selection procedures were used in choosing participants for the gifted and talented programs. According to the unstructured suggestions, teachers favored expansion of the program to include more students, inclusive of creative students and consideration of classroom teachers' choices of participants in the program.

Students should go to different teachers for different subject matter classes. Fifty-two percent of the parents agreed that more departmentalization was needed in the gifted and talented program, 24 percent were undecided, and 23 percent disagreed with departmentalization. Teachers were less supportive of the item; for example, 47 percent of the teachers indicated an uncertain attitude, while only 31 percent agreed with the item and 21 percent disagreed (mean of 2.8;

Table 6-4). The majority of the school districts' directors indicated some form of departmentalization was used in the gifted and talented program. Only one district revealed that a traditional-type classroom approach was used in the program.

The amount of time students spent in this program seems adequate. Fifty percent of the parents responded favorably to the amount of time students spent in the program. Fourteen percent were undecided, and 31 percent responded unfavorably to the statement (mean of 2.7; Table 5-5). Only 43 percent of the teachers indicated a positive response, whereas 22 percent were undecided and 35 percent disagreed with the item (mean of 2.9; Table 6-5).

Adequate use is made of the community resources (field trips and persons) in the program. Fifty percent of the parents agreed that adequate use was made of the community resources, 21 percent were undecided, and 28 percent disagreed with the amount of use made of community resources (mean of 2.7; Table 5-6). Forty-three percent of the teachers agreed with the statement, 37 percent were undecided, and 18 percent disagreed (mean of 2.8; Table 6-6). In the unstructured responses, parents as a group indicated that better use should be made of community resources. They favored more meaningful field trips and use of professionals in the community.

Category II: Overall Evaluation of the Program

The second category comprised the attitudes parents and teachers had concerning the overall evaluation of the gifted and talented program in their schools. Parents and teachers responded identically

to the category based on a comparison of mean scores for all items.

Gifted children should not remain in regular classes. Fifty-one percent of parent respondents were in favor of gifted and talented students not remaining in regular classes. There were 30 percent who were in disagreement, while 18 percent of the parents were undecided (mean of 2.7; Table 5-7). Only 44 percent of the teachers expressed support of the item, while 35 percent were in disagreement, 17 percent were undecided, and 4 percent did not respond to the item (mean of 3.1; Table 6-7). It was indicated in the teachers' unstructured responses that they were in favor of special classes for gifted and talented students with some modifications, such as coordination between classroom activities and gifted and talented program, expanded curricula, better communication between the classroom teacher and the gifted and talented program teacher.

This program has had a positive influence on my child's (student's) attitude toward school. Both groups agreed that the gifted and talented program had a positive influence on students' attitudes toward school. Eighty-two percent of the parents and 70 percent of the teachers endorsed this statement.

Special classes should be provided wherever possible for gifted students. Both parents and teachers endorsed the statement that special classes should be provided for gifted and talented students. Eighty-seven percent of the teachers and 94 percent of the parents supported special classes for these students.

I think this program is beneficial to the students involved in it. Parents of participants in the program strongly agreed that the program was beneficial to the students involved in it. Ninety-six percent of the parents responded favorably to the item, while 85 percent of the teachers indicated support of the item.

The program should be expanded to include more children. It was agreed upon by both groups that the gifted and talented program should be expanded to include more children. Sixty-one percent of the parents and 67 percent of the teachers agreed that the program should be expanded to include more children. Twenty-five percent of the parents were undecided, while 19 percent of the teachers were undecided about the item.

The program should not be eliminated. Both groups agreed that the program should not be eliminated for the benefit of the participants; however, the parents and teachers made suggestions for modifications. Ninety-five percent of the parents responded favorably to the item, while 89 percent of the teacher respondents were favorable.

Students could not do just as well without this program. Parents and teachers expressed agreement with the statement that students could not do just as well without the gifted and talented program as they did with it. Eighty-two percent of the parents agreed, while 74 percent of the teachers agreed with the item. Parents and teachers appeared to be in favor of gifted and talented students attending the program.

Category III: Student Endorsement

This category consisted of the attitudes parents and teachers had concerning the students' approval or support of the program. Parents and teachers responded in a similar manner on the items in this category based on a comparison of mean scores for all items.

My child (students) enjoys the program. Parents and teachers expressed agreement with the idea that students enjoy the program. Eighty-one percent of the teachers agreed, while 95 percent of the parents agreed with the statement.

My child (students) is willing to spend time studying for the classes in this program. According to the parents and teachers, the students who participated in the gifted and talented program were willing to spend time studying for the classes. It was indicated by both parents and teachers that students did not resent the amount of time they spent in studying for the classes in the gifted and talented program. Ninety percent of the parents expressed a positive attitude toward the item, while 70 percent of the teachers expressed a similar attitude. Twelve percent of the parents who provided unstructured responses suggested the amount of time spent in classes should be increased. Six percent of the teachers provided unstructured responses and offered similar suggestions.

My child (students) finds regular classes boring in comparison to the classes in the gifted and talented program. Fifty-seven percent of the teachers disagreed with the statement that students found regular classes boring in comparison to the classes in the gifted and talented program. Eleven percent of the respondents agreed with the

idea and 30 percent were undecided (mean of 3.6; Table 6-16). This mean denotes that teachers as a group disagreed with the item.

Forty-one percent of the parents agreed with the item, 39 percent disagreed, and 19 percent were undecided (mean of 2.9; Table 5-16).

Category IV: Student Outcomes

The student outcomes category comprised the attitudes parents and teachers had concerning the consequences or results of student participation. Parents were more favorable to the category than teachers, based on a comparison of mean scores for all items in the category (Tables 5 and 6).

The program is designed around the needs and concerns of each child. Fifty-five percent of the parent respondents were in favor of the organizational structure of the gifted and talented program in terms of meeting individual needs, 15 percent disagreed, and 29 percent were undecided (mean of 2.4; Table 5-17). This mean denotes that parents as a group agreed with the item. Fifty-eight percent of the teachers responded favorably to the item, 15 percent disagreed, and 21 percent were undecided (mean of 2.7; Table 6-17).

Parents offered the following suggestions for the design of the program in unstructured responses:

1. The content and assignments made in the gifted and talented programs should be more meaningful.
2. The program should be better organized, and there should be more preplanning for the program.
3. Gifted and talented program should be incorporated in each home school.
4. Provisions should be made for acceleration with special subjects.

5. The classes for the gifted and talented students should be smaller.
6. There should be some form of grading of students' effort.
7. Parents should be involved in the formulation of goals and objectives of the program.
8. There should be differentiated staffing in the gifted and talented program.
9. The number of teachers should be increased for the program.
10. Additional help (paraprofessional) should be provided for the gifted and talented program.
11. The amount of time spent in transporting students to centralized locations should be decreased.

Teachers offered the following similar suggestions in unstructured responses:

1. The gifted and talented program should be designed as part of the total curriculum.
2. A curriculum should be developed for the gifted and talented program.
3. Students should be involved in designing the course of study.
4. The gifted and talented program should consist of more departmentalization.
5. Provisions should be made for the gifted and talented program in each home school.
6. Teachers should be provided with a student's progress report.
7. Acceleration classes should be provided in each subject area.
8. Existing program should be coordinated with others within the county or state.
9. Student participation should be limited to one year in the program.

The program helps students to think independently. It was reported by 75 percent of the teachers that the program helped students to think independently; 88 percent of the parents expressed similar attitudes.

Students receive guidance in finding and developing ideas. Both parents and teachers showed favorable attitudes toward the quality of guidance students experienced in finding and developing ideas. The idea was supported by 86 percent of the parents and 77 percent of the teachers. It may be interesting to note that two of the State of Michigan's objectives for the pilot programs involved students attaining a satisfactory score on their products as well as the process. One of the similarities in the goals established for students by the specified school districts surveyed was to improve production through an improved intellectual climate.

Students learn to deal critically with ideas in the program. The attitudes of both parents and teachers were favorable in terms of how well students learned to deal critically with ideas in the gifted and talented program. Sixty-three percent of the parents endorsed the idea, while 32 percent were undecided. Sixty-two percent of the teachers endorsed the statement, while 30 percent were undecided.

The program helps students to become creative. The encouragement of creativity was listed as a goal of the State of Michigan's Pilot Program, as well as one of the similar goals reported by the majority of school districts surveyed. Eighty-six percent of the parents and 63 percent of the teachers responded favorably to the

effects of the gifted and talented program in encouraging student creativity.

The program helps to arouse students' intellectual interest.

Eighty percent of the parent respondents and 92 percent of the teacher respondents agreed that the program for gifted and talented students helped stimulate students' intellectual interests. To improve educational motivation was one of the goals generally listed by the majority of school districts surveyed.

The program helps students to desire to excel intellectually.

The attitude of parents and teachers was positive toward the effects of the program in helping students to desire to excel intellectually. Seventy-six percent of the parents and 65 percent of the teachers supported the idea.

Students who participate in this program are encouraged to develop hobbies. It was indicated by 65 percent of parent respondents that students who participated in the program for gifted and talented students were encouraged to develop hobbies, compared to 49 percent of the teachers who indicated a favorable attitude. Thirty-nine percent of the teachers were undecided on the item (mean of 2.6; Table 6-24).

Students who participate in this program have access to a variety of good books. Both groups responded favorably to the quantity of books the students had access to in the gifted and talented program. Sixty-three percent of the teachers supported the item, while 23 percent of them were undecided. Sixty-five percent of the parents supported the statement and 26 percent were undecided.

Students are missing the "basics" as a result of the program.

Eighty-two percent of the teachers and 89 percent of the parents indicated the students did not miss the "basics" as a result of the program. In the unstructured responses, parents suggested the curriculum be more diversified to include the cognitive and affective learning experiences. The teachers suggested better coordination between classroom activities and gifted and talented program.

The program helps students to have self-confidence.

Parents and teachers agreed that the gifted and talented program helped students to have self-confidence. Eighty-four percent of the parents supported the item and 10 percent were undecided. Seventy-four percent of the teachers supported the statement and 18 percent were undecided.

Children benefit socially by being placed in groups of similar

mental ability. Sixty-eight percent of the parent respondents expressed favorable attitudes toward the social benefits students experienced by being placed in groups of similar mental ability, while 20 percent were undecided. Fifty-six percent of the teachers responded favorably to the statement, while 25 percent were undecided (mean 2.6; Table 6-28).

The opportunity to associate with other gifted children helps

my child (students) adjust socially. Sixty percent of the parents responded favorably, while 27 percent indicated they were undecided relative to the social adjustments of students as a result of the association of gifted students with other gifted students. Fifty-three

percent of the teachers responded favorably to the item, while 29 percent indicated they were undecided (mean of 2.6; Table 6-29).

The opportunity to associate with older children and adults to find others with their interest is an enriching experience to my child (students). Eighty-three percent of responding parents agreed that the opportunity for gifted and talented students to associate with older children and adults to find others with similar interest was an enriching experience, while 85 percent of the teachers agreed with the item.

Category V: Instruction Methods and Teacher Competency

This scale was composed of the attitudes parents and teachers expressed concerning the skills, abilities, and methodologies of teachers of gifted and talented students. The expressed attitude of parents regarding this category was more favorable than the teachers', based on a comparison of mean scores for all items.

The teachers in the gifted program should have special qualifications. Eighty-nine percent of the responding parents agreed that teachers in gifted and talented programs should have special qualifications, whereas 79 percent of the responding teachers agreed with the statement. It was suggested by 11 percent of the teachers in the unstructured responses that only certified teachers should be used, and paraprofessionals should be used only to assist the teacher in the gifted and talented program. Two percent of the parents suggested in the unstructured responses that teachers in the gifted and talented program should have special qualifications.

The teaching methods used in the gifted program are satisfactory. Seventy-four percent of the parents expressed a favorable attitude toward the teaching methods used in the gifted program. The teachers were less favorable than parents toward the teaching methods used in the program. Only 57 percent of the teacher respondents indicated a positive response. Twenty-eight percent of the teachers indicated a degree of uncertainty (mean of 2.6; Table 6-32). The degree of uncertainty may be clarified in terms of the suggestions below, made by teachers and parents to improve the gifted and talented program in terms of instructional methods.

The teachers' suggestions were as follows:

1. More coordination between regular classroom activities and the gifted and talented program is needed.
2. A greater variety of activities should be offered to the participants in the program.
3. The number of required written reports in the program should be reduced.
4. The number of hobby-like activities should be limited in the gifted and talented program.
5. The liaison between classroom teachers and gifted and talented program teachers is needed in an attempt to meet the needs of the gifted and talented students in classroom situations.
6. More individualization for participants in the program is needed.
7. Projects required in the gifted and talented program should not be repetitious of the projects required in the regular classroom.

The parents' suggestions were as follows:

1. Provisions should be made for an increase in more challenging activities for students.

2. There should be provisions for more diversified activities in the gifted and talented program.
3. The content and assignments should be more relevant to students' needs in the program.
4. More competitive-type activities should be offered to participants in the program.
5. An improvement is needed in the learning environment in the classroom to include a more structured approach.
6. There should be a reduction in the number of required written reports.
7. There should be an increase in the amount of homework for participants in the program.
8. There should be provisions for more individualization of instruction.

Students receive adequate student-teacher contact in the program. Parents and teachers responded favorably to the adequacy of student-teacher contact in the gifted and talented program. Seventy-eight percent of the responding parents and 71 percent of the responding teachers expressed positive attitudes toward this item. In the unstructured responses, suggestions were made by 7 percent of the teachers to expand the amount of time students spend in the special classes, whereas 13 percent of the parents made similar suggestions--that the amount of time spent in classes should be increased.

The resistance of teachers and administrators has prevented effective programs for the gifted. Parents and teachers in general were uncertain about the resistance of teachers and administrators being a factor in preventing effective programs for the gifted. Only 26 percent of the parents agreed with the item, while 41 percent of the responding parents were undecided and 32 percent disagreed (mean

of 3.0; Table 5-34). Twenty-four percent of the teachers agreed with the item, while 30 percent were undecided and 43 percent disagreed (mean of 3.4; Table 6-34).

Category VI: Availability of
Information About the Program

This category comprised the attitudes parents and teachers expressed on the basis of their familiarity with the gifted and talented program. A similar pattern was exhibited by the parents and teachers in their responses to the items in this category based on the comparison of mean scores of all items.

I have been provided with enough information about the objectives of the program. A favorable response was indicated by 59 percent of the parents to the amount of information they had been provided relative to the objectives of the program. Twenty-seven percent of the parents disagreed with the statement and 13 percent were undecided (mean of 2.6; Table 5-35). There were only 42 percent of the teachers who responded favorably to the item, while 44 percent disagreed with the item and 14 percent were undecided (mean of 3.0; Table 6-35). Eight percent of the parents made unstructured suggestions for parents to be better informed of the gifted and talented program. Similar opinions were expressed by 15 percent of the teachers in the unstructured responses.

I have been kept well informed concerning my child's progress in the program. Similar opinions to this item were expressed by parents and teachers about having been kept well informed concerning students' progress in the gifted and talented program. Fifty-three

percent of the parent respondents indicated a favorable response, while 33 percent disagreed and 13 percent were undecided (mean of 2.7; Table 5-36). Thirty-eight percent of the teacher respondents indicated a favorable response, while 49 percent disagreed and 11 percent were undecided (mean of 3.2; Table 6-36). Five percent of the teachers indicated in the unstructured responses that they would like to be provided with some form of progress report, whereas 6 percent of the parents made similar suggestions.

I am acquainted with the program. Eighty-seven percent of the responding parents indicated they were acquainted with the gifted and talented program in their school district, while 77 percent of the responding teachers agreed with the item.

I would like to become more acquainted with the program. Seventy-six percent of the parents and 82 percent of the teachers expressed a desire to become more acquainted with the program. According to the unstructured suggestions and comments from responding teachers, the need to become more acquainted with the program was related to the goals, objectives, and ongoing activities in the program. Parents were less specific than teachers about desiring to become more acquainted with the program in their unstructured comments and suggestions.

Results of the Student Questionnaire Responses

The results of the student questionnaire responses are presented separately from those of the parents and teachers because the limited number of categories and the design of the items on the

Table 5.--Frequency distributions, percentages, means, and standard deviations--parent questionnaire.

Questions	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response		Total No.	Total %	χ ²	σ
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
<u>CATEGORY I: RESPONSES TO SPECIFIC PROGRAM CHARACTERISTICS</u>																
1. My child would benefit more from a program within the home building where students can move through the school years faster.	22	7.3	93	30.7	74	24.4	62	20.5	51	16.8	1	.3	303	100	3.0	1.21
2. The methods by which students are identified for participation in the program are according to some well-planned procedures.	40	13.2	146	48.2	85	28.1	24	7.9	8	2.6	--	--	303	100	2.3	.906
3. The methods used to select identified students for this program are satisfactory.	27	8.9	172	56.8	71	23.4	28	9.2	4	1.3	1	.3	303	100	2.3	.824
4. Students should go to different teachers for different subject matter classes.	43	14.2	115	38.0	74	24.4	62	20.5	8	2.6	1	.3	303	100	2.5	1.04
5. The amount of time students spend in this program seems adequate.	14	4.6	154	50.8	41	13.5	71	23.4	22	7.3	1	.3	303	100	2.7	1.08
6. Adequate use is made of the community resources in the program.	29	9.6	124	40.9	63	20.8	63	20.8	23	7.6	1	.3	303	100	2.7	1.12
<u>CATEGORY II: OVERALL EVALUATION OF THE PROGRAM</u>																
7. Gifted children should not remain in regular classes.	53	17.5	102	33.7	55	18.2	66	21.8	27	8.9	--	--	303	100	2.7	1.23
8. This program has had a positive influence on my child's attitude toward school.	128	42.2	121	39.9	36	11.9	18	5.9	--	--	--	--	303	100	1.8	.864
9. Special classes should be provided wherever possible for gifted students.	189	62.4	96	31.7	11	3.6	7	2.3	--	--	--	--	303	100	1.4	.679
10. I think this program is beneficial to the students involved in it.	167	55.1	123	40.6	9	3.0	4	1.3	--	--	--	--	303	100	1.5	.624
11. The program should be expanded to include more children.	77	25.4	107	35.3	75	24.8	39	12.9	4	1.3	1	.3	303	100	2.2	1.02
12. The program should not be eliminated.	241	79.5	48	15.8	8	2.6	4	1.3	1	.3	1	.3	303	100	1.2	.607
13. Students could not do just as well without this program.	139	45.9	108	35.6	39	12.9	12	4.0	3	1.0	2	.7	303	100	1.7	.891
<u>CATEGORY III: STUDENT ENDORSEMENT</u>																
14. My child enjoys the program.	181	59.7	108	35.6	3	1.0	9	3.0	1	.3	1	.3	303	100	1.4	.700

Table 5.--Continued.

Question	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response		Total No.	Total T	χ^2	σ
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
15. My child is willing to spend time studying for the classes in this program.	103	34.0	169	55.8	20	6.6	9	3.0	1	.3	1	.3	303	100	1.7	.718
16. My child finds regular classes boring in comparison to the classes in this program.	51	16.8	68	22.4	58	19.1	101	33.3	22	7.3	3	1.0	303	100	2.9	1.23
<u>CATEGORY IV: STUDENT OUTCOME</u>																
17. The program is designed around the needs and concerns of each child.	40	13.2	128	42.2	88	29.0	41	13.5	4	1.3	2	.7	303	100	2.4	.933
18. The program helps students to think independently.	85	28.1	181	59.7	31	10.2	6	2.0	--	--	--	--	303	100	1.8	.667
19. Students receive guidance in finding and developing ideas.	77	25.4	182	60.1	32	10.6	9	3.0	2	.7	1	.3	303	100	1.9	.733
20. Students learn to deal critically with ideas in the program.	42	13.9	150	49.5	98	32.3	8	2.6	2	.7	3	1.0	303	100	2.2	.753
21. The program helps students to become creative.	92	30.4	168	55.4	30	9.9	10	3.3	2	.7	1	.3	303	100	1.8	.764
22. The program helps to arouse students' intellectual interest.	105	34.7	176	58.1	13	4.3	5	1.7	2	.7	2	.7	303	100	1.7	.675
23. The program helps students to desire to excel intellectually.	79	26.1	151	49.8	59	19.5	10	3.3	3	1.0	1	.3	303	100	2.0	.825
24. Students who participate in this program are encouraged to develop hobbies.	53	17.5	145	47.9	74	24.4	27	8.9	2	.7	2	.7	303	100	2.2	.878
25. Students who participate in this program have access to a variety of good books.	61	20.1	136	44.9	79	26.1	23	7.6	3	1.0	1	.3	303	100	2.2	.895
26. Students are missing the "basics" as a result of the program.	2	.7	14	4.6	17	5.6	149	49.2	119	39.3	2	.7	303	100	4.2	.805
27. The program helps students to have self-confidence.	89	29.4	165	54.5	31	10.2	15	5.0	2	.7	1	.3	303	100	1.9	.808
28. Children benefit socially by being placed in groups of similar mental ability.	61	20.1	145	47.9	63	20.8	26	8.6	5	1.7	3	1.0	303	100	2.2	.927

Table 5.--Continued.

Question	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response		Total No.	Total %	χ^2	σ
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
29. The opportunity to associate with other gifted children helps my child adjust socially.	57	18.8	125	41.3	83	27.4	31	10.2	6	2.0	1	.3	303	100	2.3	.966
30. The opportunity to associate with older children and adults to find others with their interest is an enriching experience.	85	28.1	166	54.8	42	13.9	8	2.6	--	--	2	.7	303	100	1.9	.722
<u>CATEGORY V: INSTRUCTION METHODS AND TEACHER COMPETENCY</u>																
31. The teachers in gifted programs should have special qualifications.	120	39.6	149	49.2	27	8.9	7	2.3	--	--	--	--	303	100	1.7	.715
32. The teaching methods used in the gifted program are satisfactory.	53	17.5	170	56.1	60	19.8	60	5.3	1	.3	3	1.0	303	100	2.1	.776
33. Students receive adequate student-teacher contact in the program.	60	19.8	175	57.8	52	17.2	10	3.3	4	1.3	2	.7	303	100	2.0	.788
34. The resistance of teachers and administrators has prevented effective programs for the gifted.	27	8.9	53	17.5	124	40.9	74	24.4	23	7.6	--	--	303	100	3.0	1.04
<u>CATEGORY VI: AVAILABILITY OF INFORMATION ABOUT THE PROGRAM</u>																
35. I have been provided with enough information about the program.	37	12.2	143	47.2	40	13.2	65	21.5	18	5.9	--	--	303	100	2.6	1.12
36. I have been kept well informed concerning my child's progress in the program.	43	14.2	117	38.6	41	13.5	74	24.4	27	8.9	1	.3	303	100	2.7	1.22
37. I am acquainted with the program.	38	12.5	211	69.6	27	8.9	23	7.6	4	1.3	--	--	303	100	2.1	.784
38. I would like to become more acquainted with the program.	82	27.1	147	48.5	42	13.9	24	7.9	6	2.0	2	.7	303	100	2.0	.952

Table 6.--Frequency distributions, percentages, means, and standard deviations--teacher questionnaire.

Question	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response		Total No.	Total %	x ²	σ
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
<u>CATEGORY I: RESPONSES TO SPECIFIC PROGRAM CHARACTERISTICS</u>																
1. Students would benefit more from an acceleration program within each building.	3	2.3	8	6.1	25	18.9	43	32.6	53	40.2	--	--	132	100	4.0	1.02
2. The methods by which students are identified for participation are according to some well-planned procedures.	15	11.4	50	37.9	23	17.4	33	25.0	11	8.3	--	--	132	100	2.8	1.18
3. The methods used to select identified students for this program are satisfactory.	9	6.8	49	37.1	20	15.2	39	29.5	15	11.4	--	--	132	100	3.0	1.18
4. More departmentalization is needed in the program.	11	8.3	31	23.5	62	47.0	22	16.7	5	3.8	1	.8	132	100	2.8	1.07
5. The amount of time students spend in this program seems adequate.	6	4.5	51	38.6	29	22.0	33	25.0	13	9.8	--	--	132	100	2.9	1.10
6. Adequate use is made of the community resources in the program.	8	6.1	49	37.1	49	37.1	15	11.4	9	6.7	2	1.5	132	100	2.8	1.23
<u>CATEGORY II: OVERALL EVALUATION OF THE PROGRAM</u>																
7. Gifted children should not remain in regular classes.	23	17.4	35	26.5	23	17.4	26	19.6	20	15.2	5	3.8	132	100	3.1	1.77
8. This program has had a positive influence on the students' attitude toward school.	33	25.0	59	44.7	25	18.9	9	6.8	4	3.0	2	1.5	132	100	2.2	1.29
9. Special classes should be provided wherever possible for gifted students.	58	43.9	57	43.2	7	5.3	7	5.3	2	1.5	1	.8	132	100	1.8	1.09
10. I think this program is beneficial to the students involved in it.	54	40.9	58	43.9	11	8.3	6	4.5	3	2.3	--	--	132	100	1.8	.926
11. The program should be expanded to include more children.	46	34.8	42	31.8	26	19.7	15	11.4	2	1.5	1	.8	132	100	2.1	1.22
12. The program should not be eliminated.	87	65.9	31	23.5	9	6.8	3	2.3	1	.8	1	.8	132	100	1.5	1.02
13. Students could not do just as well without this program.	55	41.7	42	31.8	21	15.9	12	9.1	1	.8	1	.8	132	100	2.0	1.17

Table 6.--Continued.

Question	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response		Total No.	Total %	x ²	σ
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
<u>CATEGORY III: STUDENT ENDORSEMENT</u>																
14. Students enjoy the program.	48	36.4	59	44.7	16	12.1	6	4.5	2	1.5	1	.8	132	100	1.9	1.08
15. Students are willing to spend time studying for the classes in this program.	28	21.2	64	48.5	25	18.9	10	7.6	3	2.3	2	1.5	132	100	2.3	1.25
16. Students find their regular classes boring in comparison to their classes in this program.	3	2.3	12	9.1	39	29.5	58	43.9	17	12.9	3	2.5	132	100	2.7	1.59
<u>CATEGORY IV: STUDENT OUTCOMES</u>																
17. The program is designed around the needs and concerns of each child.	16	12.1	61	46.2	28	21.2	17	12.9	5	2.8	5	3.8	132	100	2.7	1.59
18. The program helps students to think independently.	29	22.0	70	53.3	23	17.4	3	2.3	2	1.5	5	3.8	132	100	2.3	1.54
19. Students receive guidance in finding and developing ideas.	31	23.5	70	53.0	22	16.7	3	2.3	2	1.5	4	3.0	132	100	2.2	1.44
20. Students learn to deal critically with ideas in the program.	26	19.7	56	42.4	39	29.5	4	3.0	2	1.5	5	3.8	132	100	2.4	1.55
21. The program helps students to become creative.	26	19.7	57	43.2	37	28.0	5	3.8	2	1.5	5	3.8	132	100	2.4	1.55
22. The program helps to arouse students' intellectual interests.	36	27.3	70	53.0	16	12.1	5	3.8	1	.8	4	3.0	132	100	2.1	1.44
23. The program helps students to desire to excel intellectually.	26	19.7	60	45.5	33	25.0	6	4.5	2	1.5	5	3.8	132	100	2.4	1.56
24. Students who participate in this program are encouraged to develop hobbies.	21	15.9	44	33.3	52	39.4	8	6.2	2	1.5	5	3.8	132	100	2.6	1.53
25. Students who participate in this program have access to a variety of good books.	25	18.9	58	43.9	31	23.5	12	9.1	2	1.5	4	3.0	132	100	2.4	1.48
26. Students are missing the "basics" as a result of the program.	4	3.0	6	4.5	12	9.1	68	51.5	40	30.3	2	1.5	132	100	4.1	1.10
27. The program helps students to have self-confidence.	29	22.0	69	52.3	25	18.9	3	2.3	2	1.5	4	3.0	132	100	2.2	1.43

Table 6.--Continued.

Question	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response		Total No.	Total %	χ^2	d
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
28. Children benefit socially by being placed in groups of similar mental ability.	19	14.4	55	41.7	33	25.0	17	12.9	4	3.0	4	3.0	132	100	2.6	1.49
29. The opportunity to associate with other gifted children helps the students adjust socially.	17	12.9	54	40.9	38	28.8	24	10.6	5	3.8	4	3.0	132	100	2.6	1.48
30. The opportunity to associate with older children and adults to find others with their interest is an enriching experience.	33	25.0	79	59.8	15	11.4	2	1.5	1	.8	2	1.5	132	100	2.0	1.11
<u>CATEGORY V: INSTRUCTION METHODS AND TEACHER COMPETENCY</u>																
31. The teachers in the gifted program should have special qualifications.	49	37.1	55	41.7	19	14.4	7	5.3	2	1.5	--	--	132	100	1.9	.93
32. The teaching methods used in the enrichment program are satisfactory.	13	9.8	63	47.7	38	28.8	9	6.8	6	4.5	3	2.3	132	100	2.6	1.34
33. Students receive adequate student-teacher contact in the program.	24	18.2	70	53.3	26	19.7	9	6.8	2	1.5	1	.8	132	100	2.2	1.05
34. The resistance of teachers and administrators has prevented effective programs for the gifted.	8	6.1	23	17.4	40	30.3	40	30.3	17	12.9	4	3.0	132	100	3.4	1.46
<u>CATEGORY VI: AVAILABILITY OF INFORMATION ABOUT THE PROGRAM</u>																
35. I have been provided with enough information about the objectives of the program.	13	9.8	42	31.8	19	14.4	35	26.5	23	17.4	--	--	132	100	3.0	1.29
36. I have been kept well informed concerning my student's progress in the program.	11	8.3	39	29.5	15	11.4	45	34.1	20	15.2	2	1.5	132	100	3.2	1.46
37. I am acquainted with the program.	17	12.9	85	64.4	5	3.8	18	13.6	6	4.5	1	.8	132	100	2.3	1.16
38. I would like to become more acquainted with the program.	48	36.4	60	45.5	16	12.1	6	4.5	1	.8	1	.8	132	100	1.9	1.05

questionnaire made it inappropriate to present them with the parents' and teachers' responses.

Category I: Student Outcomes

The student outcomes category comprised the attitudes students held concerning the consequences or results of their participation in the gifted and talented program.

The program helps me to excel intellectually. Eighty-seven percent of the responding students indicated that the program helped them to excel intellectually, while 11 percent were undecided. Seventy-six percent of the parents and 66 percent of the teachers endorsed the item. Parents and teachers were less supportive of the item.

I get more out of this class than the classes at my regular school. Sixty-five percent of the students indicated that they got more out of the class for gifted and talented students than the classes at their regular school, while 22 percent of the students were undecided. The teachers responded less favorably to this item when compared with the students and parents. Fifty-seven percent of the teachers disagreed with the item, 11 percent endorsed the item, and 30 percent were undecided. Thirty-nine percent of the parents supported the item, 47 percent disagreed, and 19 percent were undecided.

I make good use of my talent in this class. According to 81 percent of the student respondents, good use was made of their talent in the gifted and talented program. Sixteen percent of the students were undecided about the item.

What I learn in this class should be very helpful in my regular school work. Seventy-nine percent of the student respondents expressed a favorable attitude toward the effects of what they learned in the gifted and talented program as being helpful in their regular school work. Twelve percent of the respondents were undecided.

The program helps me to think without help from others. According to 73 percent of the responding students, the program helped them to think independently, while 19 percent of the students were undecided. In comparing the results of this item with the responses from parents and teachers, parents were more favorable than were the teachers and students. Eighty-eight percent of the parents agreed with the item, and 75 percent of the teachers were in agreement.

My own ideas are better accepted by the special program teacher than by my regular classroom teacher. In general, students tended to express favorable attitudes toward the gifted and talented program, but only 54 percent of them agreed that the special program teacher accepted their ideas more readily than did their regular classroom teacher. Thirty percent of the students were undecided.

The program helps me to learn to give reasons for agreeing or disagreeing with ideas. In comparing the students' attitude toward the program helping them to think critically with the attitudes of parents and teachers, an overall favorable response was indicated. However, the students responded less favorably than the parents and teachers. Only 54 percent of the students agreed with this item in comparison to 63 percent of the responding parents and 62 percent of the teachers. Thirty-six percent of the students indicated they were undecided.

The program helps me to become creative. Eighty-six percent of the students and parents agreed that the program helped students to become creative. Teachers were less favorable; only 63 percent of them were in agreement with this item.

The program helps to make my schoolwork interesting. Students responded less favorably to this item than did parents and teachers. Seventy-nine percent of the students responded favorably to the idea, whereas 80 percent of the parents and 92 percent of the teachers indicated a favorable response. This goal is common to both the State of Michigan's Pilot Program and those schools surveyed.

The program encourages me to develop hobbies. It was indicated by 73 percent of the student respondents that the gifted and talented program encouraged them to develop hobbies, while 16 percent were undecided and 10 percent disagreed. When compared with the parent and teacher respondents, the students were more favorable to this item than were the parents and teachers. Sixty-five percent of the parents and 49 percent of the teachers responded in favor of the item.

I have the same neighborhood friends now that I had before entering the program. Participating in the gifted and talented program did not appear to measurably affect the participants' neighborhood friendships since 80 percent of the students agreed or strongly agreed with this statement while 11 percent were undecided and 9 percent disagreed.

Being in this program has caused me problems with other students at my regular school. Participants in the gifted and talented program reported that their participation in the program did not

cause any significant problems with other students at school. More specifically, 79 percent of the students disagreed that participating in the program caused them problems with other students at school.

The students in this program were more fun to be with than my regular school classmates. Students did not show a definite trend toward responding to this item. Thirty-four percent of the students agreed with the item, 33 percent were undecided, and 33 percent disagreed with the idea (mean of 2.9; Table 7-13).

Category II: Instruction Methods and Teacher Competency

This scale was composed of the attitudes students expressed concerning the skills, abilities, and methodologies of teachers of gifted and talented students.

I like the way the teacher in this program teaches. A positive attitude was indicated by the students to the way the teacher in the program taught. Eighty-nine percent of the students responded positively to the item.

The class is very interesting. According to 88 percent of the student respondents, the classes for gifted and talented students were very interesting. Nine percent were undecided and 3 percent disagreed with the item.

The class was not as interesting as I thought it would be. Fourteen percent of the students indicated the class was not as interesting as they anticipated it would be, 11 percent were undecided, and 74 percent disagreed with the item.

Category III: Overall Evaluation
of the Program

This category comprised the attitudes students had concerning the overall evaluation of the gifted and talented program in their school.

I would gain more from a program like this in my own building. Only 19 percent of the students agreed that they would gain more from a gifted and talented program in their own building. Fifty-six percent of the students were undecided, 23 percent disagreed, and 2 percent did not respond to the item (mean of 3.1; Table 7-17). Four of the school districts surveyed indicated that students attended classes in the gifted and talented program in their own building. Students in these school districts tended to respond undecidedly to the item on the questionnaire.

The class lasts too long. Eighty-one percent of the students responded negatively to the length of the class. Six percent of the respondents agreed that the class lasted too long and 10 percent were undecided.

The program is not worth my time and effort. Three percent of the responding students agreed that the program was not worth the time and effort, while 88 percent disagreed and 7 percent were undecided.

I think the program is great. Eighty-six percent of the respondents indicated they thought the program was great, while 9 percent were undecided and 5 percent disagreed.

The program is boring. According to 90 percent of the respondents, the program was not boring; only 4 percent of the students responded positively to the idea and 7 percent were undecided.

I am pleased with the amount of time I spend in this program. Sixty-six percent of the students suggested they were pleased with the amount of time they spent in the gifted and talented program, while 14 percent were undecided and 20 percent disagreed.

I have benefited from this program. Attitudes concerning the gifted and talented program being beneficial to the students appeared favorable, as 87 percent of the students felt they had benefited from the program, 10 percent were undecided, and 2 percent disagreed. When compared to the teacher and parent responses, the students responded more favorably to the item than did 85 percent of the teachers and less favorably to the item than 96 percent of the parents.

Special classes should be provided for gifted children. Eighty-four percent of the students were in favor of special classes being provided for gifted and talented students, 11 percent were undecided, and 5 percent disagreed. Ninety-four percent of the parents and 93 percent of the teachers endorsed the idea. Students were less supportive of the item.

The program should be discontinued. Ninety-four percent of the students responded unfavorably to the item of discontinuing the program. Only 2 percent of the students favored the idea, and 4 percent were undecided. Ninety-five percent of the parents and 89 percent of the teachers were in favor of continuing the program.

I would like to see more students included in the program.

Only 58 percent of the students indicated they would like to see more students included in the gifted and talented program. Twenty-five percent of the students were undecided about the item. Sixty percent of the parents and 66 percent of the teachers indicated a positive response to the item. Teachers indicated a more favorable attitude toward the item than parents or students.

I attend the class because my parents encourage me to do so.

Sixty-eight percent of the student respondents stated they did not attend the class because of parental encouragement, whereas 18 percent indicated they attended the class because their parents encouraged them to do so. Thirteen percent of the respondents were undecided.

Category IV: Student Endorsement

This scale consisted of the attitudes students had concerning their approval or support of the program. According to the mean score of each item based on the nearest whole number, the students agreed on three of three (100 percent) items. Students responded more favorably to this category than did the parents or teachers.

I am willing to spend time studying for the class. Seventy-nine percent of the student respondents indicated a positive attitude toward the amount of time they spent studying for the class. Fifteen percent of the respondents were undecided. When compared to 90 percent of the parents and 70 percent of the teachers who expressed a favorable attitude toward the item, the students indicated a less favorable attitude than parents and a more favorable attitude than teachers.

I enjoy the program. Ninety-four percent of the students indicated they enjoyed the program, while only 4 percent were undecided.

If I were chosen to be in the class again, I would attend. According to 90 percent of the respondents, they would attend the class again if they were chosen.

In summary, the expressed attitudes of students toward the gifted and talented program were generally favorable. According to the results of the questionnaire, the majority of the students indicated they enjoyed participating in the program and benefited intellectually from the experiences. As expressed by the students, they did not indicate that their participation in the program had any significant social effect on them.

Reliability Analysis of Categories

The reliability of the three questionnaires--parent, teacher, and student--was determined using the results gained from administering the questionnaire to the participants in this study. This section reports the results of that work.

Cronbach's alpha test of reliability was performed on three categories (student outcome category, the overall evaluation category, and the endorsement category) that appeared on all three questionnaires (parent, teacher, and student). Each of these categories consisted of items that were alike (Cronbach, 1949).

Alpha values were determined that indicate the degree of reliability based on the value of 1; that is, the closer the alpha value is to 1, the more reliable the data are.

Table 7.--Frequency distributions, percentages, means, and standard deviations--student questionnaire.

Question	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response		Total No.	Total %	χ ²	σ
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
CATEGORY 1: STUDENT OUTCOMES																
1. The program helps me to excel intellectually.	205	40.3	236	46.4	58	11.4	8	1.6	1	.2	--	--	508	100	1.7	.732
2. I get more out of this class than the classes at my regular school.	166	32.6	167	32.8	115	22.6	49	9.6	11	2.2	--	--	508	100	2.1	1.05
3. I make good use of my talent in this class.	186	36.5	227	44.6	79	15.5	14	2.8	2	.2	--	--	508	100	1.8	.805
4. What I learn in this class should be very helpful in my regular school work.	205	40.3	199	39.1	63	12.4	39	7.7	2	.4	--	--	508	100	1.8	.927
5. The program helps me to think without help from others.	150	29.5	221	43.4	99	19.4	33	6.5	5	1.0	--	--	508	100	2.0	.915
6. My own ideas are better accepted by the special program teacher than by my regular classroom teacher.	128	25.1	146	28.7	157	30.8	49	9.6	28	5.5	--	--	508	100	2.4	1.12
7. The program helps me to give reasons for disapproving ideas.	83	16.3	191	37.5	181	35.6	47	9.2	6	1.2	--	--	508	100	2.4	.909
8. The program helps me to become creative.	253	49.7	183	36.0	57	11.2	15	2.9	--	--	--	--	508	100	1.6	.789
9. The program helps to arouse my intellectual interest.	186	36.5	217	42.6	84	16.5	17	3.3	4	.8	--	--	508	100	1.8	.852
10. The program encourages me to develop hobbies.	167	32.8	206	40.5	81	15.9	47	9.2	7	1.4	--	--	508	100	2.0	.990
11. I enjoy the same neighborhood friendship I did before entering the program.	213	41.8	193	37.9	54	10.6	29	5.7	19	3.7	--	--	508	100	1.9	1.04
12. Being in this program has caused me problems with other students at school.	20	3.9	45	8.8	43	8.4	124	24.4	276	54.2	--	--	508	100	4.1	1.14
13. The students in this program were more fun to be with than my regular school classmates.	95	18.7	78	15.3	168	33.0	96	18.9	71	13.9	--	--	508	100	2.9	1.28
CATEGORY II: INSTRUCTIONAL METHODS AND TEACHER COMPETENCY																
14. I like the way the teacher in this program teaches.	280	55.0	174	34.2	32	6.3	13	2.6	8	1.6	1	.2	508	100	1.6	.903
15. The class is very interesting.	263	51.7	185	36.3	44	8.6	9	1.8	6	1.2	1	.2	508	100	1.6	.871
16. The class was not as interesting as I thought it would be.	22	4.3	52	10.2	55	10.8	147	28.9	231	45.4	1	.2	508	100	4.0	1.18

Table 7.--Continued.

Question	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response		Total No.	Total %	χ ²	σ
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%				
<u>CATEGORY III: OVERALL EVALUATION OF THE PROGRAM</u>																
17. I would gain more from an enrichment program in my own building.	51	10.0	45	8.8	287	56.4	79	15.5	36	7.1	10	2.0	508	100	3.1	1.27
18. The class lasts too long.	10	2.0	20	3.9	53	10.4	150	29.5	263	51.7	12	2.4	508	100	4.3	1.18
19. The program is not worth the time and effort required.	7	1.4	7	1.4	36	7.1	124	24.4	322	63.3	12	2.4	508	100	4.6	1.05
20. I think the program is great.	317	62.3	120	23.6	47	9.2	18	3.5	6	1.2	--	--	508	100	1.5	.886
21. The class is boring.	7	1.4	12	2.4	33	6.5	116	22.8	340	66.8	--	--	508	100	4.5	.830
22. I am pleased with the amount of time I spend in this program.	152	29.9	185	36.3	71	13.9	58	11.4	42	8.3	--	--	508	100	2.3	1.24
23. I have benefited from this program.	250	49.1	193	37.9	53	10.4	9	1.8	3	.6	--	--	508	100	1.6	.781
24. Special classes should be provided for gifted children.	263	51.7	164	32.2	54	10.6	16	3.1	11	2.2	--	--	508	100	1.7	.931
25. The program should be discontinued.	8	1.6	4	.8	18	3.5	89	17.5	389	76.4	--	--	508	100	4.6	.728
26. I would like to see more students included in the program.	142	27.9	151	29.7	127	25.0	62	12.2	26	5.1	--	--	508	100	2.3	1.16
27. I attend the class because my parents encourage me to do so.	34	6.7	58	11.4	68	13.4	144	28.3	204	40.1	--	--	508	100	3.8	1.25
<u>CATEGORY IV: STUDENT ENDORSEMENT</u>																
28. I am willing to spend time studying for the class.	176	34.6	226	44.4	75	14.7	22	4.3	9	1.8	--	--	508	100	1.9	.908
29. I enjoy the program.	335	65.8	144	28.3	19	3.7	7	1.4	3	.6	--	--	508	100	1.4	.688
30. If I were chosen to be in the class again, I would attend.	365	71.7	94	18.5	29	5.7	11	2.2	9	1.8	--	--	508	100	1.4	.839

The purpose of the test of reliability was to determine how consistent the items were within the category and to obtain an estimate of the amount of random error.

The results of the reliability analysis of the three categories that consisted of similar items on the three questionnaires are shown in Table 8. This table shows the degree to which items in a category measured the same underlying attitude. In the student outcome category there were five items that were similar on the three questionnaires that showed an alpha .73597. The overall evaluation category consisted of five items that were similar on the three questionnaires that showed an alpha .55527, whereas the endorsement category consisted of two similar items on all questionnaires with an alpha value of .64365. The alpha values indicated a reasonable degree of consistency in the items.

A more in-depth assessment of the reliability of all categories on each questionnaire was performed to determine whether the reliability coefficient was acceptable in the reliability indices for the parent, teacher, and student questionnaires in all categories. These results are reported in Table 9. Where no alpha values are shown on the table, this indicates the category was not included on that particular questionnaire.

Table 8 shows the similarities of items as they appeared in different categories on the three questionnaires administered to students, parents, and teachers in the target population.

The alpha values, which were based on the Cronbach alpha test of reliability, indicated that the items in these three categories

Table 8.--Item similarities on the student, parent, and teacher questionnaires administered in the 11 school districts in the sample population.

Student Questionnaire	Parent Questionnaire	Teacher Questionnaire	Total No. of Similar Items	Alpha Values
Student Outcome Category Item numbers 1,5,8,9,10	Student Outcome Category Item numbers 23,18,21,22,24	Student Outcome Category Item numbers 23,18,21,22,24	Student Outcome Category 5	.73597
Overall Evalua- tion Category Item numbers 22,23,24,25,26	Overall Evalua- tion Category Item numbers 5,10,9,12,11	Overall Evalua- tion Category Item numbers 5,10,9,12,11	Overall Evalua- tion Category 5	.55527
Student Endorse- ment Category Item numbers 28, 29	Student Endorse- ment Category Item numbers 14,15	Student Endorse- ment Category Item numbers 14,15	Student Endorse- ment Category 2	.64365

measured the same areas. They were an estimate of how much of what was represented by a score was due to measuring the same phenomenon, rather than random error. The student outcome category (alpha value .73597) had .26 estimate error. The overall evaluation category (alpha value .55527) had .44 estimate error. The student endorsement category (alpha value .64365) had .35 estimate error in the measurement.

The closer the alpha value was to 1, the lesser the estimated error; and the closer the value was to 0, the greater the estimated error. The alpha values shown in Table 8 indicate the items in the three categories approached Mehrens' average for attitude scales of .75.

Parent Reliability Indices

The reliability of categorical items for the parent, teacher, and student questionnaires is shown in Table 9. The response to specific program characteristics category (items 1-6) for the parents had an alpha value of .52433. In the overall evaluation category (items 7-13), the alpha value was .70096. The student endorsement category (items 14-16) had an alpha value of .58652. The alpha value of the student outcome category (items 17-30) was .88807, while the instructional methods and teacher competency category (items 31-34) had an alpha value of .73513. In the availability of information category (items 35-38), the alpha value was .75859.

The indicated alpha values for the categorical items on the parent questionnaire approached or exceeded Mehrens' average for attitude scales of .75.

Table 9.--Reliability indices for the parent, teacher, and student questionnaires according to categories, based on Cronbach's alpha test of reliability.

Categories	Parent Alpha Value	Teacher Alpha Value	Student Alpha Value
Response to specific program characteristics	.52433	.61643	--
Overall evaluation	.70096	.81836	.63359
Student endorsement	.58652	.73472	.66500
Student outcomes	.88807	.97261	.64886
Instruction methods and teacher competency	.73513	.60350	.77311
Availability of infor- mation	.75859	.79324	--

Teacher Reliability Indices

The response to specific program characteristics category (items 1-6) for teachers had an alpha value of .61643. The overall evaluation category (items 7-13) showed an alpha value of .81836. In the student endorsement category (items 14-16), the alpha value was .73472. The student outcome category (items 17-30) had an alpha value of .97261. The instructional methods and teacher competency category (items 31-34) showed an alpha value of .60350, whereas the availability of information category (items 35-38) showed an alpha value of .79324.

The indicated alpha values for the categorical items on the teacher questionnaire approached or exceeded Mehrens' average for attitude scales of .75.

Student Reliability Indices

The student outcome category (items 1-13) showed an alpha value of .64886. In the instruction methods and teacher competency category (items 14-16), the alpha value was .77311. The overall evaluation category (items 17-27) showed an alpha value of .63359, whereas the student endorsement category (items 28-30) had an alpha value of .66500.

The indicated alpha values for the categorical items on the student questionnaire approached Mehrens' average for attitude scales of .75.

Table 9 shows the reliability indices for the parent, teacher, and student questionnaires according to categories based on Cronbach's alpha test of reliability.

Where no alpha values are shown in the table, it indicates these categories were not included on that particular questionnaire (student questionnaire: response to specific program characteristics and availability of information categories). The alpha values were an estimate of how much of what was represented by a score was due to measuring the same phenomenon, rather than random error. The alpha values obtained indicated an acceptable level of reliability for these categories.

Multivariate Analysis of Variance

The results of the multivariate analysis of variance are shown in Table 10. This technique was performed for the purpose of comparing the three groups of respondents (parents, teachers, and

students) over all three dependent variables (student outcome, overall evaluation, and student endorsement categories) which consisted of identical statements on the three questionnaires to determine if the three groups' responses to these statements were identical.

Table 10.--Result of multivariate analysis of variance between parent, teacher, and student questionnaires and their contrasting categories: step down tests.

Questionnaires	Contrasting Categories			MANOVA Test	
	Student Outcome	Overall Evaluation	Student Endorsement	F-Value	p
Teacher-parent	+	x	+	13.8633	.0001
Student-parent	+	+	x	6.6420	.0002
Teacher-student	+	+	+	22.1259	.0001

Results of the step down F's: + = The contrast was significant for that variable.

x = The contrast was not significant for that variable.

The F-test was used to compare the three groups over all three dependent variables and to determine which variable contributed to the outcome. The level of significance was .05. This test indicated that a comparison between the teachers and parents on all three variables did reveal differences. However, the difference shown by the overall evaluation of the program category was not significant, whereas a significant difference was shown when the student outcome and student endorsement categories were involved ($F = 13.8633$, $p = .0001$). A similar comparison involving the students and parents

in the student endorsement category did not reveal any significant difference. However, a significant difference was revealed as a result of the student outcome and overall evaluation categories ($F = 6.6420$, $p = .002$). Indeed, a significant difference was shown between the teachers and students on all three variables ($F = 22.1259$, $p = .0001$).

Research Question 3: What is the relationship between the parental educational background, socioeconomic status of parents, and reported attitudes toward programs for gifted and talented students?

Cross-Tabulation and Chi-Square of Parents' Education by Categorical Items

The following data pertain to the results of cross-tabulations of demographic variables with parent-reported attitudes toward programs for gifted and talented students. Cross-tabulations of the categorical items on the questionnaire with educational and income levels of the responding parents were made. Further cross-tabulations were performed on the teachers' experience and the categorical items. A cross-tabulation is a joint frequency distribution of cases according to two or more classificatory variables. Chi-square tests were performed on each cross-tabulation to determine if category responses were independent of these demographic variables. Chi-square is a test of statistical significance. It helps to determine whether a systematic relationship exists between two variables. The level of significance is .05 (Nie et al., 1975).

Cross-Tabulation and Chi-Square of
Parents' Education by Specific
Program Characteristics

The results of the cross-tabulation of the mothers' attained educational level and the specific recommendation category were shown to be unrelated according to the chi-square test of significance. The chi-square value of this cross-tabulation showed a significance level of $p = .4573$ (Table 11). The cross-tabulation of the fathers' attained educational level and the specific recommendation category suggested a lack of a relationship between these variables according to the chi-square test of significance ($p = .0827$, Table 12).

Cross-Tabulation and Chi-Square
of Parents' Education by Overall
Evaluation of Program

The overall evaluation category cross-tabulated with the mothers' educational level indicated a significant relationship between these two variables according to the chi-square test of significance ($p = .0041$, Table 13). In associating the fathers' education with the overall evaluation category, the chi-square test of significance ($p = .3244$, Table 14) indicated a lack of a relationship between the two variables.

Cross-Tabulation of Parents'
Education by Student Endorsement

The cross-tabulation between mothers' education and student endorsement category indicated that these two variables were unrelated according to the chi-square test of significance ($p = .5799$, Table 15). In associating the fathers' education with the student endorsement

Table 11.--Cross-tabulation of mothers' education by specific program characteristics.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	--	--	--	--	4	66.7	2	33.3	--	--	
9th-12th grade	2	1.7	30	24.8	66	54.5	23	19.0	--	--	
1-3 yrs. college	--	--	26	33.3	37	47.4	14	17.9	1	1.3	
College grad. & post-grad.	--	--	14	20.3	40	58.0	13	18.8	2	2.9	
No response											29

Chi-square = 11.85665 df = 12 Significance = .4573

Table 12.--Cross-tabulation of fathers' education by specific program characteristics.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	--	--	2	25.0	4	50.0	2	25.0	--	--	
9th-12th grade	2	1.9	37	35.2	45	42.9	21	20.0	--	--	
1-3 yrs. college	--	--	11	19.3	34	59.6	12	21.1	--	--	
College grad. & post-grad.	--	--	18	18.4	60	61.2	17	17.3	3	3.1	
No response											35

Chi-square = 19.24928 df = 12 Significance = .0827

Table 13.--Cross-tabulation of mothers' education by overall evaluation of the program.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	--	--	1	20.0	3	60.0	1	20.0	--	--	
9th-12th grade	3	2.5	84	69.4	33	27.3	1	.8	--	--	
1-3 yrs. college	1	1.3	57	74.0	18	23.4	1	1.3	--	--	
College grad. & post-grad.	6	8.7	41	59.4	21	30.4	1	1.4	--	--	
No response											31

Chi-square = 24.10383 df = 9 Significance = .0041

Table 14.--Cross-tabulation of fathers' education by overall evaluation of the program.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	--	--	6	75.0	2	25.0	--	--	--	--	
9th-12th grade	2	1.9	75	72.8	25	24.3	1	1.0	--	--	
1-3 yrs. college	--	--	40	69.0	17	29.3	1	1.7	--	--	
College grad. & post-grad.	7	7.2	57	58.8	31	32.0	2	2.1	--	--	
No response											37

Chi-square = 10.33033 df = 9 Significance = .3244

category according to chi-square ($p = .4691$, Table 16) indicated the lack of a relationship between these two variables.

Cross-Tabulation of Parents'
Education by Student Outcome

The chi-square test of significance used to show association by cross-tabulation of the mothers' education with the student outcome category revealed the lack of a relationship ($p = .4808$, Table 17). In assessing the cross-tabulation of the fathers' education with the student outcome category, a lack of relationship similar to that of the mothers' was observed ($p = .3927$, Table 18).

Cross-Tabulation of Parents'
Education by Instruction
Methods and Teacher Competency

A relationship between the mothers' education and the instruction methods and teacher competency category according to the cross-tabulation data did not exist as indicated by the chi-square test of significance ($p = .4143$, Table 19). In associating the fathers' education with the instruction methods and teacher competency category according to chi-square ($p = .0845$, Table 20) indicated the lack of a relationship between these two variables.

Cross-Tabulation of Parents'
Education by Availability of
Information About the Program

Cross-tabulations similar to the above made between the mothers' education and personal knowledge category indicated no relationship between these two variables according to the chi-square test of significance ($p = .1273$, Table 21). Finally, the cross-tabulation

Table 15.--Cross-tabulation of mothers' education by student endorsement.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	1	16.7	1	16.7	3	50.0	1	16.7	--	--	
9th-12th grade	13	10.8	59	49.2	43	35.8	4	3.3	1	.8	
1-3 yrs. college	7	9.0	34	43.6	35	44.9	1	1.3	1	1.3	
College grad. & post-grad.	8	11.8	32	47.1	25	36.8	1	1.5	2	2.9	
No response											31

Chi-square = 10.41199 df = 12 Significance = .5799

Table 16.--Cross-tabulation of fathers' education by student endorsement.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	1	12.5	3	37.5	4	50.0	--	--	--	--	
9th-12th grade	12	11.5	48	46.2	40	38.5	1	1.0	3	2.9	
1-3 yrs. college	3	5.3	33	57.9	20	35.1	1	1.8	--	--	
College grad. & post-grad.	13	13.3	39	39.8	40	40.8	5	5.1	1	1.0	
No response											36

Chi-square = 11.71186 df = 12 Significance = .4691

Table 17.--Cross-tabulation of mothers' education by student outcome.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	--	--	2	33.3	3	50.0	1	16.7	--	--	
9th-12th grade	2	1.7	51	43.2	61	51.7	4	3.4	--	--	
1-3 yrs. college	1	1.3	41	53.2	32	41.6	3	3.9	--	--	
College grad. & post-grad.	2	2.9	23	33.8	39	57.4	4	5.9	--	--	
No response											34

Chi-square = 8.53945 df = 9 Significance = .4808

Table 18.--Cross-tabulation of fathers' education by student outcome.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	--	--	3	37.5	5	62.5	--	--	--	--	
9th-12th grade	2	1.9	53	51.5	44	42.7	4	3.9	--	--	
1-3 yrs. college	--	--	18	32.7	35	63.6	2	3.6	--	--	
College grad. & post-grad.	3	3.1	41	41.8	48	49.0	6	6.2	--	--	
No response											39

Chi-square = 9.49689 df = 9 Significance = .3927

Table 19.--Cross-tabulation of mothers' education by instructional methods and teacher competency.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	1	16.7	2	33.3	3	50.0	--	--	--	--	
9th-12th grade	16	13.3	71	59.2	31	25.8	2	1.7	--	--	
1-3 yrs. college	8	10.3	43	55.1	23	29.5	4	5.1	--	--	
College grad. & post-grad.	13	18.8	36	52.2	14	20.3	5	7.2	1	1.4	
No response											40

Chi-square = 12.39799 df = 12 Significance = .4143

Table 20.--Cross-tabulation of fathers' education by instructional methods and teacher competency.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	1	12.5	3	37.5	4	50.0	--	--	--	--	
9th-12th grade	19	18.1	57	54.3	26	24.8	3	2.9	--	--	
1-3 yrs. college	1	1.8	35	61.4	20	35.1	1	1.8	--	--	
College grad. & post-grad.	17	17.3	53	54.1	20	20.4	7	7.1	1	1.0	
No response											35

Chi-square = 19.17221 df = 12 Significance = .0845

of the fathers' education with the availability of information about the program category indicated no relationship according to the chi-square test of significance ($p = .0557$, Table 22).

Cross-tabulations of the parents' education with various components of the questionnaire using the chi-square test of significance suggested no relationship existed between the fathers' education and the categorical items. The cross-tabulations of the mothers' education appeared to be significant with only the overall evaluation of the program category according to the chi-square test of significance. The remaining categories did not prove to be significant.

Cross-Tabulations Between Family Income and Categorical Items

Cross-Tabulations Between Family Income and Specific Program Characteristics

A significant relationship was shown between family income and specific program characteristics according to the chi-square test of significance ($p = .0000$, Table 23).

Cross-Tabulations Between Family Income and Overall Evaluation of the Program

The lack of a relationship between this variable and family income was demonstrated by the chi-square test of significance ($p = .4181$, Table 24).

Table 21.--Cross-tabulation of mothers' education by availability of information about the program.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	--	--	1	16.7	1	16.7	3	50.0	1	16.7	
9th-12th grade	4	3.3	43	35.2	39	32.0	29	23.8	7	5.7	
1-3 yrs. college	8	10.3	34	43.6	21	26.9	12	15.4	3	3.8	
College grad. & post-grad.	7	10.1	26	37.7	25	36.2	10	14.5	1	1.4	
No response											28

Chi-square = 17.63240 df = 12 Significance = .1273

Table 22.--Cross-tabulation of fathers' education by availability of information about the program.

Level Attained	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
8th grade	--	--	1	12.5	2	25.0	3	37.5	2	25.0	
9th-12th grade	8	7.6	43	41.0	31	29.5	19	18.1	4	3.8	
1-3 yrs. college	1	1.7	18	31.0	21	36.2	16	27.6	2	3.4	
College grad. & post-grad.	10	10.2	40	40.8	30	30.6	15	15.3	3	3.1	
No response											34

Chi-square = 20.65064 df = 12 Significance = .0557

Table 23.--Cross-tabulation of family's income by specific program characteristics.

Income	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
\$3,000 or less	1	100.0	--	--	--	--	--	--	--	--	
\$3,000- 7,000	--	--	4	33.3	7	58.3	1	8.3	--	--	
\$7,000-10,000	--	--	5	33.3	9	60.0	1	6.7	--	--	
\$10,000-15,000	1	3.1	6	18.8	19	59.4	6	18.8	--	--	
Over \$15,000	--	--	51	25.2	110	54.5	39	19.3	2	1.0	
No response											41

Chi-square = 138.01345 df = 16 Significance = .0000

Table 24.--Cross-tabulation of family's income by overall evaluation of the program.

Income	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
\$3,000 or less	--	--	--	--	1	100.0	--	--	--	--	
\$3,000- 7,000	--	--	9	81.8	2	18.2	--	--	--	--	
\$7,000-10,000	1	5.7	13	86.7	1	6.7	--	--	--	--	
\$10,000-15,000	1	3.2	25	80.6	5	16.1	--	--	--	--	
Over \$15,000	7	3.5	127	62.9	65	32.2	3	1.2	--	--	
No response											43

Chi-square = 12.34924 df = 12 Significance = .4181

Cross-Tabulations Between Family
Income and Student Endorsement

Similar to the above variable, a relationship was nonexistent according to the chi-square test of significance ($p = .9730$, Table 25).

Cross-Tabulations Between Family
Income and Student Outcome

Again the chi-square test of significance did not suggest a relationship between these variables ($p = .1240$, Table 26).

Cross-Tabulations Between Family
Income and Instructional Methods
and Teacher Competency

The cross-tabulation of family income with this variable did not exhibit a relationship according to the chi-square test of significance ($p = .9957$, Table 27).

Cross-Tabulations Between Family
Income and Availability of
Information About the Program

A significant relationship was shown between the family income and the availability of information about the program category, according to the chi-square test of significance ($p = .0274$, Table 28).

It appears that a relationship existed between the family's income and their attitude toward the specific characteristics and availability of information about the program categories, according to the chi-square test of significance. No apparent relationship was shown by this test to exist between the instructional methods and teacher competency, overall evaluation of the program, student endorsement, and student outcome categories with family income.

Table 25.--Cross-tabulation of family's income by student endorsement.

Income	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
\$3,000 or less	--	--	1	100.0	--	--	--	--	--	--	
\$3,000- 7,000	2	18.2	4	36.4	5	45.5	--	--	--	--	
\$7,000-10,000	1	6.7	9	60.0	5	33.3	--	--	--	--	
\$10,000-15,000	3	9.4	17	53.1	12	37.5	--	--	--	--	
Over \$15,000	21	10.4	86	42.8	84	41.8	6	3.0	4	2.0	
No response											43

Chi-square = 7.01366 df = 16 Significance = .9730

Table 26.--Cross-tabulation of family's income by student outcome.

Income	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
\$3,000 or less	--	--	1	100.0	--	--	--	--	--	--	
\$3,000- 7,000	--	--	5	50.0	5	50.0	--	--	--	--	
\$7,000-10,000	1	6.7	12	80.0	2	13.3	--	--	--	--	
\$10,000-15,000	--	--	15	50.0	15	50.0	--	--	--	--	
Over \$15,000	4	2.0	77	38.3	109	54.2	11	5.5	--	--	
No response											46

Chi-square = 17.73319 df = 12 Significance = .1240

Table 27.--Cross-tabulation of family's income by instructional methods and teacher competency.

Income	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
\$3,000 or less	--	--	1	100.0	--	--	--	--	--	--	
\$3,000- 7,000	1	9.1	6	54.5	4	36.4	--	--	--	--	
\$7,000-10,000	3	20.0	10	66.7	2	13.3	--	--	--	--	
\$10,000-15,000	4	12.9	17	54.8	9	29.0	1	3.2	--	--	
Over \$15,000	26	12.8	111	54.7	55	27.1	10	4.9	1	.5	
No response											42

Chi-square = 5.01132 df = 16 Significance = .9957

Table 28.--Cross-tabulation of family's income by availability of information about the program.

Income	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
\$3,000 or less	1	100.0	--	--	--	--	--	--	--	--	
\$3,000- 7,000	2	16.7	4	33.3	1	8.3	3	25.0	2	16.7	
\$7,000-10,000	1	6.7	9	60.0	5	33.3	--	--	--	--	
\$10,000-15,000	1	3.1	14	43.8	10	31.3	6	18.8	1	3.1	
Over \$15,000	14	6.9	69	34.0	69	34.0	42	20.7	9	4.4	
No response											40

Chi-square = 28.52157 df = 16 Significance = .0274

Research Question 4: What is the relationship between the teachers' years of experience and their reported attitudes toward programs for gifted and talented students?

Cross-Tabulations of Teachers' Experience
and Categorical Items

The following data pertain to the results of cross-tabulation of teachers' years of experience with their reported attitudes toward programs for gifted and talented students.

Cross-Tabulations of Teachers'
Experience and Specific
Program Characteristics

The results of the cross-tabulation between the teachers' experience and specific program characteristics suggested that these two variables were not related according to the chi-square test of significance ($p = .2808$, Table 29).

Cross-Tabulations of Teachers'
Experience and Overall Evalua-
tion of Program

As in the above cross-tabulation, no relationship was shown between this variable and the teachers' experience according to the chi-square test of significance ($p = .3805$, Table 30).

Cross-Tabulations of Teachers'
Experience and Student Endorsement

The student endorsement category was shown to be unrelated to the teachers' experience by the chi-square test of significance ($p = .2994$, Table 31).

Table 29.--Cross-tabulation of teachers' experience by specific program characteristics.

Experience	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1-5 years	--	--	6	21.4	13	46.4	7	25.0	2	7.1	
5-10 years	--	--	5	12.2	18	43.9	15	36.6	3	7.3	
10-15 years	--	--	5	16.1	18	58.1	7	22.6	1	3.2	
15-20 years	--	--	2	14.3	4	28.6	6	42.9	2	14.3	
20-25 years	--	--	--	--	9	90.0	--	--	1	10.0	
25-30 years	--	--	1	25.0	2	50.0	--	--	1	25.0	
30 years or more	--	--	1	50.0	--	--	1	50.0	--	--	
No response											2

Chi-square = 20.97227 df = 18 Significance = .2808

Table 30.--Cross-tabulation of teachers' experience by overall evaluation of the program.

Experience	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1-5 years	2	7.1	17	60.7	9	32.1	--	--	--	--	
5-10 years	1	2.4	20	48.8	18	43.9	2	4.9	--	--	
10-15 years	1	3.4	20	69.0	5	17.2	2	6.9	1	3.4	
15-20 years	1	7.7	8	61.5	2	15.4	2	15.4	--	--	
20-25 years	1	10.0	6	60.0	3	30.0	--	--	--	--	
25-30 years	--	--	--	--	4	100.0	--	--	--	--	
30 years or more	--	--	1	100.0	--	--	--	--	--	--	
No response											6

Chi-square = 25.47160 df = 24 Significance = .3805

Table 31.--Cross-tabulation of teachers' experience by student endorsement.

Experience	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1-5 years	1	3.6	9	32.1	15	53.6	3	10.7	--	--	
5-10 years	--	--	13	31.7	25	61.0	3	7.3	--	--	
10-15 years	--	--	4	13.3	19	63.3	4	13.3	3	100.0	
15-20 years	--	--	3	21.4	8	57.1	3	21.4	--	--	
20-25 years	--	--	3	30.0	5	50.0	2	20.0	--	--	
25-30 years	--	--	1	25.0	1	25.0	2	50.0	--	--	
30 years or more	--	--	1	50.0	--	--	1	50.0	--	--	
No response											3

Chi square = 27.10803 df = 24 Significance = .2994

Table 32.--Cross-tabulation of teachers' experience by student outcome.

Experience	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1-5 years	1	3.8	8	30.8	15	57.7	2	7.7	--	--	
5-10 years	1	2.5	14	35.0	24	60.0	--	--	1	2.5	
10-15 years	--	--	16	51.6	12	38.7	2	6.5	1	3.2	
15-20 years	--	--	4	30.8	8	61.5	--	--	1	7.7	
20-25 years	--	--	2	20.0	8	80.0	--	--	--	--	
25-30 years	--	--	2	50.0	1	25.0	1	25.0	--	--	
30 years or more	--	--	1	50.0	1	50.0	--	--	--	--	
No response											6

Chi-square = 19.95646 df = 24 Significance = .6992

Cross-Tabulation of Teachers' Experience and Student Outcome

The chi-square test of significance suggested that there was no relationship between student outcome and the teachers' experience ($p = .6992$, Table 32).

Cross-Tabulations of Teachers' Experience and Instructional Methods and Teacher Competency

This category, according to the chi-square test of significance, was unrelated to the teachers' experience ($p = .4945$, Table 33).

Cross-Tabulations of Teachers' Experience and Availability of Information About the Program

As in the cross-tabulation between instructional methods and teacher competency, the availability of information about the program category was shown to be unrelated to the teachers' experience according to the chi-square test of significance ($p = .3300$, Table 34).

The above data suggest that there was no relationship between the teachers' experience and the attitudinal categories according to the chi-square test of significance.

Table 33.--Cross-tabulation of teachers' experience by instructional methods and teacher competency.

Experience	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1-5 years	3	11.0	17	63.0	5	18.5	2	7.4	--	--	
5-10 years	2	4.9	16	39.0	18	43.9	4	9.8	1	3.4	
10-15 years	3	10.0	15	50.0	9	30.0	2	6.7	1	3.3	
15-20 years	--	--	7	46.7	5	33.3	3	20.0	--	--	
20-25 years	--	--	5	50.0	5	50.0	--	--	--	--	
25-30 years	--	--	1	25.0	3	75.0	--	--	--	--	
30 years or more	1	50.0	--	--	1	50.0	--	--	--	--	
No response											3

Chi-square = 23.43059 df = 24 Significance = .4945

Table 34.--Cross-tabulation of teachers' experience by availability of information about the program.

Experience	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree		No Response
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1-5 years	5	17.9	5	17.9	10	35.7	10	35.7	8	28.6	
5-10 years	2	5.0	8	20.0	11	27.5	15	37.5	4	10.0	
10-15 years	2	6.5	12	38.7	6	19.4	6	19.4	5	16.1	
15-20 years	--	--	4	26.7	1	6.7	7	46.7	3	20.0	
20-25 years	--	--	2	20.0	2	20.0	5	50.0	1	10.0	
25-30 years	--	--	1	25.0	1	25.0	2	50.0	--	--	
30 years or more	--	--	1	50.0	1	50.0	--	--	--	--	
No response											2

Chi-square = 26.46417 df = 24 Significance = .3300

CHAPTER V

SUMMARY AND CONCLUSIONS

The review of the literature lent credibility to the concept of employing a program for the purpose of making special provisions to meet the needs of the gifted and talented students in our schools. It further provided an insight into the three administrative approaches, enrichment, acceleration, and grouping, that are frequently used in meeting the needs of gifted and talented students, and some of the major factors (identification, staff selection, and evaluation) that should be considered in any program for the gifted and talented. Finally, it established a framework that was useful in the examination of data in this study of pilot programs for gifted and talented students.

Studies of such programs revealed that different segments of our society tend to endorse the provisions made for gifted and talented students; however, it was also revealed that parents may tend to develop special attitudes toward these programs because of their child's involvement.

The intent of the writer was to obtain the attitudes of parents, teachers, and students toward an educational program that differed from the traditional approach of providing for above-average students.

The gifted and talented programs that were funded by the State Aid Acts of 1973-1977 in the state of Michigan exhibited both similarity and variability in implementation. Of the 11 school districts that responded, 10 of these districts have pull-out or partial pull-out enrichment programs.

The data collected from the parent, teacher, and student questionnaires were analyzed by doing a frequency distribution of the responses on all items and determining the mean response of the group for the purpose of describing and comparing the attitudes of the sampled population. Scale scores were calculated, and scale means and variances were analyzed in order to characterize the attitudes of the sample and to determine the variability of responses.

Cronbach's alpha reliability analysis was performed on the categorical items to determine the degree to which items in a category measured the same underlying attitude.

A multivariate analysis of variance (MANOVA) was performed between parent, teacher, and student responses to determine if the three groups differed in their responses on three common attitude categories.

Cross-tabulations of the categorical items on the questionnaire with the educational and income levels of the responding parents were made.

Finally, cross-tabulations were performed on the teachers' experience and categorical items. Chi-square tests were performed on each cross-tabulation to determine if category responses were independent of the demographic variables.

Space was provided on the parent and teacher questionnaires to make unstructured reactions to the gifted and talented program. These responses are presented unedited in the Appendix.

Summary of Results

Research Question 1

What are the general characteristics of 11 of the 18 pilot programs reported in Michigan by the Department of Education and funded by the State Aid Acts of 1973 through 1977?

The procedures used for identifying and selecting students for the gifted and talented programs were the use of:

1. Achievement test batteries
2. Intelligence test
3. Former school performance
4. Reading level
5. Parent, teacher, and student recommendations

The goals set for students tended to vary among the reporting districts. Those goals that were similar were to:

1. Increase opportunities for academic growth
2. Improve extensive development of academic skills
3. Improve work and study habits
4. Expand interests
5. Increase opportunity for individual rate of growth
6. Improve personal, social, and emotional development
7. Improve educational motivation
8. Improve production through improved climate
9. Enhance appreciation of the creative process

Among those districts that required special qualifications of teachers for the gifted and talented, the qualifications involved five factors:

1. Some preparation in gifted education
2. Teaching experience
3. Intellectual background
4. Desire to work with gifted and talented students
5. Creativity

Of the 11 districts, all except two indicated that parents, teachers, and administrators were initially involved in the general scheme of the program through workshops or inservice meetings. In most districts, advisory committees were formed to offer advice in the implementation and development of the program.

During the first three years, which was the duration of the pilot programs, evaluation was performed by personnel from the State Department of Education. Thereafter, evaluations were conducted by local district staff members.

Most districts' directors of the gifted and talented programs were chosen by the central administration. There was a lack of commonality among the school districts as to the percentage of the director's time designated toward the gifted and talented program.

Four districts used the Renzuilli Enrichment Triad model of curriculum, and one district used the Memphis Clue format.

Of the districts surveyed, three school districts' programs had been in operation for five years, two districts' programs had been in operation for three years, four districts' programs had operated two years, and one district's program had been in operation for only one year.

The basic patterns of funding for these programs were:

1. State aid
2. Local funds
3. Local funds with state supplement

Because of the design of gifted and talented programs in districts in which students are removed from the regular classroom for a length of time during the day and then returned to the regular

classroom, no provisions were claimed for gifted and talented students in regular classrooms in any of the reporting districts.

Modifications that have been made among the districts involved in the study included:

1. Expansion to include more students
2. Change in the curriculum
3. Devised methods of identification of participants in the program
4. Scheduling
5. Change in personnel
6. Use of facilities and community resources

Data reported by district contact persons were tabulated, analyzed, and reported.

Research Question 2

What are the reported attitudes of parents, teachers, and students toward gifted and talented programs in which they participated?

Table 34 represents the summary of the responses of parents, teachers, and students by categories. The percentage of parents, teachers, and students who agreed, combined with the percentage who strongly agreed with the items, are shown in each cell.

As determined by the parents' and teachers' mean scores on the specific program characteristics category, the parents agreed on 50 percent of the items, whereas the teachers were undecided on 83 percent of the items. On this particular category, the parents were more supportive than teachers, in that they agreed that the identification and selection procedures used for the program were well planned. Both groups favored departmentalization. There was consensus between the two groups about the amount of time students spent in the program

and how adequate use was made of community resources by indicating a degree of uncertainty.

Table 35.--Summary of parent, teacher, and student responses (percentage of agreement).

Category	Parents	Teachers	Students
Responses to specific program characteristics	50	0	--
Overall evaluation of the program	86	86	45
Student endorsement	67	67	100
Student outcome	93	64	84
Instruction methods and teacher competency	75	50	67
Availability of information about the program	50	50	--

The mean scores on the overall evaluation of the program category indicated that parents agreed on 86 percent of the items and were undecided on 14 percent of the items, while the teachers agreed on 86 percent of the items and were undecided on 14 percent of the items. There was a consensus between the parents and teachers by a degree of uncertainty on the idea that students should remain in regular classrooms. These two groups agreed on the idea that the program had had a positive influence on the students, special classes should be provided for gifted and talented students, the program was beneficial, the need for expansion of the program, the continuation of the program, and the concept that students could not do just as well

without the program. The students were less favorable than the parents and teachers on this category. The students agreed that the program was great, that they were pleased with the amount of time they spent in the program, that they had benefited from the program, that special classes should be provided for gifted and talented children, and that more students should be included in the program. They were undecided about whether they would gain more from an enrichment program located in their own buildings.

According to the mean scores on the student endorsement category, the parents agreed on 67 percent of the items and were undecided on 33 percent of the items, whereas the teachers agreed on 67 percent of the items and disagreed on 33 percent of the items. Again, a consensus was revealed by both groups agreeing that students enjoyed the program and children were willing to spend time studying for the classes in the program. The parents were undecided about regular classes being boring to students, while the teachers disagreed with the idea. On this same category, according to the mean score, the students agreed on 100 percent of the items. They indicated they were willing to spend time studying for the class, they enjoyed the program, and, if chosen, they would participate in the program again.

On the student outcome category, according to the mean scores of parents and teachers, the parents agreed on 93 percent of the items and disagreed on 7 percent of the items, whereas the teachers agreed on 64 percent of the items, disagreed on 7 percent of the items, and were undecided on 29 percent of the items. Parents and teachers agreed that the program helped students to think independently, students

received guidance in locating and developing ideas, students learned to deal critically with ideas in the program, the program encouraged creativity, it helped arouse students to desire to excel intellectually, the accessibility of books for students, the enriching experience of students' association with older children and adults, and the program helped students to have self-confidence. On this particular category the students agreed on 84 percent of the items, disagreed on 8 percent of the items, and were undecided on 8 percent of the items. They agreed that the program helped them to excel intellectually, they got more out of this class than their regular classes, they made good use of their talent in the class, the material learned in this class should be helpful in regular school work, the program helped them to think independently, the acceptance of their ideas by the special program teacher, the program encouraged critical thinking, the program encouraged creativity, it aroused their intellectual interest, the program encouraged the development of hobbies, and they enjoyed the same neighborhood friendship as before.

According to the mean scores on the instruction methods and teacher competency for parents and teachers, the parents agreed on 75 percent of the items and were undecided on 25 percent of the items, whereas the teachers agreed on 50 percent of the items and were undecided on 50 percent of the items. These groups agreed on the idea of teachers of the gifted and talented programs' qualifications and the adequacy of student-teacher contact. Both groups were undecided on the idea that teachers' and administrators' resistance had prevented effective programs for the gifted and talented. On this same category,

the students agreed on 67 percent of the items and disagreed on 33 percent of the items. They agreed that they liked the way the teacher in the program taught and that the class was very interesting.

The mean scores on the personal knowledge category for parents and teachers indicated that parents agreed on 50 percent of the items and were undecided on 50 percent of the items, whereas the teachers agreed on 50 percent of the items and were undecided on 50 percent of the items. Parents and teachers agreed they were acquainted with the program but would like to become more acquainted with the program. Both groups were undecided about having been provided with enough information about the objectives of the program and about having been kept well informed of students' progress.

Unaltered Responses

The unaltered responses that were made by parents and teachers about the continuation/modifications of the gifted and talented programs of the pilot schools and the percentage of parents and teachers who made the responses are shown in Appendix B. Suggestions of parents and teachers are summarized in Table 36.

Research Question 3

What is the relationship between the parental educational background, socioeconomic status of parents, and reported attitudes toward programs for gifted and talented students?

In one category a relationship seemed to exist between the parental educational background and reported attitudes toward the programs for gifted and talented students. A relationship was found

Table 36.--Parent and teacher suggestions for gifted and talented programs.

Suggestion	No. of Responses	Percent
<u>Parent Suggestions</u>		
1. Expand curriculum	18	37.5
2. Program should be designed to meet individual needs and interests	9	18.8
3. Make better use of community resources	17	35.4
4. Expand program to involve more children	8	18.8
5. Increase amount of time spent in classes	38	79.0
6. More parent-teacher contact	19	39.5
7. Provide parents with some form of progress report	18	37.5
8. Parents should be better informed of program	25	52.0
<u>Teacher Suggestions</u>		
1. Coordination between classroom activities and gifted program	7	13.0
2. Inservice for classroom teachers on objectives of program	10	18.5
3. Certified teachers, not paraprofessionals, unless they are used to assist the teacher	14	26.0
4. Better communication between gifted program teacher and classroom teacher	20	37.0
5. Provide teachers with some form of progress report	36	67.0
6. Expand the amount of time students spend in special classes	9	17.0
7. Expand program to include more students, inclusive of creative students, and give some consideration of classroom teacher's choice	20	37.0

between the family's income and reported attitudes toward programs for gifted and talented students on two categories.

Research Question 4

What is the relationship between the teachers' years of experience and their reported attitudes toward programs for gifted and talented students?

There seemed to be no relationship between the teachers' years of experience and reported attitudes toward the programs for gifted and talented students.

Conclusions

As the result of the information obtained through the questionnaires and the comments recorded by parents and teachers, the following conclusions were drawn.

All three groups in most categories had a higher percentage of agreement than disagreement. It could be concluded that parents, teachers, and students shared favorable attitudes toward the gifted and talented program as measured by this study. Parents were generally more favorable toward all categories than were teachers. The major conclusions drawn as the result of the questionnaires and unstructured responses were:

1. Parents responded more favorably to the response to specific program characteristics category than did the teachers. Teachers were the most uncertain about the practices and procedures used for identifying and selecting students for participation in the program.

2. Both parents and teachers responded favorably to the overall evaluation of the program category. The students appeared less favorable to this category than parents and teachers.

3. Both parents and teachers responded favorably to the student endorsement category. The students responded more favorably than either group.

4. Parents responded more favorably to the instructional methods and teacher competency category than did teachers. The students responded more favorably than teachers to this category.

5. Parents and teachers responded equally on agreement and uncertainty on the availability of information about the program category.

6. Parents responded most favorably to the category that stressed the cognitive aspect of the program.

8. Teachers appeared to respond most favorably to the category in which they were given the opportunity to evaluate the program.

9. The majority of the students enjoyed participating in the program, and they benefited intellectually from the experiences. They did not feel that their participation in the program had had any adverse social effect on them.

10. All three groups responded favorably to the categorical items, which may imply that they felt the program for gifted and talented students was effective. However, the parents and teachers indicated a desire to have the program continued with some modifications.

When the demographic variables were cross-tabulated with the categorical items from the questionnaires, only limited positive relationships were revealed. Of the existing relationships found, it was difficult to offer logical explanations for the observed relations. The major conclusions drawn as the result of the cross-tabulations were:

11. A positive relationship existed between the mothers' education and the overall evaluation of the program category. The more education the mothers had acquired, the more positively they responded to this category.

12. There was a significant relationship between the family's income and the response to the specific program characteristics category. As the income increased, the parents responded less favorably to the statements in this category.

13. There was a relationship between the family's income and the availability of information about the program category. As the income level increased, the parents tended to respond less favorably to the items in this category.

14. No significant relationship was found between mothers' education and the specific program characteristics, student endorsement, student outcome, instruction methods and teacher competency, and availability of information about the program.

15. There was no relationship between the fathers' education and their responses to the categorical items.

16. No significant relationship was found between the family's income and overall evaluation of the program, student

endorsement, student outcome, and instruction methods and teacher competency.

17. There was no positive relationship between the teachers' experience and their responses to the items on the questionnaire.

Implications

As a result of the present study, the following implications were drawn:

1. In those districts planning to implement a special program for gifted and talented students, a needs assessment should be made to assure that arrangements made for gifted and talented learners are appropriate.

2. There seems to be no one best method used for identifying participants in gifted and talented programs. The use of multiple measures is important in reducing error and bias in the process of identification.

3. A high degree of similarity existed in the highly diversified goals set for students by the various reported districts. These similarities focused on improving, developing, and increasing academic, personal, social, and emotional development. Districts planning to implement a program for gifted and talented students should consider all of these domains in setting program goals.

4. Since there seem to be no widely accepted criteria for selection of staff, districts are autonomous in the requirements set for the selection of staff and curriculum for the gifted and talented programs.

5. The involvement of parents, teachers, and administrators in the developmental and evaluative stages of the programs is seen as contributive to the success of the program by the reporting districts.

6. Districts that accept categorical funds for gifted and talented programs need to consider ways to continue and maintain programs after outside funds are terminated.

7. Parents, teachers, and students were pleased with the characteristics and quality of the gifted and talented programs in meeting the needs of students, with parents reporting slightly more favorable attitudes. Districts planning to implement a program for gifted and talented students need to devise ways to communicate with these three groups about the program to maintain favorable attitudes.

8. The more formal education the mothers acquired, the more positive were their attitudes when given an opportunity to evaluate the gifted and talented program. Perhaps more attention should be given to maintenance of communication channels for the parents of students in gifted and talented programs with less formal education.

9. Evaluations that are carried out during the program's operation should be used to indicate necessary modifications and determine the total results of the program.

10. Locally designed programs tend to be isolated from the regular instructional program. Attention should be given to integrating them into the entire educational structure of the school system.

11. As parents' income increased, they were desirous of more information concerning the gifted and talented program. Districts should be prepared to accommodate this desire.

12. Teachers' reported attitudes were not related to the number of years of teaching experience. Teachers' years of experience alone should not be a criterion for staff selection for gifted and talented programs.

APPENDICES

APPENDIX A

PARENT SURVEY

APPENDIX A
PARENT SURVEY

Your child has been or is presently a member of a special program for gifted and academically talented students.

Below is a list of statements designed to survey the attitudes parents of the student have toward the program. I hope you will take a few minutes to fill out this form and return it in the self-addressed envelope.

Please indicate the extent to which you agree or disagree with each of the following statements by circling the appropriate letter(s). Please respond to each item.

Strongly Agree.....SA
Agree.....A
Undecided or Neutral.....U
Disagree.....D
Strongly Disagree.....SD

DEMOGRAPHIC

Number of years you have lived in this city:

5 years or less _____
5-10 years _____
10 years or more _____

Optional

Occupation of parents: (Place a check after the one occupation that best describes each parent.)

Mother

Housewife _____
Office Work _____
Sales Work _____
Professional _____
Laborer _____
Other _____

Father

Laborer _____
Managerial _____
Professional _____
Sales Work _____
Office Work _____
Other _____

Educational Background: (Place a check after the level that best describes each parent.)

Mother

Below 8th grade _____
 Completed 8th grade _____
 Below 12th grade _____
 H.S. graduate _____
 1-3 years of college _____
 College graduate _____
 Post-graduate _____

Father

Below 8th grade _____
 Completed 8th grade _____
 Below 12th grade _____
 H.S. graduate _____
 1-3 years of college _____
 College graduate _____
 Post-graduate _____

Family Income: (Place a check after the income that most nearly applies to your family.)

Less than \$3,000 per year _____
 \$3,000-\$7,000 per year _____
 \$7,000-\$10,000 per year _____
 \$10,000-\$15,000 per year _____
 More than \$15,000 per year _____

RESPONSES TO SPECIFIC PROGRAM CHARACTERISTICS

- | | | | | | |
|---|----|---|---|---|----|
| 1. My child would benefit more from a program within his or her building where students can move through the school years faster than usual by promotion. | SA | A | U | D | SD |
| 2. The methods by which students are identified for participation in the program are according to some well-planned procedures. | SA | A | U | D | SD |
| 3. The methods used to select identified students for this program are satisfactory. | SA | A | U | D | SD |
| 4. Students should go to different teachers for different subject-matter classes. | SA | A | U | D | SD |
| 5. The amount of time students spend in this program seems adequate. | SA | A | U | D | SD |
| 6. Adequate use is made of the community resources (field trips and persons) in the program. | SA | A | U | D | SD |

OVERALL EVALUATION OF THE PROGRAM

- | | | | | | |
|--|----|---|---|---|----|
| 7. Gifted children should not remain in regular classes. | SA | A | U | D | SD |
| 8. This program has had a positive influence on my child's attitude toward school. | SA | A | U | D | SD |
| 9. Special classes should be provided wherever possible for gifted students. | SA | A | U | D | SD |
| 10. I think this program is beneficial to the students involved in it. | SA | A | U | D | SD |
| 11. The program should be expanded to include more children. | SA | A | U | D | SD |
| 12. The program should not be eliminated. | SA | A | U | D | SD |
| 13. Students could not do just as well without this program. | SA | A | U | D | SD |

STUDENT ENDORSEMENT

- | | | | | | |
|---|----|---|---|---|----|
| 14. My child enjoys the program. | SA | A | U | D | SD |
| 15. My child is willing to spend time studying for the classes in this program. | SA | A | U | D | SD |
| 16. My child finds regular classes boring in comparison to his/her classes in this program. | SA | A | U | D | SD |

STUDENT OUTCOMES

- | | | | | | |
|--|----|---|---|---|----|
| 17. The program is designed around the needs and concerns of each child. | SA | A | U | D | SD |
| 18. The program helps students to think independently. | SA | A | U | D | SD |
| 19. Students receive guidance in finding and developing ideas. | SA | A | U | D | SD |
| 20. Students learn to deal critically with ideas in the program. | SA | A | U | D | SD |
| 21. The program helps students to become creative. | SA | A | U | D | SD |
| 22. The program helps to arouse students' intellectual interest. | SA | A | U | D | SD |

- | | | | | | |
|--|----|---|---|---|----|
| 23. The program helps students to desire to excel intellectually. | SA | A | U | D | SD |
| 24. Students who participate in this program are encouraged to develop hobbies. | SA | A | U | D | SD |
| 25. Students who participate in this program have access to a variety of good books. | SA | A | U | D | SD |
| 26. Students are missing the "basics" as a result of the program. | SA | A | U | D | SD |
| 27. The program helps students to have self-confidence. | SA | A | U | D | SD |
| 28. Children benefit socially by being placed in groups of similar mental ability. | SA | A | U | D | SD |
| 29. The opportunity to associate with other gifted children helps my child adjust socially. | SA | A | U | D | SD |
| 30. The opportunity to associate with older children and adults to find others with their interest is an enriching experience to my child. | SA | A | U | D | SD |

INSTRUCTION METHODS AND TEACHER COMPETENCY

- | | | | | | |
|--|----|---|---|---|----|
| 31. The teachers in the gifted program should have special qualifications. | SA | A | U | D | SD |
| 32. The teaching methods used in the gifted program are satisfactory. | SA | A | U | D | SD |
| 33. Students receive adequate student-teacher contact in the program. | SA | A | U | D | SD |
| 34. The resistance of teachers and administrators has prevented effective programs for the gifted. | SA | A | U | D | SD |

AVAILABILITY OF INFORMATION

- | | | | | | |
|---|----|---|---|---|----|
| 35. I have been provided with enough information about the objectives of the program. | SA | A | U | D | SD |
| 36. I have been kept well informed concerning my child's progress in the program. | SA | A | U | D | SD |

- | | | | | | |
|---|----|---|---|---|----|
| 37. I am acquainted with the program. | SA | A | U | D | SD |
| 38. I would like to become more acquainted with
the program. | SA | A | U | D | SD |

What suggestions do you have for improving the program?

Comments:

APPENDIX B

TEACHER SURVEY

APPENDIX B

TEACHER SURVEY

Your student(s) has been a member of a special program for gifted and academically talented students.

Below is a list of statements designed to survey the attitudes teachers have toward the program. I hope you will take a few minutes to fill out this form and return it in the self-addressed envelope.

Please indicate the extent to which you agree or disagree with each of the following statements by circling the appropriate letter(s). Please respond to each item.

Strongly Agree.....SA
 Agree.....A
 Undecided or Neutral.....U
 Disagree.....D
 Strongly Disagree.....SD

RESPONSES TO SPECIFIC PROGRAM CHARACTERISTICS

- | | |
|--|---------------------|
| 1. Students would benefit more from an acceleration program within each building. | SA A U D SD |
| 2. The methods by which students are identified for participation in the program are systematic. | SA A U D SD |
| 3. The methods used to select identified students for this program are satisfactory. | SA A U D SD |
| 4. More departmentalization is needed in the program. | SA A U D SD |
| 5. The amount of time students spend in this program seems adequate. | SA A U D SD |
| 6. Adequate use is made of the community resources in the program. | SA A U D SD |

OVERALL EVALUATION OF THE PROGRAM

- | | |
|---|---------------------|
| 7. Gifted children should not remain in regular classes. | SA A U D SD |
| 8. This program has had a positive influence on the students' attitude toward school. | SA A U D SD |

- | | | | | | |
|--|----|---|---|---|----|
| 9. Special classes should be provided wherever possible for gifted students. | SA | A | U | D | SD |
| 10. I think this program is beneficial to the students involved in it. | SA | A | U | D | SD |
| 11. The program should be expanded to include more children. | SA | A | U | D | SD |
| 12. The program should not be eliminated. | SA | A | U | D | SD |
| 13. Students could not do just as well without this program. | SA | A | U | D | SD |

STUDENT ENDORSEMENT

- | | | | | | |
|--|----|---|---|---|----|
| 14. Students enjoy the program. | SA | A | U | D | SD |
| 15. Students are willing to spend time studying for the classes in this program. | SA | A | U | D | SD |
| 16. Students find their regular classes boring in comparison to their classes in this program. | SA | A | U | D | SD |

STUDENT OUTCOMES

- | | | | | | |
|---|----|---|---|---|----|
| 17. The program is designed around the needs and concerns of each child. | SA | A | U | D | SD |
| 18. The program helps students to think independently. | SA | A | U | D | SD |
| 19. Students receive guidance in finding and developing ideas. | SA | A | U | D | SD |
| 20. Students learn to deal critically with ideas in the program. | SA | A | U | D | SD |
| 21. The program helps students to become creative. | SA | A | U | D | SD |
| 22. The program helps to arouse students' intellectual interests. | SA | A | U | D | SD |
| 23. The program helps students to desire to excel intellectually. | SA | A | U | D | SD |
| 24. Students who participate in this program are encouraged to develop hobbies. | SA | A | U | D | SD |

- | | | | | | |
|---|----|---|---|---|----|
| 25. Students who participate in this program have access to a variety of good books. | SA | A | U | D | SD |
| 26. Students are missing the "basics" as a result of the program. | SA | A | U | D | SD |
| 27. The program helps students to have self-confidence. | SA | A | U | D | SD |
| 28. Children benefit socially by being placed in groups of similar mental ability. | SA | A | U | D | SD |
| 29. The opportunity to associate with other gifted children helps the students adjust socially. | SA | A | U | D | SD |
| 30. The opportunity to associate with older children and adults to find others with their interest is an enriching experience to the student. | SA | A | U | D | SD |

INSTRUCTION METHODS AND TEACHER COMPETENCY

- | | | | | | |
|--|----|---|---|---|----|
| 31. The teachers in the gifted program should have special qualifications. | SA | A | U | D | SD |
| 32. The teaching methods used in the enrichment program are satisfactory. | SA | A | U | D | SD |
| 33. Students receive adequate student-teacher contact in the program. | SA | A | U | D | SD |
| 34. The resistance of teachers and administrators has prevented effective programs for the gifted. | SA | A | U | D | SD |

AVAILABILITY OF INFORMATION

- | | | | | | |
|---|----|---|---|---|----|
| 35. I have been provided with enough information about the objectives of the program. | SA | A | U | D | SD |
| 36. I have been kept well informed concerning my student's progress in the program. | SA | A | U | D | SD |
| 37. I am acquainted with the program. | SA | A | U | D | SD |
| 38. I would like to become more acquainted with the program. | SA | A | U | D | SD |

TEACHING EXPERIENCE: (Place a check after the number of years of experience that best describes you.)

1-5 years _____
5-10 years _____
10-15 years _____
15-20 years _____
20-25 years _____
25-30 years _____
more than 30 years _____

What suggestions do you have for improving the program?

Comments:

APPENDIX C

STUDENT SURVEY

APPENDIX C STUDENT SURVEY

Below are some statements about the special program for gifted and academically talented students which you have been a part of. The statements are meant to find out your feelings about the program.

Please indicate the extent to which you agree or disagree with each of the following statements by circling the appropriate letter(s). Please respond to each item.

Strongly Agree.....SA
Agree.....A
Undecided or Neutral.....U
Disagree.....D
Strongly Disagree.....SD

STUDENT OUTCOMES

- | | | | | | |
|--|----|---|---|---|----|
| 1. The program helps me to excel intellectually. | SA | A | U | D | SD |
| 2. I get more out of this class than the classes at my regular school. | SA | A | U | D | SD |
| 3. I make good use of my talent in this class. | SA | A | U | D | SD |
| 4. What I learn in this class should be very helpful in my regular school work. | SA | A | U | D | SD |
| 5. The program helps me to think without help from others. | SA | A | U | D | SD |
| 6. My own ideas are better accepted by the special program teacher than by my regular classroom teacher. | SA | A | U | D | SD |
| 7. The program helps me to give reasons for disapproving ideas. | SA | A | U | D | SD |
| 8. The program helps me to become creative. | SA | A | U | D | SD |
| 9. The program helps to make my school work interesting. | SA | A | U | D | SD |
| 10. The program encourages me to develop hobbies. | SA | A | U | D | SD |
| 11. I have the same neighborhood friends now that I had before entering the program. | SA | A | U | D | SD |

- | | |
|--|-------------|
| 12. Being in this program has caused me problems with other students at my regular school. | SA A U D SD |
| 13. The students in this program were more fun to be with than my regular school classmates. | SA A U D SD |

INSTRUCTION METHODS AND TEACHER COMPETENCY

- | | |
|--|-------------|
| 14. I like the way the teacher in this program teaches. | SA A U D SD |
| 15. The class is very interesting. | SA A U D SD |
| 16. The class was not as interesting as I thought it would be. | SA A U D SD |

OVERALL EVALUATION OF THE PROGRAM

- | | |
|--|-------------|
| 17. I would gain more from a program like this in my own building. | SA A U D SD |
| 18. The class lasts too long. | SA A U D SD |
| 19. The program is not worth the time and effort required. | SA A U D SD |
| 20. I think the program is great. | SA A U D SD |
| 21. The program is boring. | SA A U D SD |
| 22. I am pleased with the amount of time I spend in this program. | SA A U D SD |
| 23. I have benefited from this program. | SA A U D SD |
| 24. Special classes should be provided for gifted children. | SA A U D SD |
| 25. The program should be discontinued. | SA A U D SD |
| 26. I would like to see more students included in the program. | SA A U D SD |
| 27. I attend the class because my parents encourage me to do so. | SA A U D SD |

STUDENT ENDORSEMENT

- | | | | | | |
|--|----|---|---|---|----|
| 28. I am willing to spend time studying for the class. | SA | A | U | D | SD |
| 29. I enjoy the program. | SA | A | U | D | SD |
| 30. If I were chosen to be in the class again, I would attend. | SA | A | U | D | SD |
| 31. I am a girl. Yes_____ No_____ | | | | | |
| 32. I am a boy. Yes_____ No_____ | | | | | |
| 33. I am in the _____ grade. | | | | | |

APPENDIX D

QUESTIONS FOR DIRECTORS OF GIFTED AND
TALENTED PROGRAMS

APPENDIX D

QUESTIONS FOR DIRECTORS OF GIFTED AND
TALENTED PROGRAMS

1. What program prototype was used?
2. What procedures were used for identifying students?
3. What were the goals set for students?
4. What qualifications were required of teachers of the gifted?
5. What provisions were made for inservice for staff and parents?
6. How were parents, teachers, and administrators initially involved in the general scheme of the program?
7. How was the program evaluated and what use was made of the evaluation?
8. How was the director chosen?
9. What percentage of his/her job was designated toward the gifted program?
10. What model of curriculum was used?
11. How long was the program continued?
12. How was the program funded?
13. What was the population of children served?
14. Was a pullout technique used?
15. What is the geographic makeup of the district?
16. What modifications have been made in the program?

APPENDIX E

PARENT COMMENTS

APPENDIX E
PARENT COMMENTS

1. This program has helped my child adjust to her role in life not only in school, also in the family. I do hope the program is allowed to continue.
2. As with any school program, there is not enough time spent with the students. Regardless whether or not a child is intelligent or slow, they all need a lot of time spent with them. I hope this program continues.
3. Some classes are not up to par.
4. My child enjoys the program.
5. We are very satisfied with the program.
6. I was very proud when my child was selected for this program. It has been a very good experience for her. Since she started the program she has become more self-confident.
7. It would be wonderful for all children to have teachers like the ones in this program.
8. My daughter has thoroughly enjoyed the program.
9. I hope this district sees the value of the pilot program and will continue after the initial 3 years.
10. No responses were made due to the lack of knowledge concerning the program and program communication. Communication can provide a strong link between school and community and support for this and other programs but people need to know especially in a relatively nonprofessional community such as ours. I feel very strongly that a gifted program should include children long before fourth grade.
11. My child disliked school and tried to be sick at least 1 or 2 days a week before this class. Also he did not get good grades. Now he likes school and does not miss unless he is really sick.
12. I did not understand why my child was selected for the program in which she started two years ago. I have not heard anything about her progress and I was never informed of what the program is about.
13. I do not think there is enough parent contact.

14. I think some of the class projects were particularly helpful in expanding my child's horizon.
15. We need more time. My child would like a full day of this kind of thing.
16. I'm sorry I'm not that informed on the program and don't feel I can give honest opinions.
17. I only know about the program from what my 10 year old tells me. She loves to attend the class and she likes the teacher real well.
18. Why are special education students on the low range given more special programs and provided with transportation while the bright students have few programs (often cut from budget) and must provide own transportation?
19. Being bright in these days is not enough. Developing a sense of personal worth and achievement is one of the greatest things a school can give.
20. I am very sorry to say that I am not all that familiar with the program. This questionnaire has brought that to my attention. When my second grader didn't want to go to school anymore because of boredom and repetitious school work, I was thankful that our school had this program available to her.
21. This program has been very helpful to my child. I only wish it was expanded to include more children.
22. My son's teacher (classroom) takes away his gifted program privileges if he gets out of line in anyway, which I feel is very unfair.
23. Children should have the mixture of special class along with regular class.
24. I have two children in this program and they seem to enjoy the program and I believe when children enjoy the things they are involved in they tend to gain more from them.
25. My child wrote a letter to the Board of Education requesting they provide this program in high school as it does mean that much to him.
26. In regular classes too little is done for those who want to learn. Too much stress is placed on equal education.
27. I didn't even know we had a gifted child. I was never informed about this program.

28. Our son was chosen for this program to give him more confidence in himself. I think the program along with the teacher has done our son a great deal of good. He has the confidence he needed, which has improved his grades dramatically.
29. These questions got me involved more deeply in your subject than what I had expected. Right now the selection seems to be on the basis of good grades and good work, etc. but what about those who may not get good grades but can draw, act, or write good stories or poems at this very young age. It seems to me these would be gifted but overlooked because of not having good grades. I really appreciate being a part of your survey, particularly at this time when many parents feel that their children are not learning enough in school today.
30. I think the program has instilled the hunger for more education and to keep going to better oneself.
31. The solution to all our problems lies with those who have the knowledge and ability to make this world a better place to live. I therefore believe that programs to develop the intellect of our gifted children should be given top priority in our educational system.
32. I would like to see more schools involved in this project. We are moving to a different school district and I have heard they do not have a similar program.
33. I feel the program is very much improved over last year. My child is much happier in the program and is doing many interesting projects.
34. I was kept informed of my child's progress by her and in some ways I think parents can participate or help the child in some programs, if possible.
35. A well-provided program for students who teachers feel can benefit from it. The program helps students to excel in their particular fields of interest. I like the program and feel it has helped my child to seek and learn more about himself and others around him.
36. I have two children in the program, both have enjoyed it immensely.
37. The program has been a great help to my child and I would like to see it expanded to all schools.
38. I have two children in the program and it really gives them a boost to be recognized as special people.
39. My child enjoys the time spent in the enrichment classes. The teacher encourages him in his studies.

40. I think there are too few children allowed to take advantage of a program of this type. Many gifted children are not given the opportunity to channel their talents into an area of interest or future careers. I feel the proportion of monies divided among educational fields are inadequately distributed.
41. My child has only been in the program a short time. He was so proud to become eligible for the enrichment class. Because his regular teacher sets goals for him, he has worked hard to complete these goals hoping to be able to participate in the enrichment class. It has helped his problem with shyness and growing up. I am very pleased with his progress. I would like to become more familiar with the program and possibly meet his enrichment class teacher. This would help me to become familiar with my child's abilities and progress he is making in this class.
42. Gifted children need a program like this to be able to develop their full potentials.
43. My child loves the program and I would like to see it continued and expanded to include other children.
44. As a parent, I feel this program is very good. I would like to see another program formed for middle level children to hold their interest in school as well.
45. This program has been very beneficial to two of our children who have attended elementary school here.
46. I am very pleased with the program and my child is doing many interesting things.
47. It has been a good program for my child.
48. It would be nice if more children could participate. We spend billions trying to teach and train the retarded and handicapped, especially those who can never be on their own and I would like to see some of this money go to benefit the smarter child.
49. The enrichment program is a good one.
50. I feel this program has given our child self-confidence and it will benefit her in the future.
51. This is a good program.
52. I am grateful for the time and money spent on gifted programs, so few systems provide anything for these children.
53. My child loves the program and the teacher. On the days when enrichment classes are held there is no grumbling about going to school. Her regular classroom was a boring experience.

54. My child has been in the program for 2 years. The few times I have visited the class it has seemed to be very disorganized and undisciplined. The children were all participating and seemed to be enjoying themselves but in such a disorganized way. I do not know if the teachers have special training for this type of work.
55. This program is very good for my child because he is in a slow learning classroom and this program gives him a chance to use his mind more.
56. By the 2nd semester our son disliked the program so much he would purposely miss the bus so he could stay in his regular classroom. His daily class teacher was excellent and he didn't like to miss out on fun with her.
57. Many teachers (regular classroom) are opposed to the enrichment class and do not like to give the students their work when they return to their classroom.
58. I would like for my child to be in this program until she completes high school.
59. I am pleased with my child's report. Her teacher kept me well informed on her progress. It is helping her to get along with children regardless of race.
60. This has been an excellent program for our child. She is always wanting to try new things and needs to be kept busy; this program provided this for her.
61. My child did very well in the program. I have had 3 children in this program. Academically there are three grades above grade level. This program teaches them everyday common sense, they are lost if something doesn't come from a book.
62. I feel the program in our school is well planned and adequate.
63. This kind of program has helped my child to look for better ways to improve himself.
64. My daughter really loved this program. I wish they would keep it in our community; however, the school district feels there is not enough community concern about it.
65. I can see where the enrichment program has really helped my child in becoming a better student and a better person.
66. The gifted program has helped my child enjoy some things he likes and enjoys.

67. Both our children enjoyed the program and would like to be in it again; however, they did not feel it was far more beneficial than their regular classroom. They were very disappointed in missing several good art projects in their home school.
68. I am sorry that my comments were not more positive but our experiences with the program were not all that great, possibly because of my daughter's age and other things going on in her period of rapid development.
69. The enrichment program was a good supplement to our son's education at his regular school. I feel it stimulated his interest but I do not feel a child should go into a total program of this type or be pushed ahead a grade or two, many problems (socially) develop from this. Many thanks to the school district for allowing him to participate.
70. The program is excellent.
71. I've been thoroughly excited and pleased to watch my son grow so much during his exposure in the program.
72. I do feel this program helped my child but I personally thought more effort should have been made to inform parents of what is happening in the program and what the objectives are.
73. Our child has enjoyed the class particularly meeting others at his level. We have been particularly pleased with his regular school and the efforts made by the staff to individualize work and keep him interested and working up to his ability so I do not feel as strong a need for a "special program," although it was a positive experience for him.
74. I felt that the special program teachers didn't attempt to know the students as they should have. When we attended conference the teacher didn't even know our daughter's first name; this is inexcusable.
75. Our child now has well-defined opinions on the program, mostly positive ones. The problems she had with students at her regular school were caused by carelessness on the part of the staff and other parents who focused too much attention on the "special program" and therefore "better" nature of our daughter's involvement. This initiated our efforts to play down this "special" concept. We wanted her to remain unaffected by the recognition and attention so that her self-image would remain natural. It seems from our discussions with her, that she gained instead some sort of stigma among her peers. The competitive nature of life will certainly become apparent in due time. The value of the program or other such programs to the individual child can be gained without the perception of loss to others.

76. I feel that just because a child is gifted many times the "basics" are overlooked and just taken for granted that he knows them.
77. This program has met with considerable opposition in our area ever since it was introduced. I believe part of it is due to the limitation in size. If more children could be involved, it would be better received. The concept of the program was very beneficial to my own child but it is a reality that not all children (perhaps most children) do not belong in this type of program. It has enriched her growth and I am sure she is better prepared for junior and senior high school than the average child in our community. My own opinion now is that the rest of her education here will be a challenge as there is little to stimulate her interests since there are limited resources available in junior and senior high.
78. I feel this program gives the children a chance to excel without the peer pressure to be ashamed of "doing well." The students encourage and help each other to move ahead. The "in thing" in this class is to meet a challenge and conquer it. I like that idea. My child feels better about school now that he can work ahead when he's finished with his regular assignments. In the "regular classroom" he was a little bored and frustrated after finishing his assigned work quickly. His teachers didn't have time to give enrichment assignments and let him work ahead as they had to deal with the average and slower student as well. My child's test scores have averaged almost two years higher in this program than they were before he entered. He has been much happier and much more enthused about school since entering the program. Needless to say, I'm very supportive of the program.
79. The program is definitely an asset to the educational program and should be continued. I think the program would be more readily accepted by other students and parents if the name was changed.
80. There is always money for children who are low academically but it is always a battle to get money for those on the end of the scale.
81. This community is resistant to change and new ideas. Peer pressure among the teachers, a school board lacking in experience and education itself, parents of children who didn't get into the class, all have contributed to our overwhelming resistance to the original conceptual organization of the program.
82. I was in such a program as this when I was in school and I still feel that the experience was invaluable.
83. The program has made school a much more interesting and challenging place to be for our child.

84. I hope the program for gifted children goes beyond the 8th grade so that there are more opportunities for advanced learning according to the students' capabilities.
85. I am very grateful to this program because my children were becoming very bored with regular classroom procedures.
86. This is my child's third year in the program and this is the first year that I have not had to get after her about completing a special project assignment. Her teacher gives them time during class to work on special assignments, also, she has used the school library for reference materials when needed.
87. My strongest criticism of the program is the attitude of regular teachers and the school administration on behalf of resistance toward the program.
88. The success of this program in our middle school has been primarily due to the personality and teaching ability of the teacher in charge. He has organized a program which fits the needs of many students.
89. I think the gifted program is a wonderful educational experience that should be continued and spread over the U.S.
90. My only negative comment is that the teachers of these students should be better informed as to what is happening in the program and how they can help these children in the regular classroom. Each child is different, but a gifted child has learning difficulties, such as boredom from repetition that many teachers do not recognize. As these children progress and are not challenged, they turn-off on school and become problems. I would like to see this attitude eliminated.
91. The government should spend more money on gifted programs.
92. This type of program is long overdue, it should be continued and receive sufficient funding to do a significant job for ALL students who qualify.
93. I would like to know more about my child's individual response to the program.
94. My child seems to enjoy the close attention that the teacher provides for her. She has progressed farther than the average child of the same age and this could only have been made possible through this program. It gives her a chance to expand her mind and she can still enjoy her friends of the same age group when she returns to regular class. I sincerely hope that the program is continued for her sake and for the sake of others.

95. We think the program is great. The teacher is what a teacher should be. She does a super job and brings out the very best in our child. Because of this program we have decided to remain in this community.
96. The program is fantastic.
97. The teacher was a fine choice as a teacher for this group. She has good ideas for the program.
98. Many of our opinions regarding the program are based on its short life and therefore tend toward the uncertain category.
99. My child has improved in many areas as a result of this program mainly in the area of shyness and being a perfectionist. My child is no longer afraid to try something new and to make a mistake.
100. Since this is a new concept in the school system, it is very difficult to evaluate the program. Our child is very enthusiastic about the class and the teacher. I feel the teacher has some fantastic ideas.
101. I'm very pleased my child has had this opportunity and hope the program is continued and expanded.
102. Programs for the gifted are extremely important to keep a child from becoming bored and becoming an underachiever. Association with children of equal ability is important to keep the child from feeling that he is strange or different. It's very easy for a child to try to be like everyone else and not develop the talents that make him unique.
103. Many of the projects have created a jealous or envious attitude among peers. Is there some way these neat learning activities could be shared more?
104. One positive aspect of having the program in our school is that it helps my child to feel less "different" than he would otherwise. Gifted children often hide their abilities in the regular classroom in order to not appear different. I think the program has helped some children to feel it is good to have special abilities and to feel proud of it.
105. My child enjoys this experience. We are very happy with his interest and enthusiasm toward school, part of which we feel is a result of this experience.
106. Our special project program is a step in the right direction. It should be expanded.

107. My daughter has developed both intellectually and socially in this program. She is now very excited about school whereas in the past she found it most boring.
108. I think my child is becoming a very intelligent young lady and thinking for herself. Her teacher is a very nice person.
109. The program is getting the kinds worked out. My child would prefer going away from regular school for the whole day over having the program in the same building.
110. I hope this leads you to work with and for gifted children. They do need teachers on their side.
111. What effect will this program have on my child's permanent record as to ability in one given area of achievement?
112. The gifted program does not fulfill my expectations. There is much room for improvement.
113. My son has enjoyed this program and hopes to continue with it in the future.
114. Administrators and teachers treat gifted programs as rewards for good grades rather than as a necessity to prevent the loss of our most gifted and intelligent students.
115. I am grateful that my son had the opportunity to be a part of this program. I know he thoroughly enjoyed it.

APPENDIX E

PARENT SUGGESTIONS

APPENDIX E

PARENT SUGGESTIONS

1. Students need to be challenged	3
2. Provisions should be made for more diversified activities for students (e.g., games, debates, science experiments, computer programming, and investigative activities)	6
3. Expand the curriculum for gifted students to include math, science, art, writing and other creative skills, foreign language, computer science, social awareness, attitudes, fine arts, astronomy, news media (e.g., newspaper, self-awareness, industrial arts and value clarification)	18
4. The content and assignments should be more meaningful	2
5. Provide more competitive types of activities (e.g., spelling bees and quizzes)	1
6. More structured approach should be used in classes	4
7. Less writing of reports	1
8. Children need more homework	3
9. More individualization	2
10. Better organization and preplanning of program	2
11. Program should be designed to meet individual needs and interest	9
12. Begin program earlier during the year	3
13. Make better use of community resources (e.g., meaningful field trips and professionals)	17
14. More resource materials	1
15. Program should be expanded into Junior High and Senior High School	3
16. Expand program to involve all grades	1
17. Program should be expanded into lower grades	2
18. Expand program to involve more children	9

19. Initiate program again in school district	2
20. Increase the amount of time spent in classes	38
21. Incorporate gifted programs in home school	6
22. Acceleration of students (grade skipping)	1
23. Acceleration within special subjects	3
24. Smaller classes	2
25. Grading of effort	1
26. Better discipline	1
27. More student-teacher contact	1
28. More parent-teacher contact	19
29. Parental involvement in the formulation of goals and objectives	5
30. Provide parents with some form of progress report	18
31. Parents should be better informed of program	25
32. Provide inservice workshops and open house for parents	2
33. Differentiated staffing	3
34. Special qualifications for teachers	6
35. More teachers for the program and additional help	6
36. Less teacher bias on choice of projects	1
37. Teacher should be more flexible	1
38. Better cooperation from classroom teacher	4
39. Better communication between program teacher and classroom teacher	6
40. Better-defined selection procedures	6
41. Continuity after identification	2
42. Screen students prior to fall	1
43. Less building administrators' power	3

44. More funds allocated for programs	6
45. Attempt to solve social problems	3
46. Provide transportation	2
47. Less time transporting students to centralized area	3
48. Provide busing for special classes only where there are too few children to warrant a class	1

APPENDIX G

TEACHER COMMENTS

APPENDIX G
TEACHER COMMENTS

1. We do not have a smooth-functioning program. It exists in name only. We have a "great books" program for 3rd, 4th, and 5th graders; it does not fill their need for active challenges. I'm not impressed by it. Give us a program that is an active and growing thing,--a living entity. Give us a good solid criterion for judging and discovering these "gifted" ones, then show us how to be flexible with them. Help us understand and work with these young people by giving us a newsletter that shares these experiences, gives hints, offers suggestions, honestly evaluates things that turn sour, go wrong or turn kids off. After all, our grown-up ideas about what these kids need or would like aren't what they want or work best with.
2. A program must have funds to be successful. Our program depends on teacher volunteer time; it is not enough. When school boards will pay for education for all students then we will be able to begin meeting gifted students' needs.
3. Some children, whose scores (SAT) don't qualify them, would qualify if teacher judgment was involved. My children seemed to be discouraged by the research format of the program.
4. I have inadequate information about the program.
5. I want some other data other than child's notebook.
6. It would be neat to have a person who could come and help teachers meet the needs of these special children.
7. I feel it is an excellent program. I just do not know how the class is taught or what the kids do.
8. My student has been in the gifted program for the past year. I have very little knowledge as to what really is going on in the program. There is no communication from his class to me so I can extend his activities.
9. Our program for next year will be different; our children will have definite subjects as part of the program. They will not have to do work they missed by being drawn from our regular classes. This method is preferred by students and teachers involved.
10. I firmly believe that the program here at our school is a poor excuse for even the simplest program for the gifted.
11. Our country has sorely neglected the development of the brain power of the future.

12. Our program tends to be a babysitting job with gifted children. How nice! This program is ridiculous.
13. Our teacher for the gifted is excellent.
14. We have an excellent person running the program.
15. The teacher in our school has done an outstanding job with the children; in fact she has done the best of all the teachers who preceded her. I disagree that the gifted teacher should have special qualifications.
16. Classroom teachers need extra help and materials for the gifted children. These children usually finish their work early and need extra learning to go on . . . for these students.
17. I have mixed feelings about gifted education especially when there are so many kids with learning problems and lower ability that need so much extra time and help (and don't always get it).
18. I feel our program is a great success.
19. With the program the classroom work is less boring if the teacher cooperates and doesn't require make-up work for the time students are out of the room.
20. Since this program is relatively new, there are many things about the program that I have not formed opinions on yet. My children are young so I don't see a lot of advanced things on their own yet.
21. I have had 3 students involved in AIC, all have not been interested in going to the class. Our in-building program appears more interesting to the students.
22. I would like to see parents and teachers involved more.
23. I'm not so sure that using the SAT in choosing kids for the program is an appropriate tool.
24. I feel closer contact between the centralized program and individual schools would be helpful. The evaluation at the end was not too beneficial.
25. Good idea and needs to expand.
26. My students were excited and really enjoyed the classes. This is a great program. I wish I could send more than 2 students.
27. The gifted program teacher should contact teachers, if students are having difficulties concerning adjustment, behavior, interest, or completing assignments.

28. Have a teachers' visitation day where teachers can go see children at work.
29. Some participants need some counseling or time with special teachers. Children can be accelerated and also have many problems of their own. Special teachers should be trained enough to spot these children and offer help and encouragement when needed.

APPENDIX H

TEACHER SUGGESTIONS

APPENDIX H TEACHER SUGGESTIONS

1. Expand curriculum to include reading and research	1
2. Look at program as a part of total curriculum, not as an "extra"	3
3. Develop a curriculum outline	1
4. Permit students to help design the course of study	2
5. Coordination between classroom activities and gifted program (e.g., long-range goals, projects, plans)	7
6. Less written reports	1
7. Better choice of activities	2
8. More departmentalization in specific buildings rather than removal from regular building	3
9. Fewer hobby-like activities	1
10. Make suggestions to classroom teacher on how to meet the needs of the gifted children in the classroom	1
11. Inservice for classroom teachers on objectives of the program	10
12. More individualization	2
13. Provide materials to use in regular classroom	1
14. Less repetition of class projects	2
15. Provide for more self-expression	1
16. Provide a full-time teacher for the gifted	1
17. More staff team teaching/extra staff	1
18. Building administrators should not be in charge of gifted classes or programs	2
19. Certified teachers, not paraprofessionals unless they are used to assist the teacher	14
20. Utilize community resources	2

21. Involve more teachers and parents	2
22. Better communication between gifted program teacher and classroom teacher	20
23. Better communication between gifted program teacher and parents	2
24. Release time for classroom teacher for visitation to observe gifted program	3
25. Provide teacher with some form of progress report	6
26. Program in each building	5
27. Do not take child out of regular classroom	1
28. Require students to do regular classroom work	1
29. Student evaluation of program	1
30. Expand the amount of time students spend in special classes . .	9
31. Special classes should be held during regular school hours . .	1
32. Expand facilities	4
33. Expand program to include more students, inclusive of creative students, and give some consideration of classroom teacher choice	20
34. Expand program to include all grades	1
35. Improve educational opportunities for all students	1
36. Provide acceleration classes for gifted students in each subject area	2
37. Use school lunch time and recess time for independent projects	1
38. Expand program into high school	1
39. Better organization	1
40. Make provisions for minority student involvement without insult	3
41. Coordinate existing program with others in county/state	2

42. Have state guidelines to provide for identified students who may move from one school district to another	1
43. Initiate programs of this kind in other school districts . . .	2
44. Better defined selection procedures (e.g., more guidelines, special testing)	3
45. Greater weight should be given to teacher recommendation than to test scores in selection of students	1
46. Once identified, student should be picked up actively sooner	1
47. Limit student participation to 1 year so other students can participate	2
48. SAT scores may not be appropriate as an identification device	1
49. More aptitude testing	1
50. Screening should be done so a gifted student is not placed in the program when it may be detrimental to the student as a child who is an underachiever may feel production is unimportant	1
51. Consider whether child can afford to miss the basics	1
52. Provide time for special teacher counseling with students . . .	1
53. Evaluate students each year in June for later placement	2
54. More funding for gifted programs	5

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