1-1-2008

A Study Of The Relationship Between Curricular Characteristics Recommended By Recognized Authorities And Curricular Characteristics Found In Existing Programs For Academically Gifted Students

Andrew R Nixon
University of Nevada, Las Vegas

INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.

2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in "sectioning" the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.

University
Microfilms
International

300 N. ZEEB ROAD, ANN ARBOR, MI 48106
18 BEDFORD ROW, LONDON WC1R 4EJ, ENGLAND

NIXON, ANDREW R.

A STUDY OF THE RELATIONSHIP BETWEEN CURRICULAR CHARACTERISTICS RECOMMENDED BY RECOGNIZED AUTHORITIES AND CURRICULAR CHARACTERISTICS FOUND IN EXISTING PROGRAMS FOR ACADEMICALLY GIFTED STUDENTS

University of Nevada, Las Vegas ED.D. 1978

University of Nevada,

Las Vegas

A Study of the Relationship Between Curricular Characteristics Recommended by Recognized Authorities and Curricular Characteristics Found in Existing Programs for Academically Gifted Students

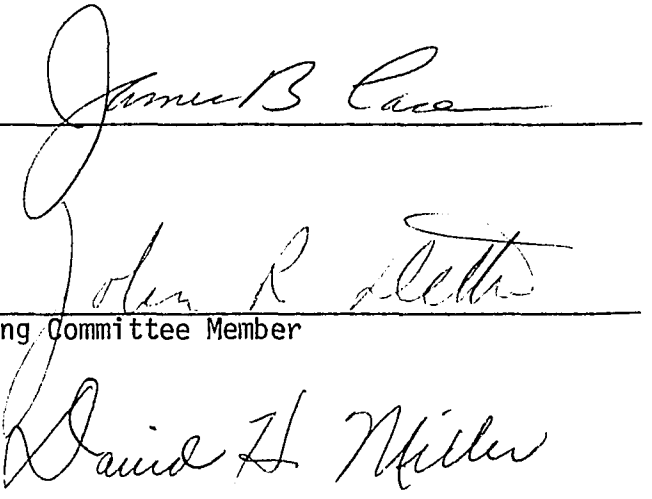
A dissertation submitted in partial fulfillment of the requirements for the degree Doctor of Education

by

Andrew R. Nixon

1978

The dissertation of Andrew R. Nixon is approved:



Advisor

Examining Committee Member

Examining Committee Member

Graduate Faculty Representative

Graduate Dean

University of Nevada,

Las Vegas

1978

VITA

January 28, 1943	Born, Clairton, Pennsylvania
1964	B.S., Psychology, Brigham Young University, Provo, Utah
1964-65	Teacher, Oxford Area School District, Oxford, Pennsylvania
1965-67	Teacher, School District #25, Pocatello, Idaho
1967-68	Teacher, Jordan School District, Midvale, Utah
1968-72	Teacher, Clark County School District, Las Vegas, Nevada
1973	M.A. Northern Arizona University, Flagstaff, Arizona
1973-76	Dean of Students, Clark County School District, Las Vegas, Nevada
1976-77	Teacher-Academically Talented Program, Clark County School District, Las Vegas, Nevada
1977-Present	Librarian, Clark County School District, Las Vegas, Nevada

ACKNOWLEDGEMENTS

My gratitude is extended to my major advisor, Dr. James B. Case, who provided assistance and insight throughout this study. Also, I am grateful to members of my committee, Dr. John R. Dettre, Dr. David H. Miller, Dr. John Trent, my liaison at the University of Nevada, Reno, and to my graduate school representative, Dr. Larry Kokkeler, all of whom provided constructive input throughout the study. My appreciation is also extended to Ms. Jane LoCicero and the professional staff at the Nevada State Department of Education for their valuable direction and encouragement.

Further appreciation goes to principals Frank Lamping and Richard C. Priest, who tolerated me during my trials and delays, to Ralph Hollingshead and John McGrath, who helped me tremendously with the preparation and treatment of my data, and to Joyce Standish for her typing of the manuscript.

Finally, and perhaps most importantly, my appreciation goes to my wife, Patricia, who endured with me.

TABLE OF CONTENTS

LIST OF TABLES

Chapter 1

INTRODUCTION

Background

A problem of continuing concern in the field of education is that of developing and utilizing the nation's human resources. Educators, parent groups, and school boards across the country have been focusing their attention on educational programs for academically gifted students. Harold C. Lyon, former Director of Education for the Gifted and Talented, U.S. Office of Education (USOE), concluded that ". . . these children need special attention if they are to be salvaged from lives of social uselessness and personal despair. They are our most discriminated against minority" (Lyon, 1972, p. 2). Between one million and two million gifted students receive little attention beyond their regular program (Dunn, 1973, p. 2). Further, Axford (1971, p. XV) has concluded: "There is nothing so unequal as the equal treatment of youth of unequal ability."

Within the differential education of academically gifted students, there currently exist three basic program models: Enrichment, acceleration, and the special grouping. Enrichment of the curriculum is the most widely described program model for the gifted student. It permits the student to stay with his own age group and within his own classroom while pursuing studies in greater depth and breadth. Enrichment can be defined as the type of activity devoted to the further

development of these skills:

1. the ability to associate and interrelate concepts,
2. the ability to evaluate facts and arguments critically,
3. the ability to create new ideas,
4. the ability to analyze and pose solutions to complex problems.

The enrichment activity planned for the gifted child must be directed to the above-noted characteristics; otherwise, the activity can become busy work (Dennis and Dennis, 1976, pp. 131-132).

Acceleration programs include early admission and grade "skipping." Students may "skip" a grade by advancing two grades instead of one at the end of a school year. The ungraded primary can be used to allow gifted children to progress at their own speed and complete the primary program in less time than children with average abilities. In the secondary school, students may take a heavy class load or may use summer school to complete requirements early.

Proponents of acceleration have suggested that students can progress at their own rate, avoiding boredom and unnecessary repetition. Studies have indicated that most creative work is done in early life (Syphers, 1972, p. 13). Decreasing the number of years in school, according to this viewpoint, will increase the gifted students' most productive years.

Also, it has been noted that in order to put this provision of acceleration into effect in a school system, one must have some method of screening and evaluating; ". . . this requires such expense in terms of professional time and diagnostic and evaluative testing that it has been considered not feasible by most school systems" (Gallagher, 1975,

p. 290).

Special grouping ranges from full-day classes to classes held once a week for gifted students. Gifted students thus may be separated from other students to provide advanced instruction. Special grouping can offer smaller student-teacher ratios, advanced studies, and the introduction of highly specialized courses in the curriculum. Research on the evaluation of special grouping has not been uniformly favorable toward this program model, and many curricular factors have been overlooked during the evaluation process (Torrance, 1965, p. 39). Research results were neither conclusive nor consistent regarding the social and academic results of special grouping (Goldberg, 1956, p. 40).

Interest in serving the needs of the academically gifted student has varied during the past century. The launching of Sputnik in 1957 revealed several inconsistencies in math and the sciences. These inconsistencies theoretically demonstrated low achievement in these areas. As a result of these inconsistencies, the curricular structure of American schools underwent a reevaluation and redirection. Based on this reevaluation and redirection, in the late 1960's, the U.S. Office of Education, through its Elementary and Secondary Education Act, allocated funds for the design of innovative programs that would meet the needs of academically gifted students. The incentive of having additional funding available encouraged many local and state education agencies to develop curricular offerings to meet the needs of academically gifted students. Many of the models that were developed under the original federal funding are still in operation as originally designed. Some models have undergone refinements and have enjoyed

additional funding, and some are just now in the process of being implemented.

The post-Sputnik federal funding "bonanza," which had directed monies toward programs for the gifted and talented student in the 1960's, began to subside in the mid-1970's in favor of increased concern in the areas of the physically and emotionally handicapped and the culturally disadvantaged (Thomas, 1971, pp. 193-197). Under the auspices of the Elementary and Secondary Education Act, Title III and the Gifted and Talented Assistance Act of 1969, additional funds were made available for the 1970's. The 1970's brought a renewed interest in the academically gifted student. Based on the March, 1972 report to the Congress, "Education of the Gifted and Talented," the Education Amendments of 1974 were enacted to provide special funds for gifted and talented students. As Thomas (1976, p. 22) stated, "Human talent is the greatest resource possessed by any nation. It is the talents of our children that must be discovered and nurtured by our teachers."

Because many programs were implemented in a relatively short period of time, 1974-present, little, if any, attempt has been made to evaluate these programs. This study attempted to develop an evaluation technique which would compare characteristics of recommended programs with characteristics of operational programs. This was accomplished by compiling a listing of curricular characteristics based upon current research and literature. The listing of characteristics was submitted to eighteen recognized authorities in the field of education for the gifted student and to administrators of programs for academically gifted students in all public school districts in the

United States with an enrollment of 25,000 or more. The results of the two mailings were then compared.

Need for the Study

A search of the literature revealed that only limited research had been done regarding curriculum evaluation for academically gifted students. Newland, in discussing the curriculum for gifted students, pointed out: "In light of a reawakening and legitimate concern for accountability in education, proper anticipation of evaluation is imperative" (Newland, 1976, p. 222). Further, French stated:

> There is a scarcity of published program evaluations, and of those published the methods of investigation differ so widely that a comparison of results is extremely difficult. Publications of more evaluative studies are needed to substantiate some of the existing data and to identify procedure that may have proven to be unusually valuable for others (French, 1964, p. 461).

More specifically, in a discussion of evaluation of programs for the gifted child, Renzulli stated that

> . . . the best weapon in the battle for program support and survival is a carefully planned and comprehensive evaluation that will accurately document all aspects of the services being provided for gifted and talented youngsters (Renzulli, 1975, p. 1).

Concerning programs for the disadvantaged gifted student, Fitzgerald stated: "The time is at hand to refine our approaches in working with the disadvantaged gifted, and it is evaluation reports based on solid methodology which will provide the basis for this refinement" (Fitzgerald, 1975, p. 51).

Gallagher noted:

> Evaluations of these special programs for the gifted have been sparse. The evidence seems to suggest that favorable

> results are obtained through special planning, especially in the areas of motivation and expression (Gallagher, 1966, p. 84).

Statement of the Problem

The problem upon which this study focused was:

> What is the relationship between curricular characteristics recommended by recognized authorities and curricular characteristics found in existing programs for the academically gifted student?

The purposes of this study were: (1) to complete a listing of curricular characteristics of supplementary educational programs for academically gifted students; (2) to identify from that listing which curricular characteristics were cited by recognized authorities in the field; (3) to identify from that listing how curricular characteristics were ranked by administrators of programs for academically gifted students in public school systems in the United States with a pupil enrollment of 25,000 or more; and (4) to compare the theoretical or recognized authorities' rankings and the operational or school district rankings of the curricular characteristics. This comparison would determine whether or not the curricular proposals of the recognized authorities were in general agreement with operational curriculum models.

Definition of Terms

Terminology in the field of education for the academically gifted student has not yet been standardized. Therefore, uncertainty and confusion often exist regarding definitions of terms. For purposes of this study, the following definitions were used:

Academically Gifted Student: A student who possesses superior intellectual potential and functional ability to achieve in the top two to three percent of the school population on an individually administered intelligence test (Newland, 1976, p. 9).

Categorical Sections: For purposes of this study, a categorical section is any one of the ten major headings (A through J) listed on this study's instrument (see Appendix B).

Curricular Characteristics: For purposes of this study, a curricular characteristic is any one of 48 items listed on this study's instrument (see Appendix B).

Differential Education: Educational experiences uniquely or predominantly suited to the distinguishing behavioral processes of intellectually superior people and to the adult roles that they typically assume as leaders and innovators. When successfully arranged to involve the capacities and needs of the gifted, the experiences (concepts, studies, activities, courses), by definition, are beyond the reach of and not appropriate to the capacities and needs of persons not exceptionally endowed with potential for learning and productive or creative behavior (Barbe, 1975, p. 10).

Identification: The process of finding those students who meet the criteria of giftedness adopted in a given school or system. Identification should begin as early as possible, should be systematic, i.e., following a defensible plan, and should be continuous so as to improve the chances of discovering larger numbers of youth qualified for differential education. A variety of techniques exist for screening the pupil population, most of which have some virtue, and not one of

which--particularly, a single measure of intelligence--is sufficient alone (Barbe, 1975, p. 11).

Program: The curriculum consists of four basic categories or programs: academic disciplines, cultural studies, occupational fields, and specialized education areas. The fourth type includes the gifted, the talented, and the academically superior (Firth and Kimpston, 1973, p. 14).

Program Evaluation: For purposes of this study, program evaluation will be referred to as the descriptive act of stating what essential components are present or absent in a given program, and then the making of judgments as to whether such components are functioning appropriately (Newland, 1976, p. 230).

Recognized Authorities: For purposes of this study, a recognized authority is a person who has distinguished him/herself in the field of education of the gifted student in one or more of the following: (1) has written significant material in the field; (2) has been responsible for design and implementation of programs for the gifted; (3) has been cited by his peers as an expert in the field; and/or (4) has been a key figure in the promotion of the movement for education for the gifted.

Method of the Study

From an extensive review of the literature related to curriculum design for academically gifted children, a general listing of recommended curricular characteristics of programs for academically gifted students was extracted (see Appendix E).

The adoption of the checklist of the curricular characteristics included a second review of the literature, which resulted in the refinement of the list to forty-eight curricular characteristics found most consistently in the research literature related to curricular programming for academically gifted students. During the literature review, it was discovered that Pledgie (1976) had constructed a checklist of curricular characteristics of supplemental programs for gifted students (see Appendix G). The purpose of the Pledgie checklist was to ". . . serve as a guide for cataloguing the key characteristics recommended and found in supplementary educational programs for gifted children" (Pledgie, 1976, p. 37).

The Pledgie checklist included several key feature headings from the Diagnostic and Evaluation Scale for Differential Education for the Gifted (DESDEG) model which had been designed by Renzulli (1969). Pledgie provided additional category headings to the DESDEG format so the diversity of program organizations could be better classified (Pledgie, 1976, p. 38). The final form of the curricular characteristic checklist used in this study was determined by taking the forty-eight items which had been found most consistently in the research literature and placing them in the format which had been designed by Pledgie.

The following which appeared in the Pledgie checklist were deleted from this author's instrument, which was mailed to the school districts:

Section A:

1. Project Title
2. Location
3. Project Director

Section B: Statements related to the philosophy and objectives place stress upon the following domain(s) of student development:

2. Intellectual domain

Section C: A review of the recommended program design indicates a relative degree of importance for each of the following objectives:

Section D:

1. Consideration of individual differences and a desire to meet these needs

Section E: The following administrative organizational pattern(s) are recommended in a program for the gifted:

Section F:

9. Teaching moments

Section G: Methods for the evaluation of the total program are recommended as follows:

Section H: Student identification criteria items are recommended as follows:

9. Other

Also deleted was the rating scale of 1. Essential, 2. Important, 3. Recommended, 4. Mentioned, and 5. Not Identified. In every case, the items were deleted because they were: (1) not relevant to the data which were gathered in this study; or (2) not included in this writer's refined listing of forty-eight curricular characteristics found most frequently in the research literature related to curricular programming for gifted students.

The following were added to this author's checklist to replace deletions:

Please complete this page as it pertains to your program. If you wish to remain anonymous, do not complete item 1. If you wish to have a copy of the results sent to you, check here ( )

Section A:

1. Name:
   Address:
   Directions: Please examine each of the following curriculum characteristics of programs for the academically gifted student. Place an X in the appropriate box as it relates to your program.

Section B:

Cognitive Domain

Also added was the rating scale of Always, Sometimes, Not Applicable, Seldom, Never.

In every case, additions were included because they were: (1) relevant to the data which were gathered; or (2) included in the writer's refined listing of forty-eight curricular characteristics found most frequently in the research literature related to curricular programming for gifted students.

The following which appeared in the Pledgie checklist were rewritten as follows:

A. General Descriptive Information
to
General Information

2. Grade levels participating in the program
to
Circle the grade levels in your district which participate in a program for the academically gifted

3. Urban-Suburban-Rural
to
Is your district setting (check one) Urban-Suburban-Rural?

4. Number of students served: Public-Non-Public-Both
to
How many total students are there in your district? Public-Non-Public

5. Funding source(s): Grant-School board budget-Legislative appropriation-Revenue sharing-Other

to

Check the funding source(s) of your program for academically gifted: Grant-School board budget-Legislative appropriation-Revenue sharing-Other

6. Yearly required operating budget FY72-FY73-FY74-FY75-FY76

to

Check the school years for which your program has been operational: 72-73 73-74 74-75 75-76 76-77 77-78

7. Math-L.A.-Reading-Science-Arts-Social Studies-Guidance-Other

to

Check the subject areas in which your academically gifted students are served: Math-L.A.-Reading-Science-Arts-Social Studies-Guidance-Other (please state)

C. 2. Provides more extensive development of academic skills

to

More extensive development of academic skills

D. 1. Consideration of individual differences and a desire to develop a curriculum to meet these needs

to

Consideration of individual differences

3. The inclusion of the student in the planning of his program

to

The inclusion of the student in the planning of his/her program

4. The curriculum is viewed as a continuum of sequential studies and learning experiences

to

A curriculum which is viewed as a continuum of sequential studies and learning experiences

I. 1. The teacher selection process should attempt to identify teachers who are democratic, responsible, and original in their classrooms

to

Attempts to identify teachers who are democratic, responsible and original in their classrooms

2. The teacher candidates should possess a background in a supervised program of gifted children

to

Candidates who possess a background in a supervised program of gifted children

3. Teacher candidates should have previous experience in actually working with gifted children

to

Candidates who have had previous experience in actually working with gifted children

In every case, rewriting was done: (1) for clarity; or (2) because the rewording was more relevant to the data which were gathered.

While Pledgie's checklist was designed to compare government grants, this author's instrument was designed to elicit reponses from two groups. The instrument which was mailed to the recognized authorities was identical to the one mailed to the school districts, with the following exceptions: Section A contained only General Information--Name:, Address:, Position:, and the rest of the instrument asked for recommendations (see Appendix B, 4, 5, and 6).

The forty-eight-item checklist was mailed to each of the eighteen recognized authorities in the field. The authorities listed were those generally accepted as leaders in the field. (See Appendix C for a listing of recognized authorities; see Appendix D for a brief biography of the recognized authorities.)

The forty-eight-item checklist was mailed to the administrator in charge of the program for gifted and talented pupils in each U.S. school district having a pupil enrollment of 25,000 or more. The selected school districts were identified from the Education Directory (Williams and Warf, 1976, p. 247).

The design and treatment of the data included a Spearman's coefficient of rank correlation (rho) which enabled a comparison to be made on a categorical section by categorical section basis.

Finally, the study was summarized, conclusions were drawn based

on the data, and recommendations were made for future programs and for further research.

General Assumptions

The rationale for this study was based upon the following frame of references and basic assumptions to the problem of education for academically gifted students:

1. Currently, there exists a need for model curriculums to meet the need of academically gifted students. This need has been documented in part in the Need for the Study section and will be elaborated upon in the Review of Literature section. Some of the findings of the report to the Congress (1972) which support this assumption reveal that:

--Existing services to the gifted and talented do not reach large and significant subpopulations and serve only a very small percentage of the gifted and talented population generally.

--Differentiated education for the gifted and talented is presently perceived as a very low priority by Federal, State, and most local levels of government and educational administration.

--Even where there is a legal or administrative basis for provision of services, funding priorities, crisis concerns and lack of personnel cause problems for the gifted to be miniscule or theoretical.

--Identification of gifted is hampered not only by costs of appropriate testing, when these methods are known and adopted, but also by apathy and even hostility among teachers, administrators, guidance counselors and psychologists.

2. Academically gifted students can be identified and do participate in special educational progress.

This assumption is supported by the work accomplished by Martinson (1974) which provides the availability of scales as well as other identification techniques for academically gifted students. Provisions for identification of disadvantaged, academically gifted students have been examined by Sato, Renzulli, Sisk, and others (Fitzgerald, 1975). Prototypes for intra-classroom and extra-classroom programs have been instituted with high levels of success (Kaplan, 1974).

3. The attitudes, interests and competence of academically gifted students can be modified through specially designed education experiences. This assumption can be supported by several authors who reported that teachers and parents of students enrolled in an enrichment program noticed marked improvement in areas such as development of freedom from fear, motivation, creativity, social acceptance and academic performance (Gallagher, and others, 1965, pp. 285-304). Syphers (1972, p. 21) pointed out that advantages to acceleration appear to be the stimulus of challenging work in high school. Meeker cited a case study in which an under-achieving, academically gifted student became a much better adjusted person as a direct result of special grouping (Hauch and Freehill, 1972, pp. 68-72).

Delimitations of the Study

The scope of the study has been limited in the following respects. This was done in order that the stated purposes could be

most efficiently accomplished.

1. The study was concerned only with innovative programs which were available during the past five school years, 1972-73 to 1976-77, inclusive.

2. The results of this study cannot be generalized to school districts with a student enrollment of less than 25,000.

3. The results of this study cannot be generalized to federally funded E.S.E.A. Title III projects, as outlined in the Pledgie study.

4. The results of this study cannot be generalized to project which characteristics actually produced desired student performance.

Summary

Chapter 1 included a discussion of the neglect that has taken place regarding gifted students, types of differential education available to these students, and funding difficulties which programs for gifted students had encountered. Further, the fact that limited research had been done in this field was cited, and the problem was stated. Terms were defined for use in this study, and the method for completing the study was outlined. Finally, general assumptions, upon which the rationale for this study was based, and the delimitations of the study were listed.

Chapter 2

A REVIEW OF RELATED LITERATURE

Although the primary concentration of this study was limited to the area of theoretical and operational program elements for the gifted student, to put these elements in their proper perspective, the roots of such elements had to be examined. This task was accomplished by review of: (1) the development of programs for the gifted student; (2) curricular considerations for programs for the gifted student; and (3) the current status and trends of the movement in education for the gifted student.

The Development of Programs for Gifted Students

This section includes a review of: the development of early programs for the gifted student; the rise of mental measurement; problems and accomplishments from 1910-1950; accomplishments of the 1950's; research studies of the gifted students; and educational provisions for the gifted student. It must be noted here that programs for gifted students were few and inconsistent until the post-Sputnik era.

The Development of Early Programs for Gifted Students

Although references to apparently academically gifted individuals have been found in the Bible, as well as the writings of Greek and Roman

philosophers, organized and scientific study of the academically gifted student began with the work of Sir Francis Galton in the latter years of the nineteenth century. Galton developed techniques for the objective observation and measurement of human traits as well as statistical methods of summarizing data (Galton, 1883, p. 48). In his work, rank percentiles were established and trait variability was shown to correspond with the normal distribution curve. Further, Galton furnished both a comprehensive description of the traits of academically gifted children and data regarding the origins and development of genius.

The earliest attempt to provide for gifted children in public schools of the United States was probably that of William T. Harris, in St. Louis, Missouri about 1863. His program introduced great flexibility into the promotional system, thus allowing gifted children to accelerate their pace rather than by following the "lock step" tradition.

As his program gained popularity throughout the United States, a multiple-track system saved time for the superior students by promoting them first on a semiannual basis, then quarterly, and finally, on a five-week basis (Passow, 1958, p. 2-1). The time period during which the needs of the gifted were met in the manner described above is often referred to as the flexible promotion period (1867-1910), followed by the rapid advancement period (1900-1920), and the enrichment period (1920-onward) (Goddard, 1928, p. 231).

The rapid advancement period was characterized by the multiple track plan, whereby gifted students were placed in a class and received a highly concentrated curriculum, permitting them to complete a two-year course in one year (Goddard, 1928, p. 1).

Lewis Terman and M. H. Oden carried out a longitudinal study of gifted individuals from earliest childhood to maturity. In the time periods of 1921-1922 and 1923-1928, 1,528 children (selected through the Binet test, the Terman Group Test, the Army Alpha Test, and the National Intelligence Test) were studied. The average age of the children at the start was eleven years, and the mean I.Q. of the subjects was 151. Terman obtained data on character, home conditions, medical conditions, achievement, interests, play interests and practices, and all books read over a two-month period. In 1930, Terman and his associates stated that the composite portrait of the group had changed only in minor respects over a period of six or seven years (Burks and others, 1939, p. 3).

Sumption, Norris, and Terman pointed out that by 1920, the public schools of three large cities, Los Angeles, Rochester, and Cleveland, were offering programs for the gifted. Emphasis on enrichment programs for the gifted continued until the period of World War II. At that time, war-time critics raised the question whether or not precious time was being wasted in traditional programs. Because it was felt that the essential objectives of education could be accomplished in less time than the conventional allowance, gifted students were permitted to enter college with less than four years of high school training, based on the successful completion of an entrance examination (Dennis and Dennis, 1976, p. 151).

Separate schools for gifted students were developed in 1901 and 1902 in Worchester, Massachusetts, Santa Barbara, Baltimore, and New York City. These schools and other similar ones made rapid advancement

and were the most widely used method of meeting the needs of the gifted student in the first twenty years of the twentieth century (Passow, 1958, p. 3).

Attempts at programs for gifted students can be traced back to 1863. These programs continued in isolated instances until the late 1930's.

The Rise of Mental Measurement

The area of mental measurement did not develop at the same rate as did gifted educational programs. In 1883 Galton defined "genius" in terms of percentages. He considered the talented as the "ablest 0.2 per cent," and genius as the "ablest 0.025 per cent" (Burt, 1975, p. 36).

Because of the awkwardness of using his definition of genius, Galton, in his later work, defined normalcy in terms of human stature, assigning the height of 3'2" to a boy of five years and noting that "a boy increases in height by almost exactly 2" every year . . ." (Goddard, 1928, p. 88). This principle was later adopted by the British Educational Department through use of a code which specified the expected attainments by students each school year from seven years onward. The normal performance of a seven-year-old child in spelling, arithmetic, and other general topics was described as standard I, that of a child of eight as standard II, and so on. It was the custom of teachers to nominate for possible certification as mentally defective, any student aged nine who could not do the work of a standard I and thus, was three years behind (Burt, 1975, p. 37).

The French psychologist, Alfred Binet, in 1889, founded the

laboratory of experimental psychology at The Sorbonne. Like Galton, Binet distinguished between cognitive and motivational characteristics, between general ability and special aptitudes. Binet developed an "intellectual scale" to measure the difference between general ability and special aptitude. By 1905, Binet and another French psychologist, Theophile Simon, had refined Binet's original scales to include vocabulary knowledge, memory, and reasoning. As a result of these scales, the measurement of an "intelligence quotient," or I.Q., was developed (Burt, 1975, p. 41).

While Henry H. Goddard translated Binet's scales into English and began to field-test the instruments, Louis Terman revised and adapted the Binet scales. In 1915, Terman, then a professor at Stanford University, presented the Stanford-Binet, which took into consideration the developmental tasks and vocabulary of the American student. Revisions of this intelligence test are still being widely used today.

The area of mental measurement was pioneered by Galton in the mid-1800's. Galton's measurement techniques were refined by Binet and Simon around the turn of the century. Their techniques were further refined by Goddard during the World War I years.

Problems and Accomplishments from 1910-1950

The large masses of American soldiers being inducted into the military during World War I provided a plethora of test data which, in turn, developed new concerns for the identification and programming of the gifted. Whipple, Henry, Hannel, and Coy (1919), in their Classes

for the Gifted Children, provided an experimental study of the methods for selection and instruction of gifted students. They concluded that Galton's standards for normalcy were inadequate (Whipple and others, 1919, p. 2). The Commission on Reorganization of Secondary Education issued its Cardinal Principles of Secondary Education (1918) which encouraged greater individual development of the exceptional student.

Terman (1921), with the aid of two associates, prepared the first bibliography of writings about the gifted child, and in 1925, Volume 1 of Genetic Studies of Genius by Terman and his associates appeared. In 1926, Catherine M. Cox took the reverse path of studying biographical material on 300 of the greatest men in history to determine their I.Q. In her book, The Early Mental Traits of Three Hundred Geniuses, it was noted that all 300 subjects were highly superior in intelligence (Cox, 1926, p. 42). Davidson (1929) provided additional research by studying the need for special classes for children of superior mental ability.

This period of the 1920's was characterized by the attempt to define intelligence in terms of a test score and to minimize the importance of teacher input. In The Autobiography of An Ex-Prodigy, Norbert Weiner stated, "My fourth grade teacher was less sympathetic with my shortcomings, and in one way or another I did not click." He further suggested that he surely would have been labeled an "ass" by the teacher had he not been tested (Dennis and Dennis, 1976, p. 70).

During the 1920's, the rapid advancement and grade-skipping techniques were rapidly falling from the favor of the public and the experts of the day. The feeling was that it would be in the best

interest of the gifted student if that student remained with his peers, regardless of the disparity of their academic abilities. According to Goddard (1928, p. 105), this situation gave rise to enrichment as a method of meeting the needs of gifted students. Rice (1970, p. 281) lists four facets of enrichment that became popular at the time and are still widely accepted today:

1. special student projects in selected subjects;
2. enrichment of the curriculum by special subjects not ordinarily offered;
3. teacher specialists exchange presentations;
4. field trip activities, camps, community involvement.

Using World War I soldiers for subjects, Terman and others further refined mental measurement and developed the I.Q. These testing techniques gave rise to another small surge of programming for gifted students.

Problems and Accomplishments of the 1950's

Prior to the 1950's, gifted educational programming left much to be desired other than to offer a base upon which the research and curricular programming could be built. Havighurst wrote:

> There has been so much interest and activity concerning the education of gifted children in recent years that it is hard to keep abreast of the march of events and even harder to get a perspective on the variety of things that are happening (Havighurst, 1955, p. 3).

The "recent years" to which Havighurst referred included the immediate post-World War II years of the waning 1940's. This era not only saw the research and publication of many works related to the education of the gifted, but also saw the beginning of organizations and commissions to

serve the needs of these students, such as Mensa, Parents of Gifted Children, and the Office of Child Development.

One major element which arose during the Renaissance of the 1950's was the broadened definition of "gifted." Havighurst noted:

> A meaningful definition of the gifted would not be a narrow one but might include every child who, in his age group, is superior in some ability which may make him an outstanding contributor to the welfare of, and quality of living in society (Havighurst, 1955, p. 4).

Strang (1958, p. 17) pointed out that "gifted children are far from being a homogeneous group; there are wide individual differences among children designated as gifted." Further, Witty included the following in a broadened definition of "gifted":

> (a) verbal ability and abstract intelligence, (b) science and mathematics, (c) art, (d) creative writing, (e) creative drama, (f) music, (g) social leadership, and (h) mechanical ability (Barbe, 1965, p. 36).

The thinking of the 1950's, then, was to broaden the concept of gifted from being strictly an intelligence entity measured by an I.Q. score to high achievement or ability in any one of a number of areas.

One previously-ignored problem of gifted students about which much was written during this era was the sometimes negative attitudes directed toward gifted students. Tannenbaum (1962, p. 9) noted that while gifted students were usually bigger, stronger, and sick less often than their peers, they often had difficulty adjusting socially. In a related study, college professors expressed feelings of shame and indignation regarding intellectuals in general (Seeman, 1958, p. 214).

In 1954, the Supreme Court struck down many laws which had prohibited some people from an opportunity to pursue their educational

endeavors. Particularly, the 1954 decision stressed compensatory education for all children regardless of race, creed, or national origin, i.e., the culturally disadvantaged. It is interesting to note that the term "culturally disadvantaged" was drawn along ethnic and racial lines. Lyon noted:

> Yet there is another minority that has as much right to special attention--a minority denoted not by race, socio-economic background, ethnic origin or impaired faculties, but by their exceptional ability. They come from all levels of society, from all races and national origins and are equally distributed among (sic) the sexes (Lyon, 1974, p. 2).

Further, as Gowan, Demos and Kokaska (1972, p. 313) pointed out, the gifted student often does not receive required counseling in the public schools, the reason being the misconception that gifted children are bright enough to handle their own problems. Dement (1957, p. 40), in studying bright students, found that they had a definite lack of counseling. Passow and others (1955, p. 4) found that gifted students expressed a need for curriculum adjustments, and the NEA Project on the Academically Talented (1960) corroborated these findings.

Overall, the 1950's was a period of growth and expansion for research and programming for the gifted. The NEA Project on the Academically Talented (1960) showed 77 percent of the schools reported some type of special program of provision for gifted students.

Research Studies of Gifted Students

During the nineteenth century, research studies sought to reveal the nature and needs of the slow-learning child. Similar studies of the gifted were not undertaken at this time. Terman (1925, p. 12)

listed four factors which operated to limit research on the gifted.

1. the influence of current beliefs, partaking of the nature of superstitions, regarding the essential nature of the Great Man, who has commonly been regarded by the masses as qualitatively set off from the rest of mankind, the product of supernatural causes, and moved by forces which are not to be explained by the natural laws of human behavior;

2. the widespread belief, hardly less superstitious in its origin, that intellectual precocity is pathological;

3. the vigorous growth of democratic sentiment in Western Europe and America during the last few hundred years, which has necessarily tended to encourage an attitude unfavorable to a just appreciation of native individual differences in human endowment;

4. the tardy birth of the biological sciences, genetics, psychology, and education.

Educational Provisions for Gifted Students

Attention to gifted children was stimulated by the publication, in 1896, of Galton's Hereditary Study of Genius. Terman believed that this book marked the beginning of an era of strong interest in individual differences. In some cities, notable adaptations to care for individual differences had already been made. In 1866, in Elizabeth, New Jersey, a multiple track system had been devised which permitted the bright and gifted pupil to advance more rapidly than the average pupil. In 1867, a flexible grading and promotional system was introduced in the St. Louis schools. This plan made it possible for

the gifted pupil to progress more rapidly through the elementary grades.

About 1900, a number of school systems made rather extensive provisions for differences in pupil ability. In some cities, such as Santa Barbara, California, pupils were placed in groups according to the results of tests. The "three-track plan" was used in many cities. Individualized instruction, strongly advocated by Frederick Burk, of San Francisco, was practiced in other cities (Davidson, 1929, p. 135).

Special classes for the gifted pupil were formed in 1920 in Los Angeles, Cleveland, and Rochester. The work of these classes was widely acclaimed as offering enriched opportunities and suitable challenge for the most capable pupils (Dennis and Dennis, 1976, p. 132). From 1920 to 1930, the gifted were provided for in some schools by acceleration or enrichment, or by a combination of these practices.

That the foregoing efforts were infrequent was pointed up by the White House Conference Report on Child Health and Protection (1929). It was estimated that in the United States there were one and one-half million pupils of superior intelligence who varied so greatly from the average that they required special education. One investigator reported that only forty cities in twenty-three states had schools and classes for such pupils; in all of these classes, only a total of about 4,000 children were enrolled (White House Report, 1929, p. 16).

Another indication of the small amount of attention to the gifted was found in the space allotted to this topic in publications. For example, in the volume on Special Education, The Handicapped and the Gifted, more than 515 pages were devoted to the handicapped, while only thirteen pages were given over to discussion of the gifted pupil. In

these thirteen pages, emphatic statements pointed to the responsibility of "all intelligent, patriotic citizens of the United States" to take

> . . . active and efficient steps to save this large number of children from the idleness, the more or less malicious mischief, and the neglect which is their portion in the average public schools of today (White House Report, 1929, p. 7).

The Committee which prepared this volume warned that it was socially reprehensible to neglect highly academically endowed children, for "in a democracy more than in any other form of government, high-grade leadership is essential" (White House Report, 1929, p. 74).

In the decade following the publication of the White House Conference Report, relatively little additional provision for gifted children was made in public schools. Moreover, during World War II, the general neglect of education resulted in even greater deprivations for this group.

The late 1800's found sporadic programs for gifted students. These included the track system and special classes for the gifted. However these attempts at programming were short-lived.

Curricular Considerations for Programs for Gifted Students

Although many authors have written about characteristics of a curriculum designed for the academically gifted student, there is a nucleus of writers recognized by their peers as authorities in the field. All of these recognized authorities do not necessarily agree with one another as to which characteristics should exist in a curriculum for academically gifted students, but they all do agree that such students should receive some type of treatment in addition to that offered to their fellow students.

This section includes a review of the program philosophy, program objectives, program curriculum, program organization, teaching strategies, progress evaluation, student identification and placement, teacher selection, and teacher in-service. The headings in this section parallel those in the instrument which was used in this study.

Program Philosophy

In view of the fact that Bloom's Taxonomy of Educational Objectives stands as a classic in terms of classification of educational goals, the cognitive, the affective, and the psycho-motor domain areas are included in the philosophy section as curricular considerations. Bloom (1956, p. 1) pointed out that the taxonomies are intended to provide for classification of the goals of our educational system.

Gowan and others (1964, p. 16) stated that society must make special efforts to develop the talents of its potentially most useful citizens, but in doing so, care should be taken not to define its concept of productivity so narrowly that the selection processes will fail to select tomorrow's leaders. Further, Tannenbaum (1962, p. 43) indicated that students recognized and admired academic talents in their peers. These talents must be defined in terms of subject achievement as well as Bloom's classification.

Torrance (1965, p. 134) showed that some children appear to be quite gifted in some subject areas but do poorly in creativity tests. It was further noted that because many gifted students excel in concept comprehension of specific subjects, programs should be designed to encourage creative expression in the form of divergent as well as convergent thinking (Witty, 1971, p. 213). The subject-achievement

domain is therefore included from the Hoepfner, Stern, and Nummedal taxonomy, as outlined by Clark (1972, p. 69).

Program Objectives

It has been noted that there exists a necessity of a firm commitment to sound socially, psychologically, and educationally based program objectives (Newland, 1976, p. 182). Kaplan (1974, p. 24) outlined the importance of specific program objectives when initiating a program for the gifted. A listing of ten program objectives was provided by Arn and Frierson in a book edited by Gowan (1971, p. 47). The above program objective recommendations provide the bases for curricular characteristics to be included in the survey portion of this study.

Program Curriculum

The curriculum of a program for academically gifted students must be recognizably different from that of the general educational program of a school (Gallagher, 1965, p. 81). Since academically gifted students are generally also creative students, their curriculum should provide for questions, problems, and materials which require problem-solving rather than strictly recall (Torrance, 1963, p. 21).

Perhaps characteristics of a curriculum for the academically gifted should be less structured and provide fewer specific requirements than the traditional curriculum. French observed:

> . . . the gifted need some time for daydreaming, for dragging a stick along a picket fence, or for fishing without really hoping to catch a fish. No one can rush along producing at a level higher than his normal one every waking moment. To push them beyond that level is unhealthy, but it is also

> unhealthy to keep them from operating at that level (French, 1964, p. 7).

Martinson (1975, p. 48) stated six points for elementary-school gifted students and four points for secondary students to enhance programs for gifted students. These included:

1. Allow the child to work in areas of his own interests, and give him any amount of time and freedom needed to pursue them.
2. Establishment of special goals with the child so that he might plan to pursue a topic in depth.
3. Permit latitude for self-management.
4. Accept the possibility of independent study projects at all grade levels.
5. Use any available external source to assist the child with necessary materials.
6. Emphasize opportunity for the child to use thought and generalization of asking broad questions.

Similarly, the secondary teachers considered developments and changes desirable for the gifted. Among their suggestions were:

1. Encouragement of high-level thinking and creativity.
2. Working with another teacher or two can create an unstructured environment in which the gifted can leave the classroom for individual research, study, or production.
3. Group seminar preparation outside the classroom.
4. Further, it has been noted that gifted children learn by complex associative methods rather than by rote drill, that they look for generalizations, are interested in abstracts of school subjects, and are able to work independently (Strang, 1958, p. 216).

A major shortcoming of some programs for the education of academically gifted students has been the mere administrative modification of structure rather than the development of a program with differentiated content, methods, and instructional resources (Passow,

1966, p. 27). Barbe and Renzulli, writing in a collection edited by Witty, stressed the importance of a curriculum for the gifted to make provisions for individual differences (Witty, 1971, p. 19). School and community resources need also be tapped to provide adults who will serve as resource people to accommodate gifted students in their studies (Gowan and others, 1964, p. 207).

Program Organization

Addressing himself to the question of homogeneous grouping for gifted children, Barbe (1965, p. 430) pointed out that the type of grouping a gifted child receives is not as important as providing that child with an enriched program. However, when the program is confined to enrichment in the regular classroom, the opportunities for the gifted child depend directly on the ingenuity, dedication, and time of the teacher (Delp and Martinson, 1975, p. 27).

Gallagher, on the other hand, indicated that if grouping is seen as merely preliminary to providing the proper environment for special new methods and content, then the chances are much greater that a favorable result will occur. When grouping is done for its own sake, the results are less satisfactory (Gallagher, 1964, p. 83). Further, it was noted that special grouping was successful when used as a technique to help gifted underachievers (Gallagher, 1966, p. 88).

Teaching Strategies

There are a multitude of teaching strategies available to the teacher of the academically gifted student. Some of the strategies such as role playing, case studies, field trips, and large- and small-

group discussions can be used as strategies in the regular classroom, as well as in the classroom for gifted students. The strategies will differ, however, in technique and intensity. Additional variations of these strategies can be found in classrooms meeting the needs of disadvantaged gifted students (Sato, 1975, p. 14). Field trips and challenging games are teaching strategies which, for the gifted student, may extend the school setting into the home (Delt and Martinson, 1975, p. 28).

Wolf and Macauley (1975, p. 45), among other strategies, noted that of analyzing a critical incident which may have occurred within the school or classroom setting of the academically gifted student.

Progress Evaluation

The need for progress evaluation in education for the academically gifted student has grown out of a greater concern for accountability. The general purpose of evaluation is to gather, analyze, and disseminate information which can be used to make decisions about the program (Renzulli, 1975, p. 51). Evaluation must be constantly undertaken to keep the program vibrant and ever-improving (Syphers, 1972, p. 60).

Newland discussed the length, breadth, and depth which should be included in an evaluation. Formal evaluation may be used by utilizing evaluation materials provided by commercial entities. Locally generated evaluation forms of a more general nature may also be used (Plowman, 1972, p. 2). Gowan concluded that evaluation in education forms the meeting edge between a culture's past and its future. There must be a change here if the culture is to grow and

progress and evaluation provides for this change (Gowan and others, 1964, p. 93).

Student Identification and Placement

There is a general agreement among writers in the field of education of the academically gifted student that some sort of test score should be used, at least in part, to identify such students. Martinson and Lessinger (1960, p. 25) and Tannenbaum (1962, p. 69) pointed out the importance of not using a group intelligence test as the only means of identification, but of including at least an individual intelligence test. Renzulli (1975, p. 123) stressed the importance of including some sort of creativity test during gifted student identification. Pegnato and Birch (1969, p. 166) outlined the inclusion of such items as teacher opinion, school grades, and achievement and aptitude tests. Also, Renzulli, Hartman, and Callahan discussed a scale which they developed for use by staff members other than teachers in identifying academically gifted students (Barbe and Renzulli, 1975, p. 38).

While discussing several studies involving gifted students, Syphers (1972, p. 70) outlined some limitations of group tests. She stated that some test designs are faulty, with ceiling levels which hamper the tests' capacity to identify the gifted child. Although Torrance (1965, p. 182), Sato (1975, p. 9), Tannenbaum (1962, p. 66), and a host of other writers have repeatedly deemphasized the importance of the I.Q. score, it still exists as one, if not the major, criterion for identification and placement of the gifted student.

Teacher Selection

The importance of the teacher upon the learning climate of the classroom has been well-documented by Isaacs (1971, p. 41), Durr (1970, p. 122), Havighurst (1970, p. 7), as well as many others. Selection of the teacher is, therefore, an important consideration in a program for gifted students. For the gifted student, it is important to maximize such learning inputs as thinking strategies, uncommon knowledge, and sophisticated methodologies. It is important, then, to have teachers who are democratic, original, and responsible in the classroom (Rice, 1970, p. 26). Another source of teachers of gifted students is teachers who have had successful teaching experiences in special programs which require additional mastery. Such programs include gifted programs (Plowman, 1972, p. 2).

In-Service Education

The continuous training of teachers has been identified as a critical element in the operation of a successful educational program for the academically gifted (Martinson, 1975, p. 215). Durr (1964, p. 263) emphasized the importance of school-centered staff training in discussing pertinent local problems through the use of meetings, workshops, and conferences. In-service activities should work in cooperation with a university by combining the systematic approach of a university program with attention to a specific school district and its needs (Gold, 1966, p. 169). Finally, an in-service program should call upon the resources from within the school district and within the community (Kaplan, 1974, p. 34).

The Current Status and Trends of the Movement in Education for Gifted Students

While the research and development of programs increased significantly in the era of the 1950's, it has increased many times beyond that in the past decade. Two primary factors have caused this rapid increase in research and program development: increased funding through federal, state, local, and organizational sources, and the establishment of several centers which generate much of the data, research, and program development.

Several legislative acts identified by the United States Office of Education (USOE) served as a framework through which federal funds flowed for the benefit of gifted education.

1. The Elementary and Secondary Education Act (ESEA), Titles I, II, III, IV, and VIII, as amended through 1970;
2. The Education of the Handicapped Act (which replaced ESEA Title VI, effective July 1, 1971);
3. The Higher Education Act of 1965;
4. The National Defense Education Act of 1958;
5. The Cooperative Research Act;
6. The Economic Opportunity Act of 1964; and
7. The Vocational Education Act of 1963.

An interest in education for the gifted was shown by the U.S. Congress by an addition to the 1969 Elementary and Secondary Education Amendment (PL 901-230) of section 806, entitled "Provisions Related to Gifted and Talented Children" (Dept. of HEW, 1972, p. c-54). The provision directed the U.S. Commissioner of Education to conduct a study in order to:

1. determine the extent of which special educational assistance programs are necessary or useful to meet the needs of gifted and talented children;

2. evaluate how existing federal educational assistance programs can be more effectively used to meet these needs;

3. recommend new programs, if any, needed to meet these needs.

The study of the gifted was conducted by USOE personnel working in the field of education for the gifted student. The results were summarized in the publication of the study as follows:

> The Commissioner's study has produced many recommendations from various sources concerning the need for special programs, suggested priorities in planning individual programs, estimates of the professional support and teacher training required, and adjustments in legal definitions that would enhance the possibility of state and local fiscal support (Dept. of HEW, 1972).

As a direct result of this report, all states began to move toward development and implementation of curriculum programs for gifted and talented students.

From the private sector, two areas have been noted as promoting the advancement of programs for the gifted. First is the growth of organizations such as the National Association for Gifted Children, Mensa, Gifted Students Foundation, and Intertel. Second, several major publishing houses have been the potential market for materials designed for academically gifted students. Hence, special materials, games, puzzles, and curriculum models for the academically gifted student have been offered for sale. While math, science, language arts, and social studies have been the most popular areas, such materials are also being offered to supplement music, home economics, industrial arts, foreign languages, and even physical education curriculums.

The past decade has been a period of great development and

building in the field of education for the gifted student. The writings of the past have been reassessed and, in some cases, redefined. The concept of giftedness being synonymous with I.Q. has been put in proper perspective, and the roles of government and private organizations have been indispensable. A trend toward a broader selection of better-quality programs has been established, a trend that should continue into the next decade.

Summary

Chapter 2 included a synthesis of the literature to provide an overview of what had been done in educational programming for the gifted student. The review of related literature focused upon the development of programs for the gifted student and the current status and trends of the movement in education for the gifted student. It was shown that the thinking of the 1950's was to broaden the concept of the gifted from being strictly an intelligence entity based on I.Q. scores to high achievement or ability in any one of a number of areas. Additionally, the second section of Chapter 2, Curricular Considerations, provided a foundation for the design of the instrument used in this study.

The development of the instrument and the procedure by which the instrument was utilized to determine the relationship between curricular characteristics, suggested recognized authorities, and those found in existing programs for the academically gifted student will be discussed in Chapter 3. The design of the study and the statistical treatment of the data will also be discussed in Chapter 3.

Chapter 3

THE DEVELOPMENT OF THE INSTRUMENT, THE PROCEDURE FOR THE STUDY, AND THE STATISTICAL TREATMENT OF THE DATA

The Development of the Instrument

The development of the instrument occurred in two sections: the establishment of a preliminary, general listing of curricular characteristics recommended for inclusion in programs for the academically gifted student and the adoption of the curricular characteristics for inclusion in the final form of the instrument.

Establishment of a General Listing

The activity of this step consisted of a general review of the literature related to curriculum design for academically gifted children. This initial review of the literature yielded information which resulted in a preliminary listing of sixty general curricular characteristics of programs for academically gifted students. This initial listing is referred to as such in the following sections (see Appendix E).

The Adoption of the Curricular Characteristics for Inclusion in the Instrument

Following the development of the initial listing of curricular characteristics as outlined in the previous section, a second review

of the literature was conducted, and the frequency of appearance of each curricular characteristic was noted. This activity resulted in a list of forty-eight curricular characteristics found most consistently in the research literature related to curricular programming for academically gifted students. The items which appeared most frequently formed an unmistakable pattern. The remaining twelve items were deleted from the checklist. The forty-eight items from the preliminary checklist thus provided the data for the final form of the instrument.

The format used in the design of the checklist was based upon the works of Renzulli (1968, p. 217), in his Diagnostic and Evaluation Scale for Differential Education for the Gifted (DESDEG). The checklist included all forty-eight items which had been selected for inclusion in the final form of the instrument used in this study. The instrument was then designed by following the major categories for a program for the gifted student, as outlined in the DESDEG model.

Additional categorical headings were added to the DESDEG list by Pledgie (1976, p. 38), in order that the diversity of program organizations could be better classified. The program categorical headings incorporated on the checklist were as follows:

(A) General Information

(B) Program Philosophy

(C) Program Objectives

(D) Program Curriculum

(E) Program Organization

(F) Teaching Strategies

(G) Progress Evaluation

(H) Student Identification and Placement

(I) Teacher Selection

(J) In-Service Education

The placement of checklist items into the final form of the instrument is explored on the following pages.

A. General Information provided for descriptive and demographic data about the subjects. This section, when requesting information from school districts, was necessarily different than when requesting information from recognized authorities (see Appendix C).

B. Program Philosophy included items from Bloom's cognitive domain (Bloom, 1956, p. 201), affective domain (Bloom, 1964, p. 176), and items from the Hoepfner, Stern, and Nummedal taxonomy (Clark, 1972, p. 69). The items in this section are:

1. Affective domain
2. Cognitive domain
3. Subject-achievement domain
4. Psychomotor domain

C. Program Objectives included ten common objectives as germane to programs for gifted students. The items in this section are:

1. Increased opportunity for academic growth
2. More extensive development of academic skills
3. Advanced development of work and study habits
4. More productivity due to improved learning climate
5. Increased motivation
6. Better personal and emotional adjustment
7. Fuller social development

8. Increased opportunity for individual rate of growth

9. Expansion of interests

10. Development of aesthetic values

D. Program Curriculum included items which were cited by certain authors and reiterated throughout the literature. Subsequent citations may be verbatim or in concept. The items, with their initial citations, are:

1. Recognition of individual differences and the desire to develop a curriculum to meet the wide variety of talents (Barbe, 1971, p. 19).

2. Utilization of a wide variety of school and community resources (Barbe, 1974, pp. 25-28).

3. Student participation in curricular planning (Bloom, 1971, pp. 8-10).

4. Viewing of a curriculum as a continuum of sequential studies and learning experiences (Hildreth, 1971, pp. 210-213).

5. Continuous evaluation of effects and effectiveness of curriculum (Durr, 1964, p. 132).

E. Program Organization yielded three basic types of format which include:

1. Special grouping

2. Acceleration

3. Enrichment

F. Teaching Strategies included eight strategies commonly found in educational programs:

1. Case studies

2. Role playing

3. Critical incidents

4. Individual programs

5. Small group discussions
6. Large group discussions
7. Field trips
8. Gaming and simulations

G. Progress Evaluation included Formal and Informal, Internal and External evaluations (Trump and Miller, 1968, p. 314). More precisely, this categorical heading includes:

1. Formal evaluation externally done by non-program personnel
2. Formal evaluation internally by program personnel
3. Informal evaluation externally by non-program personnel
4. Informal evaluation internally by program personnel

H. Student Identification and Placement developed through several phases, as outlined in the review of the literature. While the current trend seemed to be toward a deemphasis of I.Q. scores, there are still many authors who feel such scores, while not perfect, are some of the best placement techniques available. A more complete listing of items includes:

1. Individual I.Q. score
2. Group I.Q. score
3. Teacher opinion
4. School grades
5. Achievement test
6. Aptitude test
7. Importance is given to multidimensional multilevel selection criteria
8. The selection of students involves a variety of staff members

I. Teacher Selection for gifted students often included the same background and characteristics desirable in general classroom teachers. Additionally, teachers of gifted students should possess other traits. The items cited in the literature in the area of teacher selection include:

1. Attempts to identify teachers who are democratic, responsible and original in their classrooms
2. Candidates who possess a background in a supervised program of gifted children
3. Candidates who have had previous experience in actually working with gifted children

J. In-Service Education included the continuous training of the professional staff. The items in this section include:

1. Institutional/organizational educational programs
2. In-service programs operated by the local school district/staff
3. Combination school district/staff, outside institution/organization, in-service programs.

The Procedure for the Study

Recognized Authorities in the Field

Based upon their writings and contributions to education of the gifted, eighteen recognized authorities in the field of curriculum development for the academically gifted student were identified (see Appendix C). This group included individuals who have distinguished themselves through publications in the form of textbooks, treatises, articles, or other scholarly works in the field or individuals identified as experts by other researchers in the field. A biographical

sketch of each recognized authority used in this study is provided in Appendix D.

The instrument which was developed in the previous section was then mailed to each of the eighteen recognized authorities in the field. Each authority was sent a packet which included a cover letter (see Appendix A), the instrument (see Appendix B), and a stamped, self-addressed, return envelope. Directions for completion of the instrument were as follows:

> Directions: Please examine each of the following curricular characteristics of programs for the academically gifted student. Place an X in the appropriate box as it relates to your recommendations.

The instruments were completed by the recognized authorities by checking whether each item was recommended: Always, Sometimes, Not Applicable, Seldom, or Never.

School Districts

Using the Educational Directory for Public School Systems (Williams and Warf, 1976, p. 247) as a source from which school districts were identified (see Appendix F), a copy of the instrument was mailed to the administrator in charge of programs for the academically gifted students in each school district with a pupil enrollment of 25,000 or more. The total number of districts surveyed was 190. Each administrator was sent a packet which included a cover letter (see Appendix A), the instrument (see Appendix B), and a self-addressed return envelope. Directions for completion of the instrument were as follows:

Directions: Please examine each of the following curricular characteristics of programs for the academically gifted student. Place an X in the appropriate box as it relates to your program.

The instruments were completed by the school district administrators by checking whether each item related to their program: Always, Sometimes, Not Applicable, Seldom, or Never.

The rating system was applied to the recognized authroities and to the school districts in the same manner.

The Statistical Treatment of the Data

The results were tallied from the recognized authorities' responses and from the school districts' responses. Each item was analyzed, and percentages to each response within each item were established. Each item was assigned a mean score and based upon the mean scores the items were ranked within each categorical section.

Finally, Spearman's coefficient of rank correlation (rho) was tabulated to compare the categorical sections based upon the item rankings within each section. This technique was selected because, although quantitative measurements were obtained, they were not at least interval data in nature. Further, it provided a method which allowed the relationship of the rankings between the two groups to be examined as outlined by Ferguson, (1959, p. 179).

Summary

Chapter 3 included the development of the instrument, the procedure for the study, and the statistical treatment of the data. These procedures provided the necessary information to answer the research

question concerning the relationship between curricular characteristics recommended by recognized authorities and curricular characteristics found in existing programs for the academically gifted student.

Chapter 4

PRESENTATION AND INTERPRETATION OF THE DATA

The purpose of Chapter 4 is to present and interpret the data collected. The organization of Chapter 4 is as follows: First, a summary of general information and demographic data provided by responding school districts was reviewed; next, the data collected was presented and discussed according to its location in the instrument, first, that received from recognized authorities from the field of education of the gifted student, and secondly, that received from school districts in which programs for gifted students exist. Chapter 4 concludes with a discussion of the rank order relationship of the categorical listings.

General Information

The general information and demographic data were provided by the responding school districts only. A total of 190 instruments was sent to school districts throughout the United States and its territories. No follow-up mailing was required. A total of 135 instruments, or 71 percent, was returned. Of the returned instruments, seven indicated no program currently existed, thus providing 128 usable responses. Section A, General Information, includes the demographic data which are presented in Table 1. Part 1 of Table 1 indicates the number of school districts which did and did not identify themselves. Sixteen percent

Table 1

General Information and Demographic Data for the Responding School Districts[a] (N=128[b])

1.	SCHOOL DISTRICT IDENTIFICATION			
	Provided Identification	113		
	Remained Anonymous	22		
2.	NUMBER OF PROGRAMS PER GRADE LEVEL			
	First Grade	57	Seventh Grade	78
	Second Grade	63	Eighth Grade	78
	Third Grade	73	Ninth Grade	74
	Fourth Grade	84	Tenth Grade	68
	Fifth Grade	88	Eleventh Grade	63
	Sixth Grade	92	Twelfth Grade	61
3.	SCHOOL DISTRICT SETTING			
	Urban	71		
	Suburban	49		
	Rural	12		
4.	SIZE AND RANGE OF SCHOOL DISTRICTS			
	Average Enrollment	62,022		
	Range	25,077 to 653,618		
5.	FUNDING SOURCES			
	Grant	28		
	School Board	78		
	Legislative Appropriation	62		
	Revenue Sharing	3		
	Other	2		
6.	SCHOOL YEARS OPERATIONAL[c]			
	1972-73	66	1975-76	97
	1973-74	73	1976-77	99
	1974-75	91	1977-78	118
7.	SUBJECT AREAS SERVED			
	Math	90	Arts	68
	Language Arts	96	Social Studies	87
	Reading	47	Guidance	56
	Science	91	Other	14

[a]All data represent actual numbers.

[b]Seven of the responding school districts had no program.

[c]September-June.

of the school districts responding elected to remain anonymous.

Part 2 indicates the grade level in which programs are available to gifted students and the number of schools offering programs per grade level. The upper elementary grades had the largest number of programs.

Part 3 categorizes the setting in which each school district was located. Most programs were reported to be in urban and suburban areas; this was probably because of the size of the school districts surveyed.

Part 4 is used to determine the enrollment of school districts responding. The distribution of school district sizes of respondents appeared to be proportionate with those school districts surveyed.

Part 5 gives the sources of revenue for programs for the academically gifted. If more than one source was indicated, all sources were tallied. School board budgets and legislative appropriations were the most common sources of revenue for programs for the gifted student.

Part 6 cites which years, within the past six school years, the program had been operational. There is a trend toward more programs being offered each year.

Part 7 examines the subject areas in which academically gifted students were served. Most programs were available in the four core subject areas.

Program Philosophy

The recognized authorities, as shown in Table 2, recommended the curricular characteristics as follows:

Table 2

Responses of the Recognized Authorities
B. Program Philosophy

Item	Choice	Frequency	Percent	Mean	Rank
1 Affective Domain	1 Never	0	0	4.83	2
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	2	17		
	5 Always	10	83		
2 Cognitive Domain	1 Never	0	0	5.00	1
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	0	0		
	5 Always	12	100		
3 Subject Achievement Domain	1 Never	0	0	4.50	3
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	4	33		
	5 Always	7	58		
4 Psychomotor Domain	1 Never	1	8	3.42	4
	2 Seldom	1	8		
	3 Not Applicable	2	17		
	4 Sometimes	8	67		
	5 Always	0	0		

Affective Domain: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 17 percent recommended it Sometimes; and 83 percent recommended it Always. The mean was calculated to be 4.83, and this curricular characteristic was ranked second within this categorical section.

Cognitive Domain: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent

recommended it be Not Applicable; 0 percent recommended it Sometimes; and 100 percent recommended it Always. The mean was calculated to be 5.0, and this curricular characteristic was ranked first within this categorical section.

Subject Achievement Domain: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 33 percent recommended it Sometimes; and 58 percent recommended it Always. The mean was calculated to be 4.5, and this curricular characteristic was ranked third within this categorical section.

Psychomotor Domain: 8 percent of the recognized authorities recommended it Never; 8 percent recommended it Seldom; 17 percent recommended it be Not Applicable; 67 percent recommended it Sometimes; and 0 percent recommended it Always. The mean was calculated to be 3.42, and this curricular characteristic was ranked fourth within this categorical section.

A summary of this categorical section shows that the recognized authorities ranked the items as follows: Affective Domain - second; Cognitive Domain - first; Subject Achievement Domain - third; Psychomotor Domain - fourth.

The school districts, as shown in Table 3, rated the curricular characteristics as follows:

Affective Domain: 1 percent of the school districts rated it Never; 2 percent rated it Seldom; 5 percent rated it Not Applicable; 29 percent rated it Sometimes; and 64 percent rated it Always. The mean was calculated to be 4.54 and this curricular characteristic was

ranked second within this categorical section.

Cognitive Domain: 1 percent of the school districts rated it Never; 0 percent rated it Seldom; 2 percent rated it Not Applicable; 19 percent rated it Sometimes; and 79 percent rated it Always. The mean was calculated to be 4.75 and this curricular characteristic was ranked first within this categorical section.

Table 3

Responses from the School Districts
B. Program Philosophy

Item	Choice	Frequency	Percent	Mean	Rank
1 Affective Domain	1 Never	1	1	4.54	2
	2 Seldom	2	2		
	3 Not Applicable	6	5		
	4 Sometimes	37	29		
	5 Always	82	64		
2 Cognitive Domain	1 Never	1	1	4.75	1
	2 Seldom	0	0		
	3 Not Applicable	2	2		
	4 Sometimes	24	19		
	5 Always	101	79		
3 Subject Achievement Domain	1 Never	5	4	4.27	3
	2 Seldom	4	3		
	3 Not Applicable	10	8		
	4 Sometimes	42	33		
	5 Always	67	52		
4 Psychomotor Domain	1 Never	11	9	3.29	4
	2 Seldom	30	23		
	3 Not Applicable	20	16		
	4 Sometimes	45	33		
	5 Always	22	17		

Subject Achievement Domain: 4 percent of the school districts rated it Never; 3 percent rated it Seldom; 8 percent rated it Not Applicable; 33 percent rated it Sometimes; and 52 percent rated it Always. The mean was calculated to be 4.27 and this curricular characteristic was ranked third within this categorical section.

Psychomotor Domain: 9 percent of the school districts rated it Never; 23 percent rated it Seldom; 16 percent rated it Not Applicable; 35 percent rated it Sometimes; and 17 percent rated it Always. The mean was calculated to be 3.29 and this curricular characteristic was ranked fourth within this categorical section.

A summary of this categorical section shows the school districts ranked the items as follows: Affective Domain - second; Cognitive Domain - first; Subject Achievement Domain - third; and Psychomotor Domain - fourth.

Program Objectives

The recognized authorities, as shown in Table 4, recommended the curricular characteristics as follows:

Increased Opportunity for Growth: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 8 percent recommended it Sometimes; and 92 percent recommended it Always. The mean was calculated to be 4.92, and this curricular characteristic was tie-ranked 1.5 within this categorical section.

More Extensive Development of Academic Skills: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it

Table 4

Responses of the Recognized Authorities
C. Program Objectives

Item	Choice	Frequency	Percent	Mean	Rank
1 Increased Opportunity for Academic Growth	1 Never	0	0	4.92	1.5
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	1	8		
	5 Always	11	92		
2 More Extensive Development of Academic Skills	1 Never	0	0	4.67	7
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	4	33		
	5 Always	8	67		
3 Advance Development of Work and Study Habits	1 Never	0	0	4.83	3
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	2	14		
	5 Always	10	83		
4 More Productivity Due to Improved Learning	1 Never	0	0	4.92	1.5
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	1	8		
	5 Always	11	92		
5 Increased Motivation	1 Never	0	0	4.67	7
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	2	17		
	5 Always	9	75		
6 Better Personal and Emotional Adjustment	1 Never	0	0	4.75	4.5
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	3	25		
	5 Always	9	75		
7 Fuller Social Development	1 Never	0	0	4.33	10
	2 Seldom	0	0		
	3 Not Applicable	2	17		
	4 Sometimes	4	33		
	5 Always	6	50		

Table 4 (continued)

Item	Choice	Frequency	Percent	Mean	Rank
8 Increased Opportunity for Individual Rate of Growth	1 Never	0	0	4.50	9
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	4	33		
	5 Always	7	58		
9 Expansion of Interests	1 Never	0	0	4.75	4.5
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	3	25		
	5 Always	9	75		
10 Development of Aesthetic Values	1 Never	0	0	4.67	7
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	4	33		
	5 Always	8	67		

Seldom; 0 percent recommended it be Not Applicable; 33 percent recommended it Sometimes; and 67 percent recommended it Always. The mean was calculated to be 4.67, and this curricular characteristic was tie-ranked seventh within this categorical section.

Advanced Development of Work and Study Habits: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 17 percent recommended it Sometimes; and 83 percent recommended it Always. The mean was calculated to be 4.83, and this curricular characteristic was ranked third within this categorical section.

More Productivity Due to Improved Learning: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 8 percent

recommended it Sometimes; and 92 percent recommended it Always. The mean was calculated to be 4.92, and this curricular characteristic was tie-ranked 1.5 within this categorical section.

Increased Motivation: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 17 percent recommended it Sometimes; and 75 percent recommended it Always. The mean was calculated to be 4.67, and this curricular characteristic was tie-ranked seventh within this categorical section.

Better Personal and Emotional Adjustment: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 25 percent recommended it Sometimes; and 75 percent recommended it Always. The mean was calculated to be 4.25, and this curricular characteristic was tie-ranked 4.5 within this categorical section.

Fuller Social Development: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 17 percent recommended it be Not Applicable; 33 percent recommended it Sometimes; and 50 percent recommended it Always. The mean was calculated to be 4.33, and this curricular characteristic was ranked tenth within this categorical section.

Increased Opportunity for Individual Rate of Growth: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 33 percent recommended it Sometimes; and 58 percent recommended it Always. The mean was calculated to be 4.5, and this curricular characteristic was

ranked ninth within this categorical section.

Expansion of Interests: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 25 percent recommended it Sometimes; and 75 percent recommended it Always. The mean was calculated to be 4.75, and this curricular characteristic was tie-ranked 4.5 within this categorical section.

Development of Aesthetic Values: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 33 percent recommended it Sometimes; and 57 percent recommended it Always. The mean was calculated to be 4.67, and this curricular characteristic was tie-ranked seventh within this categorical section.

A summary of this categorical section shows the recognized authorities ranked the items as follows: Increased Opportunity for Academic Growth - 1.5 (tie); More Extensive Development of Academic Skills - seventh (tie); Advance Development of Work and Study Habits - third; More Productivity Due to Improved Learning - 1.5 (tie); Increased Motivation - seventh (tie); Better Personal and Emotional Adjustment - 4.5 (tie); Fuller Social Development - tenth; Increased Opportunity for Individual Rate of Growth - ninth; Expansion of Interests - 4.5 (tie); and Development of Aesthetic Values - seventh (tie).

The school districts, as shown in Table 5, rated the curricular characteristics as follows:

Table 5

Responses from the School Districts
C. Program Objectives

Item	Choice	Frequency	Percent	Mean	Rank
1 Increased Opportunity for Academic Growth	1 Never	0	0	4.79	1
	2 Seldom	0	0		
	3 Not Applicable	3	2		
	4 Sometimes	21	16		
	5 Always	104	81		
2 More Extensive Development of Academic Skills	1 Never	0	0	4.59	4
	2 Seldom	4	3		
	3 Not Applicable	6	5		
	4 Sometimes	28	22		
	5 Always	90	70		
3 Advanced Development of Work and Study Habits	1 Never	1	1	4.54	5
	2 Seldom	1	1		
	3 Not Applicable	6	5		
	4 Sometimes	40	31		
	5 Always	80	63		
4 More Productivity Due to Improved Learning Climate	1 Never	1	1	4.48	7
	2 Seldom	2	2		
	3 Not Applicable	6	5		
	4 Sometimes	44	34		
	5 Always	75	59		
5 Increased Motivation	1 Never	1	1	4.52	6
	2 Seldom	3	2		
	3 Not Applicable	6	5		
	4 Sometimes	36	28		
	5 Always	82	64		
6 Better Personal and Emotional Adjustment	1 Never	1	1	4.45	8
	2 Seldom	5	4		
	3 Not Applicable	5	4		
	4 Sometimes	42	33		
	5 Always	75	59		
7 Fuller Social Development	1 Never	1	1	4.30	9
	2 Seldom	6	5		
	3 Not Applicable	10	8		
	4 Sometimes	48	38		
	5 Always	63	49		

Table 5 (continued)

Item	Choice	Frequency	Percent	Mean	Rank
8 Increased Opportunity for Increased Rate of Growth	1 Never	0	0	4.60	3
	2 Seldom	3	2		
	3 Not Applicable	7	5		
	4 Sometimes	28	22		
	5 Always	90	70		
9 Expansion of Interests	1 Never	0	0	4.69	2
	2 Seldom	1	1		
	3 Not Applicable	5	4		
	4 Sometimes	24	21		
	5 Always	95	74		
10 Development of Aesthetic Values	1 Never	1	1	4.17	10
	2 Seldom	8	6		
	3 Not Applicable	10	8		
	4 Sometimes	58	45		
	5 Always	51	40		

Increased Opportunity for Academic Growth: 0 percent of the school districts rated it Never; 0 percent rated it Seldom; 2 percent rated it Not Applicable; 16 percent rated it Sometimes; and 81 percent rated it Always. The mean was calculated to be 4.79, and this curricular characteristic was ranked first within this categorical section.

More Extensive Development of Academic Skills: 0 percent of the school districts rated it Never; 3 percent rated it Seldom; 5 percent rated it Not Applicable; 22 percent rated it Sometimes; and 70% rated it Always. The mean was calculated to be 4.95, and this curricular characteristic was ranked fourth within this categorical section.

Advanced Development of Work and Study Habits: 1 percent of the school districts rated it Never; 1 percent rated it Seldom;

5 percent rated it Not Applicable; 31 percent rated it Sometimes; and 63 percent rated it Always. The mean was calculated to be 4.54, and this curricular characteristic was ranked fifth within this categorical section.

More Productivity Due to Improved Learning Climate: 1 percent of the school districts rated it Never; 2 percent rated it Seldom; 5 percent rated it Not Applicable; 34 percent rated it Sometimes; and 59 percent rated it Always. The mean was calculated to be 4.48, and this curricular characteristic was ranked seventh within this categorical section.

Increased Motivation: 1 percent of the school districts rated it Never; 2 percent rated it Seldom; 5 percent rated it Not Applicable; 28 percent rated it Sometimes; and 64 percent rated it Always. The mean was calculated to be 4.52, and this curricular characteristic was ranked sixth within this categorical section.

Better Personal and Emotional Adjustment: 1 percent of the school districts rated it Never; 4 percent rated it Seldom; 4 percent rated it Not Applicable; 33 percent rated it Sometimes; and 59 percent rated it Always. The mean was calculated to be 4.45, and this curricular characteristic was ranked eighth within this categorical section.

Fuller Social Development: 1 percent of the school districts rated it Never; 5 percent rated it Seldom; 8 percent rated it Not Applicable; 38 percent rated it Sometimes; and 49 percent rated it Always. The mean was calculated to be 5.30, and this curricular characteristic was ranked ninth within this categorical section.

Increased Opportunity for Individual Rate of Growth: 0 percent of the school districts rated it Never; 2 percent rated it Seldom; 5 percent rated it Not Applicable; 22 percent rated it Sometimes; and 70 percent rated it Always. The mean was calculated to be 4.60, and this curricular characteristic was ranked third within this categorical section.

Expansion of Interests: 0 percent of the school districts rated it Never; 1 percent rated it Seldom; 4 percent rated it Not Applicable; 21 percent rated it Sometimes; and 74 percent rated it Always. The mean was calculated to be 4.69, and this curricular characteristic was ranked second within this categorical section.

Development of Aesthetic Values: 1 percent of the school districts rated it Never; 6 percent rated it Seldom; 8 percent rated it Not Applicable; 45 percent rated it Sometimes; and 40 percent rated it Always. The mean was calculated to be 4.17, and this curricular characteristic was ranked tenth within this categorical section.

A summary of this categorical section shows the school districts ranked the items as follows: Increased Opportunity for Academic Growth - first; More Extensive Development of Academic Skills - fourth; Advanced Development of Work and Study Habits - fifth; More Productivity Due to Improved Learning Climate - seventh; Increased Motivation - sixth; Better Personal and Emotional Adjustment - eighth; Fuller Social Development - ninth; Increased Opportunity for Increased Rate of Growth - third; Expansion of Interests - second; Development of Aesthetic Values - tenth.

Program Curriculum

The recognized authorities, as shown in Table 6, recommended the curricular characteristics as follows:

Table 6

Responses of the Recognized Authorities
D. Program Curriculum

Item	Choice	Frequency	Percent	Mean	Rank
1 Consideration of Individual Differences	1 Never	0	0	5.00	1
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	0	0		
	5 Always	12	100		
2 The Utilization of a Wide Variety of School and Community Resources	1 Never	0	0	4.67	3
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	2	17		
	5 Always	9	75		
3 Inclusion of Student in Planning of His/Her Program	1 Never	0	0	4.33	4
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	8	67		
	5 Always	4	33		
4 Curriculum Viewed as a Continuum of Sequential Studies and Learning Experiences	1 Never	0	0	4.25	5
	2 Seldom	1	8		
	3 Not Applicable	0	0		
	4 Sometimes	6	50		
	5 Always	5	42		
5 Continuous Evaluation of the Effects and Effectiveness of the Curriculum	1 Never	0	0	4.75	2
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	3	25		
	5 Always	9	75		

Consideration of Individual Differences: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 0 percent recommended it Sometimes; and 100 percent recommended it Always. The mean was calculated to be 5.0, and this curricular characteristic was ranked first within this categorical section.

Utilization of a Wide Variety of School and Community Resources: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 17 percent recommended it Sometimes; and 75 percent recommended it Always. The mean was calculated to be 4.67, and this curricular characteristic was ranked third within this categorical section.

Inclusion of Student in Planning His/Her Program: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 67 percent recommended it Sometimes; and 33 percent recommended it Always. The mean was calculated to be 4.33, and this curricular characteristic was ranked fourth within this categorical section.

Curriculum Viewed as a Continuum of Sequential Studies and Learning Experiences: 0 percent of the recognized authorities recommended it Never; 8 percent recommended it Seldom; 0 percent recommended it Not Applicable; 50 percent recommended it Sometimes; and 42 percent recommended it Always. The mean was calculated to be 4.25, and this curricular characteristic was ranked fifth within this categorical section.

Continuous Evaluation of the Effects and Effectiveness of the

Curriculum: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 25 percent recommended it Sometimes; and 75 percent recommended it Always. The mean was calculated to be 4.25, and this curricular characteristic was ranked second within this categorical section.

A summary of this categorical section shows the recognized authorities ranked the items as follows: Consideration of Individual Differences - first; The Utilization of a Wide Variety of School and Community Resources - third; Inclusion of Student in Planning His/Her Program - fourth; Curriculum Viewed as a Continuum of Sequential Studies and Learning Experiences - fifth; and Continuous Evaluation of the Effects and Effectiveness of the Curriculum - second.

The school districts, as shown in Table 7, rated the curricular characteristics as follows:

Consideration of Individual Differences: 0 percent of the school districts rated it Never; 2 percent rated it Seldom; 1 percent rated it Not Applicable; 20 percent rated it Sometimes; and 78 percent rated it Always. The mean was calculated to be 4.74, and this curricular characteristic was ranked first within this categorical section.

Utilization of a Wide Variety of School and Community Resources: 0 percent of the school districts rated it Never; 2 percent rated it Seldom; 3 percent rated it Not Applicable; 30 percent rated it Sometimes; and 66 percent rated it Always. The mean was calculated to be 4.59, and this curricular characteristic was ranked second within this

categorical section.

Inclusion of Student in Planning His/Her Program: 0 percent of the school districts rated it Never; 5 percent rated it Seldom; 7 percent rated it Not Applicable; 48 percent rated it Sometimes; 41 percent rated it Always. The mean was calculated to be 4.24, and this curricular characteristic was ranked fourth within this categorical section.

Table 7

Responses from the School Districts
D. Program Curriculum

Item	Choice	Frequency	Percent	Mean	Rank
1 Consideration of Individual Differences	1 Never	0	0	4.74	1
	2 Seldom	2	2		
	3 Not Applicable	1	1		
	4 Sometimes	25	20		
	5 Always	100	98		
2 Utilization of a Wide Variety of School and Community Resources	1 Never	0	0	4.59	2
	2 Seldom	2	2		
	3 Not Applicable	4	3		
	4 Sometimes	38	30		
	5 Always	84	66		
3 Inclusion of Student in Planning His/Her Program	1 Never	0	0	4.24	4
	2 Seldom	6	5		
	3 Not Applicable	9	7		
	4 Sometimes	61	48		
	5 Always	52	41		
4 Curriculum Viewed as a Continuum of Sequential Studies and Learning Experiences	1 Never	0	0	4.21	5
	2 Seldom	7	5		
	3 Not Applicable	15	12		
	4 Sometimes	50	39		
	5 Always	56	44		
5 Continuous Evaluation of Effects and Effectiveness of Curriculum	1 Never	0	0	4.37	3
	2 Seldom	7	5		
	3 Not Applicable	9	7		
	4 Sometimes	42	33		
	5 Always	70	55		

Curriculum Viewed as a Continuum of Sequential Studies and Learning Experiences: 0 percent of the school districts rated it Never; 5 percent rated it Seldom; 12 percent rated it Not Applicable; 39 percent rated it Sometimes; and 44 percent rated it Always. The mean was calculated to be 4.21, and this curricular characteristic was ranked fifth within this categorical section.

Continuous Evaluation of Effects and Effectiveness of Curriculum: 0 percent of the school districts rated it Never; 5 percent rated it Seldom; 7 percent rated it Not Applicable; 33 percent rated it Sometimes; and 55 percent rated it Always. The mean was calculated to be 4.37, and this curricular characteristic was ranked third within this categorical section.

A summary of this categorical section shows the school districts ranked the items as follows: Consideration of Individual Differences - first; Utilization of a Wide Variety of School and Community Resources - second; Inclusion of Student in Planning His/Her Program - fourth; Curriculum Viewed as a Continuum of Sequential Studies and Learning Experiences - fifth; and Continuous Evaluation of Effects and Effectiveness of Curriculum - third.

Program Organization

The recognized authorities, as shown in Table 8, recommended the curricular characteristics as follows:

Special Groupings: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 58 percent recommended it Sometimes;

and 42 percent recommended it Always. The mean was calculated to be 4.42, and this curricular characteristic was ranked second within this categorical section.

Table 8

Responses of the Recognized Authorities
E. Program Organization

Item	Choice	Frequency	Percent	Mean	Rank
1 Special Groupings	1 Never	0	0	4.41	2
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	7	58		
	5 Always	5	42		
2 Acceleration	1 Never	0	0	4.08	3
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	9	95		
	5 Always	2	14		
3 Enrichment	1 Never	0	0	4.58	1
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	5	42		
	5 Always	7	58		

Acceleration: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 75 percent recommended it Sometimes; and 17 percent recommended it Always. The mean was calculated to be 4.08, and this curricular characteristic was ranked third within this categorical section.

Enrichment: 0 percent of the recognized authorities recommended

it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 42 percent recommended it Sometimes; and 58 percent recommended it Always. The mean was calculated to be 4.58, and this curricular characteristic was ranked first within this categorical section.

A summary of this categorical section shows the recognized authorities rated the items as follows: Special Groupings - second; Acceleration - third; and Enrichment - first.

The school districts, as shown in Table 9, rated the curricular characteristics as follows:

Table 9

Responses from the School Districts
E. Program Organization

Item	Choice	Frequency	Percent	Mean	Rank
1 Special Grouping	1 Never	2	2	4.52	2
	2 Seldom	2	2		
	3 Not Applicable	4	3		
	4 Sometimes	39	31		
	5 Always	80	63		
2 Acceleration	1 Never	2	2	3.91	3
	2 Seldom	15	12		
	3 Not Applicable	18	14		
	4 Sometimes	51	40		
	5 Always	42	33		
3 Enrichment	1 Never	2	2	4.54	1
	2 Seldom	2	2		
	3 Not Applicable	7	5		
	4 Sometimes	31	24		
	5 Always	86	67		

Special Grouping: 2 percent of the school districts rated it Never; 2 percent rated it Seldom; 3 percent rated it Not Applicable; 31 percent rated it Sometimes; and 63 percent rated it Always. The mean was calculated to be 4.52, and this curricular characteristic was ranked second within this categorical section.

Acceleration: 2 percent of the school districts rated it Never; 12 percent rated it Seldom; 14 percent rated it Not Applicable; 40 percent rated it Sometimes; and 33 percent rated it Always. The mean was calculated to be 3.91, and this curricular characteristic was ranked third within this categorical section.

Enrichment: 2 percent of the school districts rated it Never; 2 percent rated it Seldom; 5 percent rated it Not Applicable; 24 percent rated it Sometimes; and 67 percent rated it Always. The mean was calculated to be 4.54, and this curricular characteristic was ranked first within this categorical section.

A summary of this categorical section shows the school districts ranked the items as follows: Special Grouping - second; Acceleration - third; and Enrichment - first.

Teaching Strategies

The recognized authorities, as shown in Table 10, recommended the curricular characteristics as follows:

Case Studies: 0 percent of the recognized authorities recommended it Never; 17 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 50 percent recommended it Sometimes; and 25 percent recommended it Always. The mean was calculated to be 3.83, and this

curricular characteristic was ranked eighth within this categorical section.

Role Playing: 0 percent of the recognized authorities recommended it Never; 8 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 84 percent recommended it Sometimes; and 8 percent recommended it Always. The mean was calculated to be 3.92, and this curricular characteristic was ranked seventh within this categorical section.

Table 10

Responses of the Recognized Authorities
F. Teaching Strategies

Item	Choice	Frequency	Percent	Mean	Rank
1 Case Studies	1 Never	0	0	3.83	8
	2 Seldom	2	17		
	3 Not Applicable	1	8		
	4 Sometimes	6	50		
	5 Always	3	25		
2 Role Playing	1 Never	0	0	3.92	7
	2 Seldom	1	8		
	3 Not Applicable	0	0		
	4 Sometimes	10	84		
	5 Always	1	8		
3 Critical Incidents	1 Never	0	0	4.08	5
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	9	75		
	5 Always	2	17		
4 Individual Programs	1 Never	0	0	4.58	1
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	5	42		
	5 Always	7	58		

Table 10 (continued)

Item	Choice	Frequency	Percent	Mean	Rank
5 Small Group Discussion	1 Never	0	0	4.33	2
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	8	67		
	5 Always	4	33		
6 Large Group Discussion	1 Never	0	0	4.08	5
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	9	75		
	5 Always	2	17		
7 Field Trips	1 Never	0	0	4.08	5
	2 Seldom	1	8		
	3 Not Applicable	9	75		
	4 Sometimes	2	17		
	5 Always	0	0		
8 Gaming and Simulations	1 Never	0	0	4.25	3
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	9	75		
	5 Always	3	25		

Critical Incidents: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 75 percent recommended it Sometimes; and 17 percent recommended it Always. The mean was calculated to be 4.08, and this curricular characteristic was tie-ranked fifth within this categorical section.

Individual Programs: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 42 percent recommended it Sometimes; and 58 percent recommended it Always. The mean was calculated to be

4.58, and this curricular characteristic was ranked first within this categorical section.

Small Group Discussion: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 67 percent recommended it Sometimes; and 33 percent recommended it Always. The mean was calculated to be 4.33, and this curricular characteristic was ranked second within this categorical section.

Large Group Discussion: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 75 percent recommended it Sometimes; and 17 percent recommended it Always. The mean was calculated to be 4.08, and this curricular characteristic was tie-ranked fifth within this categorical section.

Field Trips: 0 percent of the recognized authorities recommended it Never; 8 percent recommended it Seldom; 75 percent recommended it be Not Applicable; 17 percent recommended it Sometimes; and 0 percent recommended it Always. The mean was calculated to be 4.08, and this curricular characteristic was tie-ranked fifth within this categorical section.

Gaming and Simulations: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 75 percent recommended it Sometimes; 25 percent recommended it Always. The mean was calculated to be 4.25, and this curricular characteristic was ranked third within this categorical section.

A summary of this categorical section shows the recognized authorities ranked the items as follows: Case Studies - eighth; Role Playing - seventh; Critical Incidents - fifth (tie); Individual Programs - first; Small Group Discussions - second; Large Group Discussions - fifth (tie); Field Trips - fifth (tie); and Gaming and Simulations - third.

The school districts, as shown in Table 11, rated the curricular characteristics as follows:

Table 11

Responses from the School Districts
F. Teaching Strategies

Item	Choice	Frequency	Percent	Mean	Rank
1 Case Studies	1 Never	6	5	3.69	8
	2 Seldom	15	12		
	3 Not Applicable	17	13		
	4 Sometimes	65	51		
	5 Always	25	20		
2 Role Playing	1 Never	2	2	3.83	7
	2 Seldom	14	11		
	3 Not Applicable	7	5		
	4 Sometimes	86	67		
	5 Always	19	15		
3 Critical Incidents	1 Never	2	2	3.93	6
	2 Seldom	8	6		
	3 Not Applicable	14	11		
	4 Sometimes	77	60		
	5 Always	27	21		
4 Individual Programs	1 Never	0	0	4.34	2
	2 Seldom	4	3		
	3 Not Applicable	4	3		
	4 Sometimes	64	50		
	5 Always	56	44		

Table 11 (continued)

Item	Choice	Frequency	Percent	Mean	Rank
5 Small Group Discussion	1 Never	0	0	4.38	1
	2 Seldom	3	2		
	3 Not Applicable	1	1		
	4 Sometimes	68	53		
	5 Always	56	44		
6 Large Group Discussion	1 Never	2	2	4.16	4
	2 Seldom	6	5		
	3 Not Applicable	3	2		
	4 Sometimes	75	59		
	5 Always	42	33		
7 Field Trips	1 Never	3	2	4.17	3
	2 Seldom	5	4		
	3 Not Applicable	2	2		
	4 Sometimes	75	59		
	5 Always	43	34		
8 Gaming and Simulations	1 Never	2	2	4.05	5
	2 Seldom	8	6		
	3 Not Applicable	4	3		
	4 Sometimes	82	64		
	5 Always	32	25		

Case Studies: 5 percent of the school districts rated it Never; 12 percent rated it Seldom; 13 percent rated it Not Applicable; 51 percent rated it Sometimes; and 20 percent rated it Always. The mean was calculated to be 3.69, and this curricular characteristic was ranked eighth within this categorical section.

Role Playing: 2 percent of the school districts rated it Never; 11 percent rated it Seldom; 5 percent rated it Not Applicable; 67 percent rated it Sometimes; and 15 percent rated it Always. The mean was calculated to be 3.83, and this curricular characteristic was ranked seventh within this categorical section.

Critical Incidents: 2 percent of the school districts rated it Never; 6 percent rated it Seldom; 11 percent rated it Not Applicable; 60 percent rated it Sometimes; and 21 percent rated it Always. The mean was calculated to be 3.93, and this curricular characteristic was ranked sixth within this categorical section.

Individual Programs: 0 percent of the school districts rated it Never; 3 percent rated it Seldom; 3 percent rated it Not Applicable; 50 percent rated it Sometimes; and 44 percent rated it Always. The mean was calculated to be 4.34, and this curricular characteristic was ranked second within this categorical section.

Small Group Discussion: 0 percent of the school districts rated it Never; 2 percent rated it Seldom; 1 percent rated it Not Applicable; 53 percent rated it Sometimes; and 44 percent rated it Always. The mean was calculated to be 4.38, and this curricular characteristic was ranked first within this categorical section.

Large Group Discussion: 2 percent of the school districts rated it Never; 5 percent rated it Seldom; 2 percent rated it Not Applicable; 59 percent rated it Sometimes; and 33 percent rated it Always. The mean was calculated to be 4.16, and this curricular characteristic was ranked fourth within this categorical section.

Field Trips: 2 percent of the school districts rated it Never; 4 percent rated it Seldom; 2 percent rated it Not Applicable; 59 percent rated it Sometimes; and 34 percent rated it Always. The mean was calculated to be 4.17, and this curricular characteristic was ranked third within this categorical section.

Gaming and Simulations: 2 percent of the school districts

rated it Never; 6 percent rated it Seldom; 3 percent rated it Not Applicable; 64 percent rated it Sometimes; and 25 percent rated it Always. The mean was calculated to be 4.05, and this curricular characteristic was ranked fifth within this categorical section.

A summary of this categorical section shows the school districts ranked the items as follows: Case Studies - eighth; Role Playing - seventh; Critical Incidents - sixth; Individual Programs - second; Small Group Discussion - first; Large Group Discussions - fourth; Field Trips - third; and Gaming and Simulations - fifth.

Progress Evaluation

The recognized authorities, as shown in Table 12, recommended the curricular characteristics as follows:

Formal Evaluation Externally Done by Non-Program Personnel: 0 percent of the recognized authorities recommended it Never; 17 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 75 percent recommended it Sometimes; and 8 percent recommended it Always. The mean was calculated to be 3.75, and this curricular characteristic was ranked third within this categorical section.

Formal Evaluation Internally Done by Program Personnel: 0 percent of the recognized authorities recommended it Never; 8 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 50 percent recommended it Sometimes; and 42 percent recommended it Always. The mean was calculated to be 4.25, and this curricular characteristic was ranked second within this categorical section.

Informal Evaluation Externally Done by Non-Program Personnel:

0 percent of the recognized authorities recommended it Never; 25 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 75 percent recommended it Sometimes; and 0 percent recommended it Always. The mean was calculated to be 3.5, and this curricular characteristic was ranked fourth within this categorical section.

Table 12

Responses of the Recognized Authorities
G. Progress Evaluation

Item	Choice	Frequency	Percent	Mean	Rank
1 Formal Evaluation Externally Done by Non-Program Personnel	1 Never	0	0	3.75	3
	2 Seldom	2	17		
	3 Not Applicable	0	0		
	4 Sometimes	9	75		
	5 Always	1	8		
2 Formal Evaluation Internally Done by Program Personnel	1 Never	0	0	4.25	2
	2 Seldom	1	8		
	3 Not Applicable	0	0		
	4 Sometimes	6	50		
	5 Always	5	42		
3 Informal Evaluation Externally Done by Non-Program Personnel	1 Never	0	0	3.50	4
	2 Seldom	3	25		
	3 Not Applicable	0	0		
	4 Sometimes	9	75		
	5 Always	0	0		
4 Informal Evaluation Internally Done by Program Personnel	1 Never	0	0	4.42	1
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	7	58		
	5 Always	5	42		

Informal Evaluation Internally Done by Program Personnel: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 58 percent recommended it Sometimes; and 42 percent recommended it Always. The mean was calculated to be 4.41, and this curricular characteristic was ranked first within this categorical section.

A summary of this categorical section shows the recognized authorities ranked the items as follows: Formal Evaluation Externally Done by Non-Program Personnel - third; Formal Evaluation Internally Done by Program Personnel - second; Informal Evaluation Externally Done by Non-Program Personnel - fourth; and Informal Evaluation Internally Done by Program Personnel - first.

The school districts, as shown in Table 13, rated the curricular characteristics as follows:

Formal Evaluation Externally Done by Non-Program Personnel: 19 percent of the school districts rated it Never; 22 percent rated it Seldom; 13 percent rated it Not Applicable; 27 percent rated it Sometimes; and 20 percent rated it Always. The mean was calculated to be 3.07, and this curricular characteristic was ranked fourth within this categorical section.

Formal Evaluation Internally Done by Program Personnel: 6 percent of the school districts rated it Never; 5 percent rated it Seldom; 5 percent rated it Not Applicable; 27 percent rated it Sometimes; and 56 percent rated it Always. The mean was calculated to be 4.22, and this curricular characteristic was ranked second within this categorical section.

Table 13

Responses from the School Districts
G. Progress Evaluation

Item	Choice	Frequency	Percent	Mean	Rank
1 Formal Evaluation Externally Done by Non-Program Personnel	1 Never	28	19	3.07	4
	2 Seldom	24	22		
	3 Not Applicable	16	13		
	4 Sometimes	35	27		
	5 Always	25	20		
2 Formal Evaluation Internally Done by Program Personnel	1 Never	8	6	4.22	2
	2 Seldom	7	5		
	3 Not Applicable	6	5		
	4 Sometimes	35	27		
	5 Always	42	56		
3 Informal Evaluation Externally Done by Non-Program Personnel	1 Never	20	16	3.16	3
	2 Seldom	20	16		
	3 Not Applicable	25	20		
	4 Sometimes	46	36		
	5 Always	17	13		
4 Informal Evaluation Internally Done by Program Personnel	1 Never	5	4	4.41	1
	2 Seldom	1	1		
	3 Not Applicable	7	5		
	4 Sometimes	39	30		
	5 Always	76	59		

Informal Evaluation Externally Done by Non-Program Personnel: 16 percent of the school districts rated it Never; 16 percent rated it Seldom; 20 percent rated it Not Applicable; 36 percent rated it Sometimes; and 13 percent rated it Always. The mean was calculated to be 3.16, and this curricular characteristic was ranked third within this categorical section.

Informal Evaluation Internally Done by Program Personnel: 4 percent of the school districts rated it Never; 1 percent rated it Seldom; 5 percent rated it Not Applicable; 30 percent rated it Sometimes; and 59 percent rated it Always. The mean was calculated to be 4.41, and this curricular characteristic was ranked first within this categorical section.

A summary of this categorical section shows the school districts ranked the items as follows:

Formal Evaluation Externally Done by Non-Program Personnel - fourth; Formal Evaluation Internally Done by Program Personnel - second; Informal Evaluation Externally Done by Non-Program Personnel - third; and Informal Evaluation Internally Done by Program Personnel - first.

Student Identification and Placement

The recognized authorities, as shown in Table 14, recommended the curricular characteristics as follows:

Individual I.Q.: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 67 percent recommended it Sometimes; and 33 percent recommended it Always. The mean was calculated to be 4.33, and this curricular characteristic was tie-ranked 3.5 within this categorical section.

Group I.Q.: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 84 percent recommended it Sometimes; and 8 percent

recommended it Always. The mean was calculated to be 4.0, and this curricular characteristic was tie-ranked 7.5 within this categorical section.

Table 14

Responses of the Recognized Authorities
H. Student Identification
and Placement

Item	Choice	Frequency	Percent	Mean	Rank
1 Individual I.Q.	1 Never	0	0	4.33	3.5
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	8	67		
	5 Always	4	33		
2 Group I.Q. Score	1 Never	0	0	4.00	7.5
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	10	84		
	5 Always	1	8		
3 Teacher Opinion	1 Never	0	0	4.33	3.5
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	8	67		
	5 Always	4	33		
4 School Grades	1 Never	0	0	4.00	7.5
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	12	100		
	5 Always	0	0		
5 Achievement Test	1 Never	0	0	4.25	5
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	9	75		
	5 Always	3	25		

Table 14 (continued)

Item	Choice	Frequency	Percent	Mean	Rank
6 Aptitude Test	1 Never	0	0	4.08	6
	2 Seldom	1	8		
	3 Not Applicable	0	0		
	4 Sometimes	8	67		
	5 Always	3	25		
7 Importance Given to Multi-Dimensional/ Multi-Level Section Criteria	1 Never	0	0	4.75	2
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	3	25		
	5 Always	9	75		
8 Selection of Students Involves a Variety of Staff Members	1 Never	0	0	4.83	1
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	2	17		
	5 Always	10	83		

Teacher Opinion: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 67 percent recommended it Sometimes; and 33 percent recommended it Always. The mean was calculated to be 4.33, and this curricular characteristic was tie-ranked 3.5 within this categorical section.

School Grades: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 100 percent recommended it Sometimes; and 0 percent recommended it Always. The mean was calculated to be 4.0, and this curricular characteristic was tie-ranked 7.5 within

this categorical section.

Achievement Test: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 75 percent recommended it Sometimes; and 25 percent recommended it Always. The mean was calculated to be 4.25 and this curricular characteristic was ranked fifth within this categorical section.

Aptitude Test: 0 percent of the recognized authorities recommended it Never; 8 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 67 percent recommended it Sometimes; and 25 percent recommended it Always. The mean was calculated to be 4.08, and this curricular characteristic was ranked sixth within this categorical section.

Importance Given to Multi-Dimensional/Multi-Level Selection Criteria: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it be Not Applicable; 25 percent recommended it Sometimes; and 75 percent recommended it Always. The mean was calculated to be 4.75 and this curricular characteristic was ranked second within this categorical section.

Selection of Students Involves a Variety of Staff Members: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 17 percent recommended it Sometimes; and 84 percent recommended it Always. The mean was calculated to be 4.83 and this curricular characteristic was ranked first within this categorical section.

A summary of this categorical section shows the recognized authorities ranked the items as follows: Individual I.Q. Score - 3.5 (tie); Group I.Q. Score - 7.5 (tie); Teacher Opinion - 3.5 (tie); School Grades - 7.5 (tie); Achievement Test - fifth; Aptitude Test - sixth; Importance Given to Multi-Dimensional/Multi-Level Selection Criteria - second; and Selection of Students Involves a Variety of Staff Members - first.

The school districts, as shown in Table 15, rated the curricular characteristics as follows:

Table 15

Responses from the School Districts
H. Student Identification and Placement

Item	Choice	Frequency	Percent	Mean	Rank
1 Individual I.Q. Score	1 Never	9	7	4.22	5
	2 Seldom	7	5		
	3 Not Applicable	6	5		
	4 Sometimes	31	24		
	5 Always	75	59		
2 Group I.Q. Score	1 Never	24	19	3.61	8
	2 Seldom	7	5		
	3 Not Applicable	11	9		
	4 Sometimes	39	30		
	5 Always	47	37		
3 Teacher Opinion	1 Never	5	4	4.53	1.5
	2 Seldom	2	2		
	3 Not Applicable	2	2		
	4 Sometimes	30	23		
	5 Always	89	70		

Table 15 (continued)

Item	Choice	Frequency	Percent	Mean	Rank
4 School Grades	1 Never	8	6	3.88	6
	2 Seldom	13	10		
	3 Not Applicable	14	11		
	4 Sometimes	46	36		
	5 Always	47	37		
5 Achievement Test	1 Never	5	4	4.36	3
	2 Seldom	5	4		
	3 Not Applicable	6	5		
	4 Sometimes	35	27		
	5 Always	77	60		
6 Aptitude Test	1 Never	9	7	3.62	7
	2 Seldom	16	13		
	3 Not Applicable	22	17		
	4 Sometimes	49	38		
	5 Always	32	25		
7 Importance Given to Multi-Dimensional/ Multi-Level Selection Criteria	1 Never	6	5	4.28	4
	2 Seldom	6	5		
	3 Not Applicable	11	9		
	4 Sometimes	28	22		
	5 Always	77	60		
8 Selection of Students Involves a Variety of Staff Members	1 Never	5	4	4.53	1.5
	2 Seldom	2	2		
	3 Not Applicable	8	6		
	4 Sometimes	18	14		
	5 Always	95	74		

Individual I.Q. Score: 7 percent of the school districts rated it Never; 5 percent rated it Seldom; 5 percent rated it Not Applicable; 24 percent rated it Sometimes; and 59 percent rated it Always. The mean was calculated to be 4.22, and this curricular characteristic was ranked fifth within this categorical section.

Group I.Q. Score: 19 percent of the school districts rated it Never; 5 percent rated it Seldom; 9 percent rated it Not Applicable; 30 percent rated it Sometimes; and 37 percent rated it Always. The mean was calculated to be 3.61, and this curricular characteristic was ranked eighth within this categorical section.

Teacher Opinion: 4 percent of the school districts rated it Never; 2 percent rated it Seldom; 2 percent rated it Not Applicable; 23 percent rated it Sometimes; and 70 percent rated it Always. The mean was calculated to be 4.54, and this curricular characteristic was tie-ranked 1.5 within this categorical section.

School Grades: 6 percent of the school districts rated it Never; 10 percent rated it Seldom; 11 percent rated it Not Applicable; 36 percent rated it Sometimes; and 37 percent rated it Always. The mean was calculated to be 3.87, and this curricular characteristic was ranked sixth within this categorical section.

Achievement Test: 4 percent of the school districts rated it Never; 4 percent rated it Seldom; 5 percent rated it Not Applicable; 27 percent rated it Sometimes; and 60 percent rated it Always. The mean was calculated to be 4.36, and this curricular characteristic was ranked third within this categorical section.

Aptitude Test: 7 percent of the school districts rated it Never; 13 percent rated it Seldom; 17 percent rated it Not Applicable; 38 percent rated it Sometimes; and 25 percent rated it Always. The mean was calculated to be 3.62, and this curricular characteristic was ranked seventh within this categorical section.

Importance given to Multi-Dimensional/Multi-Level Selection

Criteria: 5 percent of the school districts rated it Never; 5 percent rated it Seldom; 9 percent rated it Not Applicable; 22 percent rated it Sometimes; and 6 percent rated it Always. The mean was calculated to be 4.28, and this curricular characteristic was ranked fourth within this categorical section.

Selection of Students Involves a Variety of Staff Members: 4 percent of the school districts rated it Never; 2 percent rated it Seldom; 6 percent rated it Not Applicable; 14 percent rated it Sometimes; and 74 percent rated it Always. The mean was calculated to be 4.53 and this curricular characteristic tie-ranked 1.5 within this categorical section.

A summary of this categorical section shows the school districts rated the items as follows: Individual I.Q. Score - fifth; Group I.Q. Score - eighth; Teacher Opinion - 1.5 (tie); School Grades - sixth; Achievement Tests - third; Aptitude Test - seventh; Importance Given to Multi-Dimensional/Multi-Level Selection Criteria - fourth; and Selection of Students Involves a Variety of Staff Members - 1.5 (tie).

Teacher Selection

The recognized authorities, as shown in Table 16, recommended the curricular characteristics as follows:

Teachers that are Democratic, Responsible, and Original: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 25 percent recommended it Sometimes; and 75 percent recommended it Always. The mean was calculated to be 4.75 and this curricular

characteristic was ranked first within this categorical section.

Candidates Who Possess a Background in a Supervised Program of Gifted Students: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 58 percent recommended it Sometimes; and 42 percent recommended it Always. The mean was calculated to be 4.42, and this curricular characteristic was ranked third within this categorical section.

Table 16

Responses of the Recognized Authorities
I. Teacher Selection

Item	Choice	Frequency	Percent	Mean	Rank
1 Teachers that are Democratic, Responsible, and Original	1 Never	0	0	4.75	1
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	3	25		
	5 Always	9	15		
2 Candidates Who Possess a Background in a Supervised Program of Gifted Students	1 Never	0	0	4.42	3
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	7	58		
	5 Always	5	42		
3 Candidates with Previous Experience Working with Gifted Students	1 Never	0	0	4.50	2
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	6	50		
	5 Always	6	50		

Candidates with Previous Experience Working with Gifted Students: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 50 percent recommended it Sometimes; and 50 percent recommended it Always. The mean was calculated to be 4.5, and this curricular characteristic was ranked second within this categorical section.

A summary of this categorical section shows the recognized authorities ranked the items as follows: Teachers that are Democratic, Reponsible, and Original - first; Candidates Who Possess a Background in a Supervised Program of Gifted Students - third; and Candidates With Previous Experience Working with Gifted Students - second.

The school districts, as shown in Table 17, rated the curricular characteristics as follows:

Teachers Who are Democratic, Responsible, and Original: 1 percent of the school districts rated it Never; 1 percent rated it Seldom; 5 percent rated it Not Applicable; 20 percent rated it Sometimes; and 73 percent rated it Always. The mean was calculated to be 4.64, and this curricular characteristic was ranked first within this categorical section.

Candidates Who Possess a Background in a Supervised Program of Gifted Children: 5 percent of the school districts rated it Never; 12 percent rated it Seldom; 16 percent rated it Not Applicable; 39 percent rated it Sometimes; and 27 percent rated it Always. The mean was calculated to be 3.71, and this curricular characteristic was ranked third within this categorical section.

Table 17

Responses from the School Districts
I. Teacher Selection

Item	Choice	Frequency	Percent	Mean	Rank
1 Teachers Who are Democratic Responsible and Original	1 Never	1	1	4.64	1
	2 Seldom	1	1		
	3 Not Applicable	7	5		
	4 Sometimes	25	20		
	5 Always	94	73		
2 Candidates Who Possess a Background in a Supervised Program of Gifted Children	1 Never	7	5	3.71	3
	2 Seldom	15	12		
	3 Not Applicable	21	16		
	4 Sometimes	50	39		
	5 Always	35	27		
3 Candidates With Previous Experience Working with Gifted Students	1 Never	6	5	3.80	2
	2 Seldom	13	10		
	3 Not Applicable	15	12		
	4 Sometimes	61	48		
	5 Always	33	26		

Candidates with Previous Experience Working with Gifted Students: 5 percent of the school districts rated it Never; 10 percent rated it Seldom; 12 percent rated it Not Applicable; 48 percent rated it Sometimes; and 26 percent rated it Always. The mean was calculated to be 3.80, and this curricular characteristic was ranked second within this categorical section.

A summary of this categorical section shows the school districts ranked the items as follows: Teachers Who Are Democratic, Responsible, and Original - first; Candidates Who Possess a Background in a Supervised

Program of Gifted Children - third; and Candidates with Previous Experience Working with Gifted Students - second.

In-Service Education

The recognized authorities, as shown in Table 18, recommended the curricular characteristics as follows:

Table 18

Responses of the Recognized Authorities
J. In-Service Education

Item	Choice	Frequency	Percent	Mean	Rank
1 Institutional/ Organizational Education Programs	1 Never	0	0	4.25	2
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	9	75		
	5 Always	3	25		
2 In-Service Operated by Local School District Staff	1 Never	0	0	4.17	3
	2 Seldom	0	0		
	3 Not Applicable	1	8		
	4 Sometimes	8	64		
	5 Always	3	25		
3 Combination School District Staff/ Outsider In-Service	1 Never	0	0	4.42	1
	2 Seldom	0	0		
	3 Not Applicable	0	0		
	4 Sometimes	7	58		
	5 Always	5	42		

Institutional/Organizational Education Programs: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 75 percent recommended it Sometimes; and 25 percent recommended it Always. The

mean was calculated to be 4.25, and this curricular characteristic was ranked second within this categorical section.

In-Service Operated by Local School District Staff: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 8 percent recommended it be Not Applicable; 67 percent recommended it Sometimes; and 25 percent recommended it Always. The mean was calculated to be 4.17, and this curricular characteristic was ranked third within this categorical section.

Combination School District Staff/Outside In-Service: 0 percent of the recognized authorities recommended it Never; 0 percent recommended it Seldom; 0 percent recommended it Not Applicable; 58 percent recommended it Sometimes; and 42 percent recommended it Always. The mean was calculated to be 4.42, and this curricular characteristic was ranked first within this categorical section.

A summary of this categorical section shows the recognized authorities rated the items as follows: Institutional/Organizational Education Programs - second; In-Service Operated by Local School District Staff - third; and Combination School District Staff/Outside In-Service - first.

The school districts, as shown in Table 19, rated the curricular characteristics as follows:

Institutional/Organizational Education Programs: 5 percent of the school districts rated it Never; 9 percent rated it Seldom; 10 percent rated it Not Applicable; 39 percent rated it Sometimes; and 38 percent rated it Always. The mean was calculated to be 3.96, and this curricular characteristic was ranked third within this categorical section.

Table 19

Responses from the School Districts
J. In-Service Education

Item	Choice	Frequency	Percent	Mean	Rank
1 Institutional/ Organizational Education Programs	1 Never	6	5	3.96	3
	2 Seldom	11	9		
	3 Not Applicable	13	10		
	4 Sometimes	50	39		
	5 Always	48	38		
2 In-Service Operated by Local School District Staff	1 Never	2	2	4.32	1
	2 Seldom	5	4		
	3 Not Applicable	9	4		
	4 Sometimes	46	36		
	5 Always	66	52		
3 Combination School District Staff/ Outsider In-Service	1 Never	3	2	4.18	2
	2 Seldom	10	8		
	3 Not Applicable	8	6		
	4 Sometimes	47	37		
	5 Always	60	47		

In-Service Operated by Local School District Staff: 2 percent of the school districts rated it Never; 4 percent rated it Seldom; 4 percent rated it Not Applicable; 36 percent rated it Sometimes; and 52 percent rated it Always. The mean was calculated to be 4.32, and this curricular characteristic was ranked first within this categorical section.

Combination School District/Outside In-Service: 2 percent of the school districts rated it Never; 8 percent rated it Seldom; 6 percent rated it Not Applicable; 37 percent rated it Sometimes; and 47 percent rated it Always. The mean was calculated to be 4.18 and this curricular characteristic was ranked second within this categorical section.

A summary of this categorical section shows the school districts ranked the items as follows: Institutional/Organizational Education Programs - third; In-Service Operated by Local School District Staff - first; and Combination School District/Outside In-Service - second.

Statistical Comparison of Curricular Characteristics Recommended by Recognized Authorities, and Curricular Characteristics Found in Existing Programs

The use of Spearman's coefficient of rank correlation (rho) enabled a comparison to be made between the recommendations of recognized authorities and the ratings of school districts. Table 20 presents the Spearman coefficient of rank correlation. Coefficients of correlation are conventionally defined to take the value of +1, 0, and -1 in the presence of a perfect positive, independent, and perfect negative relationship, respectively, between the two variables (Ferguson, 1959, p. 180).

The comparisons were made among the categorical sections, based upon the item rankings within each section.

The Program Philosophy, Program Organization, and Teacher Selection sections showed a perfect positive correlation. That is, the recognized authorities and the school districts ranked the curricular characteristics in the exact same sequence, respectively.

The Program Curriculum, Teaching Strategies, Progress Evaluation, and Student Identification sections all had a very high correlation coefficient. That is, the recognized authorities and the school districts agreed upon the rankings of the respective curricular characteristics more than 75 percent of that time.

The Program Objectives section had the lowest correlation coefficient. That is, recognized authorities and the school districts ranked the respective curricular characteristics in such a manner that they approached an independent relationship.

Table 20

Spearmans Coefficient of Rank Correlation Between Ranking by Recognized Authorities and Rankings by School Districts

Program Characteristic Category	Calculated Spearman Ratio	No. of Items
B. Program Philosophy	1.00	4
C. Program Objectives	0.32	10
D. Program Curriculum	0.90	5
E. Program Organization	1.00	3
F. Teaching Strategies	0.86	8
G. Progress Evaluation	0.80	4
H. Student Identification and Placement	0.76	8
I. Teacher Selection	1.00	3
J. In-Service Education	-0.50	3

The In-Service Education section was the only one which had a negative correlation coefficient. The recognized authorities and the school districts ranked the respective curricular characteristics in such a manner that they yielded a negative relationship.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was designed to answer the research question, "What is the relationship between curricular characteristics recommended by recognized authorities and curricular characteristics found in existing programs for the academically gifted students?"

To best answer this question, the background of education for the gifted student was examined, the problem was stated, the need for the study was cited, and the method of the study was outlined. A thorough review of the literature was completed, which included a review of the development of programs and curriculum for the gifted student and the current status and trends of the movement in education for the gifted student.

Next, an instrument was developed to be used in the activities designed to answer the research question. The procedure used in the study was outlined and the statistical treatment of the data was discussed. During this phase of the study, an instrument was developed and mailed to 190 school districts in the United States and its territories. Also, the instrument was mailed to eighteen recognized authorities in the field of education for the gifted student. The mailings were completed on December 3, 1977. On January 10, 1978, follow-up mailings were conducted to the recognized authorities who had

not responded. January 27, 1978, was selected as the cut-off date for receipt of responses. By that date, a 71-percent response from recognized authorities had been noted.

Based on the responses, the data were presented and interpreted. Conclusions are presented below.

Conclusions

The following conclusions were derived from the data collected in the study. These conclusions answer the research question, "What is the relationship between curricular characteristics recommended by recognized authorities, and curricular characteristics found in existing programs for the academically gifted student?"

1. Within the Program Philosophy, Program Objectives, Program Curriculum, Program Organization, Teaching Strategies, Teacher Selection, and In-Service Education section, there was general agreement between the recognized authorities and the school districts on all thirty-six curricular characteristics.

2. Within the Progress Evaluation section, general agreement was evidenced between the recognized authorities and the school districts on the inclusion of Item G-2, having a formal evaluation done internally by program personnel, and on the inclusion of Item G-4, having an informal evaluation done internally by program personnel. There was, however, disagreement on the inclusion of Item G-1, formal evaluation externally done by non-program personnel. There was also disagreement on the inclusion of Item G-3, informal evaluation externally by non-program personnel.

3. Within the Student Identification and Placement section, general agreement was evidenced between the recognized authorities and the school districts on Items H-6, aptitude test, H-7, importance is given to multi-dimensional, multi-level selection criteria, and H-8, the selection of students involves a variety of staff members. There was disagreement on Items H-1, Individual I.Q. score, H-2, Group I.Q. score, H-3, teacher opinion, H-4, school grades, and H-5, achievement tests.

4. The Program Philosophy, Program Organization, and Teacher Selection sections showed a perfect positive correlation between the recognized authorities and the school districts when compared using Spearman's rho.

5. The Program Curriculum, Teaching Strategies, Progress Evaluation, and Student Identification and Placement sections showed a very high correlation (0.76 or higher) between the recognized authorities and the school districts when compared using Spearman's rho.

6. The Program Objectives section showed a low correlation (0.32) between the recognized authorities and the school districts when compared using Spearman's rho.

7. The In-Service Education section showed a negative correlation (-0.5) between the recognized authorities and the school districts when compared using Spearman's rho.

The overall results of the study suggested that there existed a high degree of agreement between the recommendations of recognized authorities in the field of education for the gifted student and the ratings of existing programs for gifted students in school districts. Areas of disagreement occurred only in two categorical sections,

Progress Evaluation and Student Identification and Placement.

A closer examination of the Progress Evaluation section showed that while 83 percent of the recognized authorities recommended formal evaluation externally done by non-program personnel, Always or Sometimes, school districts reported this being done Always or Sometimes less than 50 percent of the time. This disparity might be accounted for in what Renzulli describes as a lack of sufficient funds allocated for the implementation of such an evaluation (Renzulli, 1975, p. 183). Although the school districts may acknowledge this as a desirable characteristic, it appears not to be implemented with the desired frequency.

The other areas of disagreement within the Progress Evaluation section showed 75 percent of the recognized authorities recommending informal evaluation done externally by non-program personnel, Sometimes; school districts reported this being done Always or Sometimes less than 50 percent of the time. Again, the disparity might be attributed to budgetary considerations. Typically, evaluation of programs, particularly by non-program personnel, received a low priority (Renzulli, 1975, p. 183).

A further examination of the five areas of disagreement within the Student Identification and Placement section revealed the following:

1. Within the individual I.Q. score item, 33 percent of the recognized authorities recommended this item be included Always and 67 percent Sometimes. No authority rated this item as Not Applicable, Seldom, or Never. However, 59 percent of the school districts reported this being included Always; 24 percent, Sometimes; 5 percent, Not

Applicable; 5 percent, Seldom; and 7 percent, Never.

2. Within the group I.Q. score item, 8 percent of the recognized authorities felt this item should be included Always, 83 percent felt it should be included Sometimes, and 8 percent felt this item was Not Applicable. No recognized authorities rated this item Seldom or Never. However, 37 percent of the school districts reported this item being included Always, 30 percent Sometimes, 9 percent Not Applicable, 5 percent Seldom, and 19 percent Never.

3. Within the teacher opinion item, 33 percent of the recognized authorities rated this item Always and 67 percent rated it Sometimes. No recognized authorities rated this item Not Applicable, Seldom, or Never. However, 70 percent of the school districts reported this item being included Always, 23 percent Sometimes, 2 percent Not Applicable, 2 percent Seldom, and 4 percent Never.

4. Within the school grades item, no recognized authorities recommended this item be included Always, 100 percent recommended it be included Sometimes, and none rated this item Not Applicable, Seldom, or Never. However, 37 percent of the school districts reported this item being included Always, 36 percent Sometimes, 11 percent Not Applicable, 10 percent Seldom, and 6 percent Never.

5. Within the achievement test item, 25 percent of the recognized authorities recommended it be included Always and 75 percent Sometimes. No recognized authorities recommended it be Not Applicable, Seldom, or Never. However, 60 percent of the school districts reported this item being included Always, 27 percent Sometimes, 5 percent Not Applicable, 4 percent Seldom, and 4 percent Never.

While there appeared to be disagreement between the recommendations of the recognized authorities and the reports of the school districts regarding the above items, that disagreement lay not with the inclusion or exclusion of each item, but within the degree of inclusion or exclusion of each item.

A further examination of the Spearman rho revealed the following:

1. Within the Program Philosophy, Program Organization, and Teacher Selection sections, the recognized authorities ranked the respective items in the identical order as did the school districts. It must be noted that these sections contain items about which there is rarely disagreement in the field of education for the gifted student.

2. Within the Program Curriculum, Teaching Strategies, Progress Evaluation, and Student Identification and Placement sections, there was general agreement between the recognized authorities and the school districts regarding the ranking of the respective items. It must be noted that while disagreement was noted earlier regarding the degree of inclusion or exclusion of certain items within the Progress Evaluation and Student Identification and Placement sections, the rankings of the respective items within these sections showed general agreement between the two groups surveyed.

3. Within the Program Objectives section, there existed a relationship which lacks definition, as evidenced by its low degree of correlation between the recognized authorities and the school districts. It must be noted that while no disagreement was noted earlier regarding

the degree of inclusion or exclusion of all items within the Program Objectives section, the rankings of the items within this section showed a low degree of correlation between the two groups surveyed.

4. Within the In-Service Education section, there existed general disagreement between the recognized authorities and the school districts, as evidenced by its negative correlation between the recognized authorities and the school districts. It must be noted that while no disagreement was noted earlier regarding the degree of inclusion or exclusion of all items within the In-Service Education section, the ranking of the items within this section showed a negative correlation between the two groups surveyed.

Recommendations

Recommendations for Programs for Gifted Students

Recommendations are:

1. It is recommended that more funds be allocated on federal and state levels to encourage the education of gifted students. It is further recommended that since gifted students are often handicapped by the mere possession of their giftedness, federal monies, such as those controlled by PL94.142, be made available for programs for academically gifted students.

2. It is recommended that teacher-training and teacher-retraining programs be expanded on the university level to include the training of teachers of academically gifted students.

3. It is recommended that within existing programs for academically gifted students, more consideration be directed toward evaluation.

Recommendations for Further Research

Recommendations are:

1. This study compared recommended curricular characteristics with curricular characteristics in existing programs. Using the curricular characteristics from this study, it is recommended research be conducted to show which characteristics are most effective in raising the quality level of programs for the gifted student.

2. This study was concerned primarily with large urban and suburban school districts. Therefore, it is recommended that research be conducted to show the existence and effectiveness of programs for the gifted student in small school districts.

3. It is recommended that research be conducted to determine what impact a program for the academically gifted student has on individual students.

4. This study cited several curricular characteristics which were given a high recommendation by the recognized authorities and were reported by the school districts to be often included in a program. It is recommended that research be conducted to determine the effectiveness of such characteristics in meeting the objectives of the program.

5. Finally, it is recommended that research be conducted to discover the type of training a teacher needs to receive in order to work effectively with gifted students.

BIBLIOGRAPHY

Anderson, Harold H. "The Measurement of Domination and Socially Integrative Behavior in Teachers' Contacts with Children." Child Development, LV (1939), 73-89.

Ashley, Rosalind M. Activities for Motivating and Teaching Bright Children. Englewood Cliffs, N.J.: Parker Publishing Co., 1973.

Axford, Lavonne B. A Directory of Educational Programs for the Gifted. Metuchen, N.Y.: The Scarecrow Press, Inc., 1971.

Barbe, Walter B. "Differentiated Guidance for the Gifted." Education, LXXIV (1954), 306-11.

_____. "Characteristics of Gifted Children." Educational Administration and Supervision, XLI (2955), 207-17.

_____. "Evaluation of Special Classes for Gifted Children." Exceptional Children, XXII (1966), 60-2.

_____. "Career Achievement of Gifted Children." Personnel and Guidance Journal, XXXIV (1956), 356-9.

_____. "Homogeneous Grouping for Gifted Children." Educational Leadership, XIII (1956), 225-9.

_____. "Problems in Reading Encountered by Gifted Children." Elementary English, XXIII (1956), 274-8.

_____. "A Study of the Family Background of the Gifted." Journal of Educational Psychology, XLVII (1956), 302-9.

_____. "What Happens to Graduates of Special Classes for the Gifted?" Educational Research Bulletin, XXXVI (1957), 13-6.

_____. "Chatanooga's Program for Talented Youth." Exceptional Children, XXVII (1961), 350-2.

_____. Psychology and Education of the Gifted: Selected Readings. New York: Appleton-Century-Crofts, 1964.

_____. "Ingredients of a Creative Reading Program." Creative Reading for Gifted Learners: A Design for Excellence, ed. Michael Labula. Newark, Del.: International Reading Association, 1974.

Barbe, Walter B., and R. A. Horn. One in a Thousand--A Comparative Study of Moderately and Highly Gifted Elementary School Children. Columbus: State Department of Education, 1964.

Barbe, Walter B., and E. Norris. "Special Classes for Gifted Children in Cleveland." Exceptional Children, XXI (1954), 55-7.

Barbe, Walter B., and Joseph S. Renzulli. "Innovative Reading Programs for the Gifted and Creative." Readings for the Gifted and Creative, ed. Paul A. Witty. Newark, Del.: International Reading Association, 1971.

_____. Psychology and Education of the Gifted. New York: Irvington Publishers, Inc., 1975.

Barbe, Walter B., and E. Williams. "Developing Creative Thinking in Gifted Children through the Reading Process." The Reading Teacher, XCIV (1956), 200-3.

Beckner, Weldon, and Joe Cornett. The Secondary School Curriculum. Scranton, Pa.: Intext Educational Publishers, 1972.

Bloom, Benjamin S., ed. Stability and Change in Human Characteristics. New York: John Wiley & Sons, 1964.

_____. Taxonomy of Educational Objectives, Handbook 1: Cognitive Domain. New York: David McKay Co., Inc., 1956.

Bloom, Benjamin S., and others. Handbook of Formulative and Summative Evaluation of Student Learning. New York: McGraw-Hill Book Company, 1971.

Brown, Kenneth E., and Philip G. Johnson. Education for the Talented in Mathematics and Science. Washington: U.S.O.E., 1952.

Burks, Barbara, and others. Thirty-ninth Yearbook of the National Society for the Study of Education. Stanford, Calif.: Stanford University Press, 1939.

Burt, Cyril. The Gifted Child. New York: John Wiley & Sons, 1975.

Cardinal Principles of Secondary Education. Commission on Reorganization of Secondary Education, Washington, D.C., 1918.

Clark, Vernon L. A Model for the Evaluation of Preschool Curricula. Storrs, Conn.: University of Connecticut, 1972.

Cox, Charles M. The Early Mental Traits of Three Hundred Geniuses. Stanford, Calif.: Stanford University Press, 1926.

Davidson, Carl L. "Special Classes for Children of Superior Mental Ability." Third Yearbook of the Division of Education Research, Los Angeles. Los Angeles: Los Angeles School Publications, 1929.

DeHaan, Robert F. Guidelines for Parents of Capable Youth. Chicago: Science Research Associates, 1961.

Delp, Jeanne. An Approach to Research Skills for Grades 1-3. Calif.: Garden Grove Unified School District, 1975.

Delp, Jeanne, and B. Jennings. What Manner of Man: A Depth Study on Leonardo da Vinci for Fifth Grade. California: Garden Grove Unified School District, 1976.

Delp, Jeanne, and Ruth A. Martinson. The Gifted and Talented: A Handbook for Parents. Ventura, Calif.: Ventura County Superintendent of Schools, 1975.

Delp, Jeanne, and G. Stanley. Criteria for Teacher Selection. Calif.: Garden Grove Unified School District, 1975.

Dement, Allan. "Good Students Want Counseling Too." Journal of Counseling Psychology, IV (1957), 124-8.

Dennis, Wayne, and Margaret W. Dennis. The Intellectually Gifted: An Overview. New York: Grune and Stratton, 1976.

Department of Health, Education, and Welfare. Education of the Gifted and Talented. Vols. I & XI. Washington: Government Printing Office, 1972.

Dransfield, J. Edgar. Administration of Enrichment to Superior Children in the Typical Classroom. New York: Bureau of Publications, Teachers College, Columbia University, 1933.

Dunn, Lloyd M. Exceptional Children in the Schools. New York: Holt, Rinehart and Winston, Inc., 1973.

Durr, William K. The Gifted Student. New York: Oxford University Press, 1964.

_____. Reading Difficulties: Diagnosis, Correction, and Remediation. Paper presented at the 14th annual convention of the IRA, Kansas City, 1972.

Education of the Gifted and Talented. A report to the Congress of the United States by the U.S. Commission of Education, Washington, 1972.

Education Policies Commission. Education of the Gifted. Washington: N.E.A., 1950.

Ferguson, George A. Statistical Analysis in Psychology and Education. New York: McGraw-Hill Book Company, 1959.

Firth, Gerald R., and Richard D. Kimpston. The Curricular Continuum in Perspective. Itasca, Ill.: F. E. Peacock Publishers, 1973.

Fitzgerald, Ellen J., ed. Presentations at the First National Conference on the Disadvantaged Gifted. Ventura, Calif.: Ventura County Superintendent of Schools, 1975.

French, E. "Some Characteristics of the Achievement Motivation." Journal of Experimental Psychology, L (1955), 232-6.

French, Joseph L. "Interests of the Gifted." Vocational Guidance Quarterly, VII (1958), 14-7.

_____. Educating the Gifted: A Book of Readings. New York: Henry Holt, 1959.

_____. "Significance of the Deviation IQ for Exceptional Children." Phi Delta Kappa, XL (1959), 325.

_____. Educating the Gifted. New York: Holt, Rinehart and Winston, Inc., 1964.

Gallagher, James J. Analysis of Research on the Education of Gifted Children. Itasca: State of Illinois, 1960.

_____. Research Summary on Gifted Child Education. Itasca: State of Illinois, 1966.

_____. Talent Delayed--Talent Denied the Culturally Different Gifted Child. Washington, D.C.: The Foundation for Exceptional Children, 1974.

_____. Teaching the Gifted Child. Boston: Allyn and Bacon, Inc., 1964.

Gallagher, James J., ed. Teaching Gifted Students: A Book of Readings. Boston: Allyn and Bacon, Inc., 1966.

Gallagher, James J., and others. "Individual Classroom Adjustment for Gifted Children in Elementary Schools." Teaching Gifted Students: A Book of Readings, ed. James G. Gallagher. Boston: Allyn and Bacon, Inc., 1966.

Galton, Francis. Inquiries into Human Faculty and Its Development. 1883; rpt. London: The Eugenics Society, 1951.

Gifted Children and Youth. Council of Chief State School Officers, Washington, D.C., 1962.

Goddard, Henry H. School Training of Gifted Children. Yonkers-on-Hudson, N.Y.: World Book Company, 1928.

Gold, Milton J. Education of the Intellectually Gifted. Columbus, Ohio: Charles E. Merrill Books, Inc., 1965.

Goldberg, Miriam L. "On the Semantics of Provisions for Gifted Children." Exceptional Children, II (1956), 277-9.

_____. "Recent Research on the Talented." Teachers College Record, LX (1958), 150-63.

_____. "Studies in Underachievement Among the Academically Gifted." Freeing Capacity to Learn. Washington, D.C.: National Education Association, 1960.

Goldberg, Miriam L., and A. H. Passow. "A Study of Underachieving Gifted." Educational Leadership, XVI (1958), 121-5.

Gowan, John C., and George D. Demos. The Education and Guidance of the Ablest. Springfield, Ill.: Charles E. Thomas, 1964.

Gowan, John C., George D. Demos, and Charles J. Kakaska. The Guidance of Exceptional Children. New York: David McKay Co., 1972.

Gowan, John C., George D. Demos, and Paul E. Torrance. Creativity: Its Educational Implications. New York: John Wiley & Sons, Inc., 1967.

Gowan, John C., and Paul E. Torrance. Educating the Ablest. Itasca, Ill.: Peacock Publishers, Inc., 1971.

Gowan, John C., and others. "New Aspects in Guiding the Gifted in Demonstration Classes." Gifted Child Quarterly, XIII (1969), 103-12.

Hall, J. C., and N. M. Chansky. "Relationships Between Selected Ability and Achievements Tests in an Economically Disadvantaged Negro Sample." Psychological Reports, XXVIII (1971), 741-2.

Hauck, Barbara B., and Maurice F. Freehill. The Gifted--Case Studies. Dubuque, Iowa: Wm. C. Brown Co., 1972.

Havighurst, Robert J. Education for the Gifted. National Society for the Study of Education, Washington, D.C., 1958.

_____. "Education Reform: Change the Child." Viewpoints, XLVI (1970), 49-55.

Havighurst, Robert J., Eugene Stivers, and Robert F. DeHaan. A Survey of the Education of Gifted Children. Chicago: University of Chicago Press, 1955.

Hess, R. D. "Class and Ethnic Influences upon Socialization." Manual of Child Psychology, ed. P. Mussen. 3rd ed. New York: John Wiley & Sons, 1970.

Hildreth, Gertrude H., V. S. Ward, and Paul A. Witty, eds. Readings for the Gifted and Creative Student. Newark, Del.: International Reading Association, 1971.

Hunt, J. M. Intelligence and Experience. New York: Ronald Press, 1961.

Isaacs, Ann F. "Preparation for Teachers of the Gifted." Educating the Ablest, eds. John G. Gowan and E. Paul Torrance. Itasca, Ill.: Peacock Publishers, Inc., 1971.

Jacobs, C. "Effectiveness of Teacher and Parent Identification of Gifted Children as a Function of School Level." Psychology in the Schools, VIII (1971), 140-2.

_____. "Formal Recognition of Mentally Superior Children: Its Effect on Achievement and Achievement Motivation." Doctoral dissertation, Stanford University, 1959.

Jenkins, M. D. "Case Studies of Negro Children of Binet IQ 160 and Above." Journal of Negro Education, XII (1943), 159-66.

_____. "The Upper Limit of Ability Among American Negroes." Educating the Gifted: A Book of Readings, ed. J. L. French. Rev. ed. New York: Holt, Rinehart and Winston, 1964.

Jensen, A. "How Much Can We Boost IQ and Scholastic Achievement?" Harvard Educational Review, XXXIX (1969), 1-124.

Johnson, J. K. "Effects of the Process Approach upon IQ Measure of Disadvantaged Children." Illinois School Research, VII (1971), 22-4.

Johntz, W. F. "Innovation and the New Concern for the Disadvantaged." CTA Journal, V (January, 1967), 30-2.

Kaplan, Sandra N. Providing Programs for the Gifted and Talented: A Handbook. Ventura, Calif.: Office of the Superintendent of Schools, 1974.

Kaplan, Sandra N., and others. Enhanced Learning Program. Calif.: Inglewood Unified School District, 1970-73.

Krathwohl, D. R., B. S. Bloom, and B. B. Masias. Taxonomy of Objectives: The Classification of Educational Goals, Handbook II: Affective Domain. New York: David McKay, 1964.

L'Abate, Luciano, and Leonard T. Curtis. Teaching the Exceptional Child. Philadelphia: Saunders, 1975.

Laird, A. W. "Investigative Survey: The Fifty States Provisions for Gifted Children." The Gifted Child Quarterly, XV (1971), 205-16.

Laird, A. W., and Joseph P. Cangemi. "The Last Ones--The Gifted." The Gifted Child Quarterly, XVII (1973), 173-81.

Laird, A. W., and C. J. Kowalski. "Survey of 1,564 Colleges and Universities on Courses Offered in the Education of the Gifted-teacher Training. The Gifted Child Quarterly, XVI (1972), 93-111.

Lazzaro, Robert A., and others. Major Works--Honors Advanced Placement Program: Manual for Junior and Senior High School. Ohio: Cleveland Public Schools, 1970.

Los Angeles Unified School District, Administrative Area D. Educationally Disadvantaged Developmental Pilot Program. Los Angeles: Marvin Avenue Elementary School, 1973.

Lyon, Harold R. Learning to Feel, Feeling to Learn: Studies of the Person. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.

Martinson, Ruth A. Better Teaching for the Gifted. Ventura, Calif.: Ventura County Superintendent of Schools, 1975.

_____. "Children with Superior Cognitive Abilities." Exceptional Children in the Schools, ed. L. M. Dunn. 2d ed. New York: Holt, Rinehart and Winston, 1973.

_____. Curriculum Enrichment for the Gifted in Primary Grades. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968.

_____. Educational Programs for Gifted Pupils. Sacramento: California Department of Education, 1961.

_____. The Gifted Pupil and His Curriculum. California: Office of the Los Angeles County Superintendent of Schools, n.d.

_____. A Guide Toward Better Teaching for the Gifted. Ventura, Calif.: Ventura County Superintendent of Schools Office, 1976.

_____. The Identification of the Gifted and the Talented. Ventura, Calif.: Office of the Ventura County Superintendent of Schools, 1974.

_____. Special Programs for Gifted Pupils. California: State Department of Education, 1962.

Martinson, Ruth A., and L. Lessinger. "Problems in the Identification of Intellectually Gifted Children." Exceptional Children, XXVI (1960), 227-31.

Martinson, Ruth A., and J. Wiener. The Improvement of Teaching Procedures with Gifted Elementary and Secondary School Students. Final report, 1968, Project No. 6-1244, U.S. Office of Education.

National Education Association. Administration: Procedures and School Practices for the Academically Talented Student in the Secondary School. Washington: National Educational Association, 1960.

_____. Research on the Academically Talented Student. Washington: National Educational Association, 1961.

Newland, J. Ernest. The Gifted Socioeducational Perspective. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1976.

Niles, C. C. "Gifted Children." Manual of Child Psychology, ed. L. Carmichael. New York: John Wiley & Sons, 1954.

Parnes, S. J. Creative Behavior Guidebook. New York: Charles Scribner's Sons, 1967.

Passow, A. Harry. "Are We Short Changing the Gifted?" School Executive, LXXV (1955), 54-7.

_____. Bright Underachievers. New York: Teachers College Press, 1966.

_____. "Developing a Science for Rapid Learners." Science Education, XLI (1957), 104-22.

_____. "Eight Ways of Enriching Education for Gifted Children." Nations Schools, LVI (1955), 52.

_____. "Enrichment of Education for the Gifted." Education for the Gifted: Fifty-seventh Yearbook, Part II, NSSE, ed. N. B. Henry. Chicago: University of Chicago Press, 1958.

_____. "For Talented Students." New York State Education, XLIII (1956), 606-10.

_____. "The Gifted and the Disadvantaged." The National Elementary Principal, LI (1972), 22-31.

_____. Identifying and Counseling the Gifted College Students." Journal of Higher Education, XXVIII (1957), 21-9.

_____. "The Talented Youth Project. A Report on Research Under Way." Educational Research Bulletin, XXXVI (1957), 199-206.

_____. Talented Youth Project. New York: Horace Mann-Lincoln Institute, 1959. (Mimeo.)

Passow, A. Harry, J. Heasley, and D. J. Brooks. "Adapting the Curriculum to the Needs, Capabilities and Talents of Individual Students." Review of Educational Research, XXVII (1957), 3.

Passow, A. Harry, and others. Education of the Disadvantaged: A Book of Readings. New York: Holt, 1967.

_____. Planning for Talented Youth. New York: Bureau of Publication, Teachers College, Columbia University, 1955.

Pegnato, Carl W., and Jack W. Birch. "Locating Gifted Children in Junior High Schools: A Comparison of the Methods." Exceptional Children, VII, No. 25 (1969), 300-4.

Philadelphia Suburban School Study Council. Improving Programs for the Gifted, a Handbook for Teachers, Administrators, and Laymen. Philadelphia: University of Pennsylvania, 1965.

Pledgie, Thomas K. "A Comparison of Program Characteristics Found in Theoretical and Operational Supplementary Educational Programs for Gifted Students." Doctoral dissertation, University of Connecticut, 1976.

Plowman, Paul D. "California Mentally Gifted Minor Program." Education of the Gifted and Talented. Vol. II. Washington: Department of Health, Education, and Welfare, 1972.

_____. "Programming for the Gifted Child." An unpublished paper. Sacramento: California State Department of Education, 1967.

_____. "Rationale and Accountability Factors Basic to the Improvement and Support of Mentally Gifted Minor Programs." An unpublished paper. Sacramento: California Department of Education, 1974.

Plowman, Paul D., and J. Rice. California Project Talent. Sacramento: California State Department of Education, 1967.

Plowman, Paul D., and Irving Sato. Preliminary Criteria for Identifying Mentally Gifted but Culturally Disadvantaged Pupils. Sacramento: California State Department of Education, 1969.

Plowman, Paul D., J. Rice, Irving Sato, and others. Education of Mentally Gifted Minors. Sacramento: California State Department of Education, 1971.

Renzulli, Joseph S. "The Enrichment Triad Model." The Gifted Child Quarterly, XX, No. 3 (1977), 295.

_____. A Guidebook for Evaluating Programs for the Gifted and Talented. Storrs: University of Connecticut, 1975.

_____. Identifying Key Features in Programs for the Gifted and Talented. Storrs: University of Connecticut, 1975.

_____. "IMS: A Model for In-service Training." The Gifted Child Quarterly, XX, No. 2 (1977), 186-94.

_____. "Talent Potential in Minority Group Students." Exceptional Children (November, 1971).

Renzulli, Joseph S., R. K. Hartman, and C. M. Callahan. "Teacher Identification of Superior Students." Exceptional Children (November, 1971).

Renzulli, Joseph S., and S. V. Ward. Diagnostic and Evaluative Scales for Differential Education for the Gifted. Storrs: University of Connecticut, 1969.

Rice, Joseph P. California Project Talent: Identification and Case Study. Sacramento: California State Department of Education, 1964.

_____. The Gifted: Developing Total Talent. Springfield, Ill.: Charles C. Thomas, 1970.

Rice, Joseph P., and Paul D. Plowman. California Project Talent: Revised Guidelines for Establishing and Evaluating Programs for Mentally Gifted Minors. Sacramento: California State Department of Education, 1974.

Riessman, F. The Culturally Deprived Gifted. New York: Harper and Row, Publishers, Inc., 1962.

Rosen, C. E. "The Effects of Sociodramatic Play on Problem-solving Behavior Among Culturally Disadvantaged Preschool Children." Child Development, XLV (1974), 920-7.

Sato, Irving S. "The Culturally Different Gifted Child--The Dawning of His Day?" Exceptional Children (May, 1974), 108-14.

_____. Group Summary for Work Conference on the Culturally Different Gifted Child. Los Angeles: National/State Leadership Training Institute on the Gifted and the Talented, 1973. (Unpublished manuscript.)

_____. A Recommended Process for Setting up Programs for the Gifted and Talented. California, 1973.

Sato, Irving S., M. Birnbaum, and J. LoCicero. Developing a Written Plan for Education of Gifted and Talented Students. Ventura, Calif.: Office of Ventura County Superintendent of Schools, 1974.

Sato, Irving S., and J. Curry. "Training on the Right Track." The Gifted Child Quarterly, XXI, No. 2 (1977), 200-20.

Sato, Irving S., and others. Promising Practices: Teaching the Disadvantaged Gifted. Ventura, Calif.: Ventura County Superintendent of Schools, 1975.

Seeman, Michael. "The Intellectual and the Language of Minorities." American Journal of Sociology, LXIV (1958), 25-35.

Strang, Ruth. The Adolescent Views Himself. New York: McGraw-Hill Book Company, 1957.

_____. "The Counselor's Contribution to the Guidance of the Gifted, the Underachiever and the Retarded." Personnel and Guidance Journal, XXXV (1956), 494-6.

_____. "Gifted Adolescents' Views of Growing Up." Exceptional Children, XXIII (1956), 10-5.

_____. Guideposts for the Gifted Children Themselves. New York: Bureau of Publications, Teachers College Columbia University, 1958.

_____. Guideposts for Parents of Gifted Children. New York: Bureau of Publications, Teachers College Columbia University, 1958.

_____. Guideposts for Teachers of Gifted Children. New York: Bureau of Publications, Teachers College, Columbia University, 1958.

_____. Helping Your Gifted Child. New York: E. P. Dutton and Company, Inc., 1960.

_____. "How About Separate Classes for Gifted Children?" Grade Teacher, LXXV (1957), 18-9.

_____. "The Inner World of Gifted Adolescents." Exceptional Children, XVI (1950), 97-101, 125.

_____. "Insights of Gifted Students About Reading." The Reading Teacher, IX (1956), 204-8.

_____. "The Nature of Giftedness." Education of the Gifted, ed. Nelson B. Henry. Chicago: The University of Chicago Press, 1958.

_____. "Recent Trends in the Education of Gifted Children." Frontiers of Elementary Education, ed. V. J. Glennon. Syracuse, N.Y.: Syracuse University Press, 1955.

Sudman, Seymour. Applied Sampling. New York: Academic Press, 1976.

Syphers, Dorothy. Gifted and Talented Children: Practical Programming for Teachers and Principals. Washington: Council for Exceptional Children, 1972.

Tannenbaum, Abraham J. Adolescent Attitudes Toward Academic Brilliance. New York: Teachers College, Columbia University, 1962.

Terman, Lewis M. Genetic Studies of Genius. Vol. I. Stanford, Calif.: Stanford University Press, 1925.

Terman, Lewis, and M. Oden. Genetic Studies of Genius. Vol. V. Stanford, Calif.: Stanford University Press, 1930.

Thomas, Donald. "Gifted and Talented Children: The Neglected Minority." National Association of Secondary School Principals Bulletin, LX, No. 402 (1976).

Thomas, Susan B. "Neglecting the Gifted Courses to Hide Their Talents." The Gifted Child Quarterly, XV (1971), 193-7.

Torrance, E. Paul. "An Alternative to Compensatory Education." Educational Horizons, L (1972), 176-82.

_____. "Are the Torrance Tests of Creative Thinking Biased Against or in Favor of 'Disadvantaged' Groups?" Gifted Child Quarterly, XV (1971), 75-80.

_____. "Can We Teach Children to Think Creatively?" Journal of Creative Behavior, VI (1972), 114-41.

_____. "Creative Positives of Disadvantaged Children and Youth." Gifted Child Quarterly, XIII (1969), 71-81.

_____. Creativity. Belmont, Calif.: Dimensions Publishing Company in association with Fearon Publishers, 1969.

_____. "Differences Are Not Deficits." Teachers College Record, LXXV (1974), 471-87a.

_____. Education and the Creative Potential. Bloomington: University of Minnesota Press, 1963.

_____. Education and the Creative Potential. Minneapolis: University of Minnesota Press, 1964a.

_____. Encouraging Creativity in the Classroom. Dubuque, Iowa: William C. Brown, 1970.

_____. "Finding Hidden Talents Among Disadvantaged Children." Gifted Child Quarterly, XII (1968), 131-7.

_____. Gifted Children in the Classroom. New York: MacMillan Co., 1965.

_____. Guiding Creative Talent. Englewood Cliffs, N.J.: Prentice-Hall, 1962.

_____. How Creativity Development Can Awaken Unrecognized Potential. Paper presented at the conference on "Developing Unwakened and Unrecognized Potential" sponsored by the Minnesota State Department of Education, Minneapolis, April, 1969a.

_____. "Identifying the Creatively Gifted Among Economically and Culturally Disadvantaged Students." Gifted Child Quarterly, VIII (1964b), 171-6.

_____. "Interscholastic Brainstorming and Creative Problem-solving Competition for the Creatively Gifted." Gifted Child Quarterly, XVIII (1974), 3-7.

_____. "Issues in the Identification and Encouragement of Gifted Disadvantaged Children." The Association for the Gifted Newsletter. Washington: Council for Exceptional Children, 1969b.

_____. "Motivating the Creatively Gifted Among Disadvantaged Children." Gifted Child Quarterly, VII (1966), 7-13.

_____. Rewarding Creative Behavior. Englewood Cliffs, N.J.: Prentice-Hall, 1964c.

_____. The Torrance Tests of Creative Thinking. Princeton, N.J.: Personal Press, 1966.

_____. Understanding the Fourth Grade Slump in Creativity. Athens: Georgia Studies of Creative Behavior, 1967.

_____. "Ways Gifted Children Can Study the Future." Gifted Child Quarterly, XVIII (1974), 65-71.

_____. "What Gifted Disadvantaged Children Can Teach Their Teachers." Gifted Child Quarterly (1973), 243-9.

Torrance, E. Paul, and J. Khatena. "What Kind of Person Are You?: A Brief Screening Device for Identifying Creatively Gifted Adolescents and Adults." Gifted Child Quarterly (Summer, 1970), 71-5.

Torrance, E. Paul, and R. E. Myers. Creative Learning and Teaching. New York: Dodd, Mead, 1970.

Torrance, E. Paul, and J. P. Torrance. "Combining Creative Problem-solving with Creative Expressive Activities in the Education of Disadvantaged Young People." Journal of Creative Behavior, VI (1972), 1-10.

Trump, J. Lloyd. A School for Everyone. Washington: National Association of Secondary Principals, 1977.

Trump, J. Lloyd, and Delmas F. Miller. Secondary School Curriculum Improvement. Boston: Allyn and Bacon, 1968.

Ward, Virgil S. "Differential Education for the Gifted." The Gifted Child in Connecticut, eds. William G. Vassar and Joseph S. Renzulli. Hartford: Connecticut State Department of Education, 1967.

_____. Educating the Gifted: An Axiomatic Approach. Columbus, Ohio: Charles E. Merrill Books, Inc., 1961.

_____. "Educating Your Most Educable." American School Board Journal, CXL (1960), 26-7.

_____. "Education of Gifted." Virginia Journal of Education, LII (1958), 11-3.

_____. "Functions of Theory in Programs for the Gifted." Teachers College Record, LXII (1961), 532-9.

_____. "New Perspectives in the Education of the Gifted." Educational Forum, XXIV (1960), 329-335.

_____. "Systematic Intensification and Extensification of the School Curriculum." Exceptional Children, XXVII (1960), 67-71.

Warren, Thomas F. Ideas: Creative Thinking Techniques for Stimulating Original Ideas in Students. Lincoln: Nebraska Department of Education, 1973.

Whipple, G. M. Classes for Gifted Children: An Experimental Study of Methods of Selection and Instruction. Bloomington, Ill.: Public School Publishing Company, 1919.

White House Conference Report on Child Health and Protection, Committee on Child Health, Washington, D.C., 1929.

Williams, Clifford W. "Characteristics and Objectives of a Program for the Gifted." Education for the Gifted, ed. Nelson B. Henry. Chicago: The University of Chicago Press, 1958.

Williams, Frank E. Total Creativity Program for Individualizing and Humanizing the Learning Process. Englewood Cliffs, N.J.: Educational Technology Publications, Inc., 1967.

Williams, Jeffrey W., and Sallie L. Warf. Education Directory, Public School Systems 1975-76. Washington: U.S.O.E., 1976.

Witty, Paul A. "The Education of the Gifted and the Creative in the U.S.A." The Gifted Child Quarterly, XV (1971), 109-15.

_____. The Gifted Child. Lexington, Mass.: D. C. Heath and Co., 1951.

_____. "Nature and Extent of Educational Provisions for the Gifted Pupil." Educational Administration and Supervision, XXXVII (1951), 65-79.

_____. "Practices in the Education of the Gifted." Frontier of Elementary Education. Ithaca: Syracuse University Press, 1950.

_____. "The Relative Frequency of Gifted Boys and Girls in the Secondary School." Educational Administration and Supervision, XX (1934), 606-12.

Witty, Paul A., ed. Reading for the Gifted and the Creative Student. Newark, Del.: International Reading Association, 1971.

Witty, Paul A., and S. W. Bloom. "Conserving Ability in Science." Exceptional Children, XXII (1955), 10-6, 46-7.

_____. "The Education of the Superior High School Student," Bulletin NASSP, XLIX (1955), 15-22.

Witty, Paul A., and M. D. Jenkins. "The Educational Achievement of a Group of Gifted Negro Children." Journal of Educational Psychology, XXV (1934), 585-97.

Witty, Paul A., and H. C. Leham. "The Reading and the Reading Interests of Gifted Children." Pedagogical Seminary and Journal of Genetic Psychology, XLV (1934), 466-81.

Wolf, Richard O., and Howard K. Macauley. "Simulation: A Multi-dimensional Approach to Teacher Evaluation." Educational Technology, XV, 1975, 45-50.

Worcester, D. A. The Education of Children of Above-average Mentality. Lincoln: University of Nebraska Press, 1956.

Yablonsky, L. "Future-projection Technique." Psychodrama: Theory and Therapy, ed. I. A. Greenberg. New York: Behavioral Publications, 1974.

APPENDIX A

COVER LETTERS

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION
UNIVERSITY OF NEVADA, LAS VEGAS
4505 MARYLAND PARKWAY • LAS VEGAS, NEVADA 89154 • (702) 739-3596

Dear Colleague:

Currently I am a candidate for the degree of Doctor of Education at the University of Nevada, Las Vegas under the direction of Dr. James B. Case. My field of study is the Curriculum of Secondary Education and my specialization is Education for the Gifted Student.

During the past decade, there has been a renewed interest in education for the gifted student. Much has been written and many programs have been implemented in this area. This study addresses itself to the relationship between the curricular characteristics found in recent writings, and those present in programs such as yours.

Would you please complete and return the attached survey in the enclosed post paid envelope. If you would like a copy of the results, please check the appropriate box on the top of page one of the survey. If your district has no such program, please complete only item A-1 on page one and return the uncompleted survey in the enclosed post paid envelope. Your prompt reply will be much appreciated.

Thank you for your help.

Sincerely,

Andrew R. Nixon

Andrew R. Nixon,
doctoral candidate

James B. Case

James B. Case, Ph.D.,
advisor

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION
UNIVERSITY OF NEVADA, LAS VEGAS
4505 MARYLAND PARKWAY • LAS VEGAS, NEVADA 89154 • (702) 739-3596

Dear:

Currently I am a candidate for the degree of Doctor of Education at the University of Nevada, Las Vegas under the direction of Dr. James B. Case. My field of study is the Curriculum of Secondary Education and my area of specialization is Education of the Gifted Student.

Would you please complete and return the attached survey in the enclosed post paid envelope. If you would like a copy of the results, please check the appropriate box on the top of page one of the survey. If you wish to remain anonomous, do not complete page one of the survey.

Additionally, the final draft of my dissertation will include a listing of eighteen recognized authorities in the field of education for the gifted student, and a brief biographical sketch of each authority listed. My research has indicated you to be one of the eighteen recognized authorities. Please review the enclosed biographical sketch and return it to me if any corrections are necessary.

Thank you for your help and for your contributions to the field of education for the gifted student.

Sincerely,

Andrew R. Nixon

Andrew R. Nixon
doctoral candidate
702-873-1637

James B. Case

James B. Case, Ph.D.,
advisor

COLLEGE OF EDUCATION
DEPARTMENT OF SECONDARY EDUCATION
UNIVERSITY OF NEVADA, LAS VEGAS
4505 MARYLAND PARKWAY • LAS VEGAS, NEVADA 89154 • (702) 739-3596

January 18, 1978

Several weeks ago I mailed a survey to each of eighteen recognized authorities in the field of Education of the Gifted student. You were identified as one such authority, and you should have received a survey and a copy of a brief biographical sketch.

As you know, there is a myriad of reasons for surveys of this nature not being completed and returned. With deadlines drawing near, I've taken the liberty of sending you a second survey and biographical sketch in hopes that you'll complete it. Please feel free to make any changes or corrections on the biographical sketch.

Please return this information to me at your earliest convenience as time is of the essence. Thank you for your help and for your contributions to the field of education for the gifted student.

Sincerely,

Andrew R. Nixon
doctoral student

APPENDIX B

CURRICULAR CHARACTERISTIC INSTRUMENT

Please complete this page as it pertains to your program. If you wish to remain anonymous, do not complete item 1. If you wish to have a copy of the results sent to you, check here ☐.

A. General Information

1. Name:

   Address:

2. Circle the grade levels in your district which participate in a program for the academically gifted.

   1 2 3 4 5 6 7 8 9 10 11 12

3. Is your district setting (check one)

   Urban ___ Suburban ___ Rural ___?

4. How many total students are there in your district?

   Public ___; Non-Public ___

5. Check the funding source(s) of your program for the academically gifted.

   Grant ___ School board budget ___

   Legislative appropriation ___ Revenue sharing ___

   Other ___.

6. Check the school years for which your program has been operational.

   72-73 ___ 73-74 ___ 74-75 ___

   75-76 ___ 76-77 ___ 77-78 ___

7. Check the subject areas in which your academically gifted students are served.

   Math ___ L.A. ___ Reading ___ Science ___

   Arts ___ Social Studies ___ Guidance ___

   Other ___ (please state)

Please complete this page unless you wish to remain anonymous. If you wish to have a copy of the results of this survey sent to you, check here. ☐

A. General Information

NAME:

ADDRESS:

POSITION:

Directions: Please examine each of the following curricular characteristics of programs for the academically gifted student. Place an X in the appropriate box as it relates to your program.

	Always	Sometimes	Not Applicable	Seldom	Never
B. Program Philosophy includes:					
(1) affective domain					
(2) cognitive domain					
(3) subject achievement domain					
(4) psychomotor domain					
C. Program Objectives provide for:					
(1) increased opportunity for academic growth					
(2) more extensive development of academic skills					
(3) advanced development of work and study habits					
(4) more productivity due to improved learning climate					
(5) increased motivation					
(6) better personal and emotional adjustment					
(7) fuller social development					
(8) increased opportunity for individual rate of growth					
(9) expansion of interests					
(10) development of aesthetic values					
D. Program Curriculum includes:					
(1) consideration of individual differences					
(2) the utilization of a wide variety of school and community resources					
(3) the inclusion of the student in the planning of his/her program					
(4) a curriculum which is viewed as a continuum of sequential studies and learning experiences					
(5) continuous evaluation of the effects and effectiveness of the curriculum					
E. Program Organization includes:					
(1) special grouping					
(2) acceleration					
(3) enrichment					

	Always	Sometimes	Not Applicable	Seldom	Never
F. Teaching Strategies include:					
(1) case studies					
(2) role playing					
(3) critical incidents					
(4) individual programs					
(5) small group discussion					
(6) large group discussion					
(7) field trips					
(8) gaming and simulations					
G. Progress Evaluation includes:					
(1) formal evaluation externally done by non-program personnel					
(2) formal evaluation internally by program personnel					
(3) informal evaluation externally by non-program personnel					
(4) informal evaluation internally by program personnel					
H. Student Identification and Placement includes:					
(1) individual I. Q. score					
(2) group I. Q. score					
(3) teacher opinion					
(4) school grades					
(5) achievement test					
(6) aptitude test					
(7) importance is given to multidimensional multilevel selection criteria					
(8) the selection of students involves a variety of staff members					
I. Teacher Selection includes:					
(1) attempts to identify teachers who are democratic, responsible and original in their classrooms					
(2) candidates who possess a background in a supervised program of gifted children					
(3) candidates who have had previous experience in actually working with gifted children					
J. In-Service Education includes:					
(1) institutional/organizational educational programs					
(2) in-service programs operated by the local school district/staff					
(3) combination school district/staff, outside institution/organization, in-service programs					

APPENDIX C

RECOGNIZED AUTHORITIES LISTING

For purposes of this study, a recognized authority is a person who has distinguished him/herself in the field of education of the gifted student in one or more of the following: (1) has written significant material in the field; (2) has been responsible for design and implementation of programs for the gifted; (3) has been cited by his peers as an expert in the field; and/or (4) has been a key figure in the promotion of the movement for education for the gifted. Most of the weight came from criterion 3. In excess of 100 people actively involved in education for gifted students were interviewed during an eighteen-month period. Each was asked to list the five most prominent authorities in the field. The eighteen authorities mentioned most frequently in every case also fulfilled criteria 1, 2, and 4. This process for selection of this stratified sample was adopted from a process outlined by Sudman (1976, pp. 108-112).

Recognized authorities in the field of education for the Gifted and Talented:

Walter B. Barbe	Paul D. Plowman
Jeanne L. Delp	Joseph S. Renzulli
Joseph L. French	Joseph P. Rice
James J. Gallagher	Irving Sato
Miriam L. Goldberg	Ruth Strang
John C. Gowan	Abraham J. Tannenbaum
Sandra N. Kaplan	E. Paul Torrance
Ruth A. Martinson	Virgil Ward
Harry A. Passow	Paul Witty

APPENDIX D

BIOGRAPHICAL SKETCH OF RECOGNIZED AUTHORITIES

DR. WALTER B. BARBE - Dr. Barbe's degrees include a B.S., M.A., and Ph.D. from Northwestern University. His Ph.D. was completed in 1953. He has taught at Baylor, Chattanooga, and Kent State Universities in the areas of education, special education, and psychology. Currently, he is an adjunct professor at Ohio State University. He is a past-president of the National Association for Gifted Children and the Association for the Gifted. Dr. Barbe has distinguished himself as a contributor of over one hundred articles to educational and psychological journals. He has authored or co-authored at least three books which stand as landmarks in the field of education for the gifted student.

JEANNE DELP - Ms. Delp received a B.A. from Stanford University and an M.A. from Sacramento State College. She has done extensive post-graduate study in Gifted Child Education. Ms. Delp has served as a teacher, coordinator, director, and consultant in several school district programs for gifted children. She is currently a principal in the Garden Grove (California) School District. Her publications include "A Handbook for Parents," which has served as the basis for numerous organizations for parents of gifted students. Ms. Delp is also recognized as one of the foremost speakers in the area of in-service teacher training programs and the development of programs for the gifted.

DR. JOSEPH L. FRENCH - Dr. French received his B.S. and M.S. from Illinois State University and his Ed.D. from the University of Nebraska. The latter degree was in the field of educational psychology and measurement. He has taught education and special education at Illinois State University, University of Nebraska, and University of Missouri. Currently, he is a Professor of Special Education and Educational Psychology at Pennsylvania State University. In addition to many article contributions in the field of education, Dr. French has published the Pictorial Test of Intelligence and co-authored the Hermon-Nelson test of mental ability. His book, Educating the Gifted, is considered one of the finest collections in the field.

DR. JAMES J. GALLAGHER - Dr. Gallagher received his B.A. from the University of Pittsburgh, and his M.S. and Ph.D. from Pennsylvania State University in Child and Clinical Psychology. He has served as the director of two psychological clinics, has taught at the University of Illinois, Duke University, and is currently a professor at the University of North Carolina. Dr. Gallagher has been involved in more than fifty publications including more than ten books in the field of education of the gifted student. His most recent book, Teaching the Gifted Child, is the most current gathering of information in the field of education for the gifted student.

DR. MIRIAM GOLDBERG - Dr. Goldberg received her B.A., M.A., and Ph.D. at Columbia University. She worked in a school for emotionally disturbed children as a teacher and administrator, taught at and directed a nursery school, and served as a research assistant and associate on several research projects. In 1956, she was appointed to the faculty of the Teachers College at Columbia University, where she is currently professor of Psychology and Education and coordinator of the program in Educational Psychology. Dr. Goldberg has authored and co-authored more than ten books in the field of education of gifted students. Her writings include Bright Underachievers, which she co-authored in 1966 with J. B. Raph and A. Harry Passow.

DR. JOHN C. GOWAN - Dr. Gowan received his A.B. and Ed.M. at Harvard University, and his Ed.D. at the University of California, Los Angeles. His career has included teaching assignments at California State College at Los Angeles, San Fernando Valley College, and University of Singapore as a Fulbright lecturer. He is currently retired as a professor at California State University at Northridge. His writings include an annotated bibliography of writings about gifted children and Education and Guidance of the Ablest, which he co-authored with G. Demos, and Educating the Ablest, which he co-authored with E. Paul Torrance, both of which stand as landmarks in the field. Dr. Gowan is editor of The Gifted Child Quarterly and Executive Director of the National Association for Gifted Children.

MS. SANDRA KAPLAN - Ms. Kaplan received her B.A. degree at the University of California at Los Angeles, her M.S. degree at the University of Southern California, and is currently completing her Ed.D. degree at the University of California, Los Angeles. She has served as a teacher and consultant for gifted children in the Inglewood Unified School District, in California, and is currently Assistant Director of the National/State Leadership Training Institute on Gifted/Talented. Ms. Kaplan has authored or co-authored at least six books in general education and practical guides for programs for gifted students, and is recognized by her peers as one of the foremost speakers in the field.

DR. RUTH A. MARTINSON - Dr. Martinson received her B.A. at Western Washington State College and her M.A. and Ed.D. at University of California, Los Angeles. She has served as a visiting professor at University of California, Los Angeles, and University of Washington, Seattle, as a lecturer at California State College at Long Beach, and most recently, as a professor at California State College at Dominguez Hills. She is currently retired. Dr. Martinson has served as a consultant on at least six committees which serve gifted students. She has written two books and contributed to numerous monographs, bulletins, journals, yearbooks, and other symposia. She was the production supervisor of the film, "Understanding the Gifted."

DR. HARRY PASSOW - Dr. Passow received his B.A. and M.A. at New York State College for Teachers, and his Ed.D. from Columbia University. He has taught at New York State College for Teachers and has been a professor at Columbia since 1952. Dr. Passow is past-president of the Metropolitan Association of the Gifted. He directed the Talented Youth Project of the Horace Mann Lincoln Institute from 1954-1966. He has had a special interest in such aspects as the gifted and the disadvantaged, teachers for the gifted, curriculum development for the gifted and talented. Currently, he is Associate Director of the USOE-sponsored Graduate Leadership in Education Programs for developing leaders in the field of the gifted and talented. His contributions also include four books in the area of education for the gifted and curriculum for the gifted student, including Bright Underachievers, which he co-authored.

DR. PAUL D. PLOWMAN - Dr. Plowman received a B.A. in Political Science from Carleton College, an M.A. in Political Science from the University of Wisconsin, and his doctorate in School Administration from Stanford University. Dr. Plowman has worked as teacher, counselor, dean, curriculum consultant, and principal in Hawaii and California. He is currently one of three consultants on the Gifted and Talented Education Management Team, California State Department of Education and director of the statewide federally-supported project, "Development of Teaching Competencies-Gifted and Talented." Dr. Plowman has authored or co-authored more than two dozen publications in the field of education for gifted students. In addition to state leadership and consultant responsibilities, he has assisted the United States Commissioner of Education and other states develop and promote differentiated education for gifted students.

DR. JOSEPH S. RENZULLI - Dr. Renzulli received his B.S. from Glassboro State College (N.J.), his M.Ed. in Educational Psychology from Rutgers University and his Ed.D. in Educational Psychology from the University of Virginia. He has taught educational measurement at the University of Virginia and is currently a professor of educational psychology and the director of the Teaching and Talented Program at the University of Connecticut. Dr. Renzulli is probably today's most recognized authority in the field of evaluation of programs for the gifted student. His numerous publications include The Enrichment Triad Model: A Guide for Developing Defensible Programs for the Gifted and Talented, and his most noted work is A Guidebook for Evaluating Programs for the Gifted and Talented.

DR. JOSEPH P. RICE - Dr. Rice received his B.A. from International College, his M.Ed. from Springfield College, and his Ph.D. from the University of Connecticut. He served as a teacher and psychologist at Mitchell College, Fresno City College, Yuba College, and Lompoc Unified School District, and as a consultant of the Bureau for Mentally Exceptional Children for the State of California. Dr. Rice has written guidelines and other projects designed to provide programs for mentally gifted students. He has contributed to dozens of publications and his outstanding book, The Gifted: Developing Total Talent, serves as a key reference in the field of education for the gifted.

IRVING S. SATO - Mr. Sato received his B.Ed. from the University of Hawaii and his M.S. from the University of Southern California. He has taught on the elementary level, secondary level, and college level, and has served as an instructor and project director for numerous programs for gifted students. Mr. Sato is currently Director of the National/ State Leadership Training Institute on the Gifted and the Talented. He is currently president of TAG (The Association for the Gifted). His publications include many articles and guidebooks for implementing programs for gifted and talented students. Mr. Sato's most widely quoted publication is "The Culturally Different Gifted Child--The Dawning of His Day."

DR. RUTH STRANG - Dr. Strang did undergraduate study at the University of Chicago and received her Ph.D. from Columbia University. She taught at University of Chicago, University of California, Berkeley, Columbia Teachers College, and at the University of Arizona. Dr. Strang had more than 50 publications to her credit. Her most valuable publication to people in the field of educating gifted children is Helping Your Gifted Child. This book has become a major tool for parent groups who are active in education for the gifted student. Dr. Strang is deceased.

DR. ABRAHAM J. TANNENBAUM - Dr. Tannenbaum earned his B.A. from Brooklyn College and his M.A. and Ph.D. from Columbia University in social and educational psychology. He served as a Fulbright visiting professor to Hebrew University in Jerusalem and as a consultant for the programs for the gifted student in the state of New York. Currently, he is a professor of education at Columbia University and the director of the Taxonomic Instruction Project. Dr. Tannenbaum's publications include Introduction to Taxonomic Instruction and A Backward and Forward Glance at the Gifted, both of which are considered to be essential in curriculum structure for the gifted student.

DR. E. PAUL TORRANCE - Dr. Torrance received his B.A. from Mercer University, his M.A. from the University of Minnesota, and his Ph.D. from the University of Michigan. He has taught in the public schools, at Kansas State College, Stead Air Force Base, and the University of Minnesota. He is currently a professor at the University of Georgia. Dr. Torrance has published and co-authored more than 500 works in the area of education and behavior of gifted and creativity. He is considered this nation's foremost authority in studying the creatively gifted child. His work in the area of test development for determination and measurement of creativity is unparalleled in the field.

DR. VIRGIL S. WARD - Dr. Ward received his B.A. from Wofford College, an M.Ed. from Duke University, and a Ph.D. from the University of North Carolina. He has served as a professor and chairman of the Department of Educational Psychology at Wofford College and as a professor and chairman of the Department of Educational Foundations at the University of Virginia. Dr. Ward has been a visiting professor at Johns Hopkins, Tulane, and the University of California at Los Angeles. He has served as project director of the Southern Regional Project of Education of the Gifted and is the past president of the South Carolina Association of Mental Health and the South Carolina Psychological Association. He is currently the University of Virginia representative of Columbia University's Graduate Leadership Education Project; Gifted and Talented. Dr. Ward's publications include Educating the Gifted: An Axiomatic Approach and The Gifted Student: A Manual for Program Improvement.

DR. PAUL A. WITTY - Dr. Witty received his B.A. degree from Indiana State Teachers College, his M.A. from the University of Chicago, and his Ph.D. from Columbia University in 1923. His career spanned more than half a century, during which time he lectured at the University of Kansas and Northwestern University. His book, The Gifted Child, is considered a classic in the field. Dr. Witty remained active in the field of education for the gifted student until his recent death.

APPENDIX E

INITIAL LISTING OF CURRICULAR CHARACTERISTICS

1. Cognitive Domain
2. Affective Domain
3. Subject-Achievement Domain
4. Psychomotor Domain
5. Intellectual Domain
6. Academic Growth
7. Academic Skills
8. Work Habits
9. Study Habits
10. Learning Climate
11. Motivation
12. Personal Development
13. Emotional Development
14. Social Development
15. Growth Rate
16. Curricular Interests
17. Extra-Curricular Interests
18. Performing Arts
19. Fine Arts
20. Music
21. Individualization
22. Use Of In-Service Resources
23. Use Of Community Resources
24. Student Initiated Curriculum Planning
25. Open-Ended Curriculum
26. Curriculum Evaluation
27. Grouping
28. Enrichment
29. Acceleration
30. Case Studies
31. Role Playing
32. Critical Incidents
33. Individualizing
34. Sociograms

35. Small Group Discussions
36. Large Group Discussions
37. Field Trips
38. Guest Speakers
39. Classroom Games
40. Mentors
41. Formal Evaluation
42. Informal Evaluation
43. Local Evaluation
44. Outside Evaluation
45. Formative Evaluation
46. Summative Evaluation
47. Group Intelligence Test
48. Individual Intelligence Test
49. Teacher Nomination
50. Peer Nomination
51. Academic Performance
52. Achievement Test
53. Aptitude Test
54. Multidimensional Approach
55. Teacher of Demonstrated Ability
56. Teacher With Gifted Academic Background
57. Teacher With Previous Experience
58. In-Service by School District People
59. In-Service by Outside People
60. In-Service by Combination

APPENDIX F

SCHOOL DISTRICTS SURVEYED

1 New York City, Brooklyn, NY
2 Puerto Rico, Hato Rey, PR
3 Los Angeles Unif, Los Angeles, CA
4 City Of Chicago, Chicago, IL
5 Philadelphia City, Philadelphia, PA
6 Dade County, Miami, FL
7 Detroit City, Detroit, MI
8 Houston ISD, Houston, TX
9 Hawaii, Honolulu, HI
10 Baltimore City, Baltimore, MD
11 Prince Georges County, Upr Marlboro, MD
12 Dallas ISD, Dallas, TX
13 Fairfax County, Fairfax, VA
14 Jefferson County, Louisville, KY
15 Broward County, Ft. Lauderdale, FL
16 District Of Columbia, Washington, DC
17 Cleveland, Cleveland, OH
18 San Diego City Unif, San Diego, CA
19 Baltimore County, Towson, MD
20 Montgomery County, Rockville, MD
21 Milwaukee, Milwaukee, WI
22 Memphis City, Memphis, TN
23 Hillsborough County, Tampa, FL
24 Duval County, Jacksonville, FL
25 Columbus, Columbus, OH
26 Orleans Parish, New Orleans, LA
27 Boston, Boston, MA
28 Pinellas County, Clearwater, FL
29 Dekalb County, Decatur, GA
30 Indianapolis, Indianapolis, IN
31 Orange County, Orlando, FL
32 Albuquerque, Albuquerque, NM
33 Saint Louis City, St Louis, MO
34 Nashville-Davidson County, Nashville, TN
35 Atlanta City, Atlanta, GA
36 Denver, Denver, CO
37 Clark County, Las Vegas, NV
38 Jefferson County, Denver, CO
39 Anne Arundel, Annapolis, MD
40 Mecklenburg Co-Charlotte City, Charlotte, NC
41 Newark, Newark, NJ
42 Fort Worth ISD, Fort Worth, TX
43 Palm Beach County, W Palm Beach, FL
44 San Francisco Unif, San Francisco, CA
45 East Baton Rouge Parish, Baton Rouge, LA
46 Cincinnati, Cincinnati, OH
47 Seattle, Seattle, WA
48 San Antonio ISD, San Antonio, TX
49 Jefferson Parish, Gretna, LA
50 Tulsa City, Tulsa, OK
51 Pittsburgh City, Pittsburgh, PA
52 Mobile (City-County), Mobile, AL
53 Granite, Salt Lake Cy, UT
54 Polk County, Bartow, FL
55 Long Beach Unif, Long Beach, CA
56 El Paso ISD, El Paso, TX
57 Portland 01J, Portland, OR
58 Fresno City Unif, Fresno, CA
59 Buffalo City, Buffalo, NY
60 Oakland City Unif, Oakland, CA
61 Omaha 001, Omaha, NE
62 Toledo, Toledo, OH
63 Austin ISD, Austin, TX
64 Brevard County, Titusville, FL
65 Minneapolis Special, Minneapolis, MN
66 Virginia Beach City, Virginia Bch, VA
67 Greenville County, Greenville, SC
68 Garden Grove Unif, Garden Grove, CA
69 Birmingham City, Birmingham, AL
70 San Juan Unif, Carmichael, CA
71 Charleston County, Charleston, SC
72 Kansas City 33, Kansas City, MO
73 Sacramento City Unif, Sacramento, CA
74 Oklahoma City, Oklahoma City, OK
75 Jefferson County, Birmingham, AL

76 Caddo Parish, Shreveport, LA
77 Akron, Akron, OH
78 Cobb County, Marietta, GA
79 Escambia County, Pensacola, FL
80 Norfolk City, Norfolk, VA
81 Kanawha County, Charleston, WV
82 Mt Diablo Unif, Concord, CA
83 Dayton, Dayton, OH
84 Forsyth Co-Winston Salem City, Winston Salem, NC
85 Wichita 259, Wichita, KS
86 Corpus Christi ISD, Corpus Christi, TX
87 Rochester, Rochester, NY
88 Saint Paul 0625, Saint Paul, MN
89 Des Moines Ind Comm, Des Moines, IA
90 Tucson Elem 001, Tucson, AZ
91 Spring Branch ISD, Houston, TX
92 Ysleta ISD, El Paso, TX
93 Shawnee Msn 512, Shawnee Msn, KS
94 Prince William County, Manassas, VA
95 Fort Wayne Comm, Fort Wayne, IN
96 Flint, Flint, MI
97 Gary CSC, Gary, IN
98 San Jose Unif, San Jose, CA
99 Richmond City, Richmond, VA
100 Rockford, Rockford, IL
101 Jersey City, Jersey City, NJ
102 Calcasieu Parish, Lake Charles, LA
103 Richmond Unif, Richmond, CA
104 Greater Anchorage Area Borough, Anchorage, AK
105 Montgomery (City-County), Montgomery, AL
106 Davis County, Farmington, UT
107 Hacienda-La Puente Unif, La Puente, CA
108 Volusia County, Deland, FL
109 Pasadena ISD, Pasadena, TX
110 Cumberland County, Fayetteville, NC
111 Fayette County, Lexington, KY
112 Henrico County, Highland Spgs, VA
113 Colorado Springs, Colorado Spg, CO
114 Richardson ISD, Richardson, TX
115 Grand Rapids, Grand Rapids, MI
116 Gaston County, Gastonia, NC
117 Trust Territory Of The Pacific, Marshall Is, TT
118 San Bernardino City Unif, Sn Bernardino, CA
119 Fulton County, Atlanta, GA
120 Compton Unified, Compton, CA
121 Harford County, Bel Air, MD
122 Muscogee County, Columbus, GA
123 Fremont Unif, Fremont, CA
124 Torrance Unif, Torrance, CA
125 Huntsville City, Huntsville, AL
126 Spokane, Spokane, WA
127 Tacoma, Tacoma, WA
128 Wake County, Raleigh, NC
129 Richland County 01, Columbia, SC
130 Jordan, Sandy, UT
131 Chatham County, Savannah, GA
132 Lubbock ISD, Lubbock, TX
133 Knoxville City, Knoxville, TN
134 Livonia, Livonia, MI
135 Hampton City, Hampton, VA
136 Warren Cons, Warren, MI
137 Anoka, Anoka, MN
138 North East ISD, San Antonio, TX
139 Madison, Madison, WI
140 South Bend CSC, South Bend, IN
141 Clayton County, Jonesboro, GA
142 Seminole County, Sanford, FL
143 Orange Unif, Orange, CA
144 Washoe County, Reno, NV
145 Newport News City, Newport News, VA
146 Racine, Racine, WI
147 Richmond County, Augusta, GA
148 Springfield, Springfield, MA
149 Aldine ISD, Houston, TX
150 Lansing, Lansing, MI
151 A B C Unif, Cerritos, CA
152 Stockton City Unif, Stockton, CA

153 Evansville-Vanderburgh SC, Evansville, IN
154 Hartford, Hartford, CT
155 Kansas City 500, Kansas City, KS
156 Pulaski Co Special, Little Rock, AR
157 Norwalk-La Mirada City Unif, Norwalk, CA
158 Worcester, Worcester, MA
159 Lincoln 001, Lincoln, NE
160 Yonkers, Yonkers, NY
161 Guam Department Of Education, Agana, GU
162 Lafayette Parish, Lafayette, LA
163 Northside ISD, San Antonio, TX
164 Bibb County, Macon, GA
165 Paterson, Paterson, NJ
166 Rapides Parish, Alexandria, LA
167 Salt Lake City, Salt Lake City, UT
168 Simi Valley Unif, Simi, CA
169 Jackson Mun Sep, Jackson, MS
170 Greensboro City, Greensboro, NC
171 Anaheim Union High, Anaheim, CA
172 Scottsdale Unified 048, Phoenix, AZ
173 Hamilton County, Chattanooga, TN
174 Lee County, Fort Myers, FL
175 Knox County, Knoxville, TN
176 Santa Ana Unif, Santa Ana, CA
177 Chesapeake City, Chesapeake, VA
178 Chesterfield County, Chesterfield, VA
179 Pasadena Unified, Pasadena, CA
180 Phoenix Union High 210, Phoenix, AZ
181 Syracuse, Syracuse, NY
182 Okaloosa County, Crestview, FL
183 Amarillo ISD, Amarillo, TX
184 Newport-Mesa Unif, Newport Beach, CA
185 Arlington ISD, Arlington, TX
186 Garland ISD, Garland, TX
187 Pueblo City, Pueblo, CO
188 Edmonds, Lynnwood, WA
189 Riverside Unif, Riverside, CA
190 Guilford County, Greensboro, NC

APPENDIX G

THE PLEDGIE CHECKLIST

A. General Descriptive Information

1. Project Title_____

2. Location_____

3. Project Director_____Phone_____

4. Grade levels participating in the program

   1 2 3 4 5 6 7 8 9 10 11 12

5. Urban_____ Suburban_____ Rural_____

6. Number of students served

   Public_____ Non-Public_____ Both_____

7. Funding source(s)

   Grant_____ School board budget_____

   Legislative appropriation_____ Revenue sharing_____

   Other_____

8. Yearly requested operating budget

   FY 72_____ FY 73_____ FY 74_____

   FY 75_____ FY 76_____

9. Math_____ L.A._____ Reading_____ Science_____ Arts____

   Social studies_____ Guidance_____ Other_____

Scale

1--Essential
2--Important
3--Recommended
4--Mentioned
5--Not Identified

B. Program Philosophy

Statements related to the philosophy and objectives place stress upon the following domain(s) of student development.

(1) Affective Domain.....1 2 3 4 5
(2) Intellectual Domain.....1 2 3 4 5
(3) Subject Achievement Domain.....1 2 3 4 5
(4) Psychomotor Domain.....1 2 3 4 5

C. Program Objectives

A review of the recommended program design indicates a relative degree of importance for each of the following objectives.

(1) Increased opportunity for academic growth.....1 2 3 4 5
(2) Provides more extensive development of academic skills.....1 2 3 4 5
(3) Advanced development of work and study habits.....1 2 3 4 5
(4) More productivity due to improved learning climate..1 2 3 4 5
(5) Increased motivation.....1 2 3 4 5
(6) Better personal and emotional adjustment.....1 2 3 4 5
(7) Fuller social development.....1 2 3 4 5
(8) Increased opportunity for psychological growth.....1 2 3 4 5
(9) Expansion of interests.....1 2 3 4 5
(10) Development of aesthetic values.....1 2 3 4 5

D. Program Curriculum

(1) Consideration of individual differences and a desire to develop a curriculum to meet these needs..1 2 3 4 5
(2) The utilization of a wide variety of school and community resources.....1 2 3 4 5
(3) The inclusion of the student in the planning of his program.....1 2 3 4 5
(4) The curriculum is viewed as a continuum of sequential studies and learning experiences.....1 2 3 4 5

(5) Continuous evaluation of the effects and effectiveness of the curriculum.....1 2 3 4 5

E. Program Organization

The following administrative organizational pattern(s) are recommended in a program for the gifted.

(1) Special Grouping.....1 2 3 4 5
(2) Acceleration.....1 2 3 4 5
(3) Enrichment.....1 2 3 4 5

F. Teaching Strategies

Recommended teaching strategies are as follows:

(1) Case studies.....1 2 3 4 5
(2) Role playing.....1 2 3 4 5
(3) Critical incidents.....1 2 3 4 5
(4) Individual programs.....1 2 3 4 5
(5) Small group discussion.....1 2 3 4 5
(6) Large group discussion.....1 2 3 4 5
(7) Field trips.....1 2 3 4 5
(8) Gaming and simulations.....1 2 3 4 5
(9) Teaching moments.....1 2 3 4 5

G. Program Evaluation

Methods for the evaluation of the total program are recommended as follows.

(1) Formal evaluation externally done by non-program personnel.....1 2 3 4 5
(2) Formal evaluation internally by program personnel...1 2 3 4 5
(3) Informal evaluation externally by non-program personnel.....1 2 3 4 5
(4) Informal evaluation internally by program personnel.....1 2 3 4 5

H. Student Identification and Placement

Student identification criteria items are recommended as follows:

(1) Individual IQ Score.....1 2 3 4 5
(2) Group IQ Score.....1 2 3 4 5
(3) Teacher opinion.....1 2 3 4 5
(4) School grades.....1 2 3 4 5
(5) Achievement test.....1 2 3 4 5
(6) Aptitude test.....1 2 3 4 5
(7) Importance is given to multidimensional-multilevel selection criteria.....1 2 3 4 5
(8) The selection of students involves a variety of staff members.....1 2 3 4 5
(9) Other_____

I. The Teacher

(1) The teacher selection process should attempt to identify teachers who are democratic, responsible, and original in their classrooms.....1 2 3 4 5
(2) The teacher candidates should possess a background in a supervised program of gifted children.....1 2 3 4 5
(3) Teacher candidates should have previous experience in actually working with gifted children.....1 2 3 4 5

J. In-Service Education

(1) Program teachers are encouraged to broaden their knowledge in gifted education by attending institutional/organizational education programs.....1 2 3 4 5
(2) An active in-service program totally operated by the local school district/staff is included in the program design.....1 2 3 4 5
(3) The local school district/staff, in conjunction with an outside institution/organization, has formulated an in-service program.....1 2 3 4 5

ABSTRACT OF THE DISSERTATION

A Study of the Relationship between Curricular Characteristics Recommended by Recognized Authorities and Curricular Characteristics Found in Existing Programs for Academically Gifted Students

by

Andrew R. Nixon

Doctor of Education

University of Nevada, Las Vegas, 1978

Professor James B. Case, Chairman

The study surveyed the 190 largest school districts in the United States and 18 recognized authorities in the field of education for the academically gifted. Each of the school districts was presumed to have a program which served the academically gifted.

The recognized authorities were given a list of 48 curricular characteristics and were asked to check the degree to which they would select each characteristic for inclusion in a program for the academically gifted. The school districts were given the same list of 48 curricular characteristics and were asked to check the degree to which each characteristic was included in their program for the academically gifted.

Seventy-one percent of the school districts and 67 percent of the recognized authorities who were surveyed responded. The recognized authorities and the school districts were in general agreement regarding the inclusion of 41 of the 48 curricular characteristics in programs for the academically gifted. The major findings of this study were that, in general, school districts which offer programs for academically gifted students are offering within those programs the curricular characteristics which the recognized authorities recommend be offered.

The only area of apparent disagreement between the recognized authorities' recommendations and the school district practices was in the area of evaluation of programs. The authorities recommended programs be evaluated by non-program personnel significantly more frequently than school districts reported this being done.

This study yielded recommendations that further research be done to show: which of the 48 characteristics are most effective in raising the quality level of programs for gifted students; the existence and effectiveness of programs for the gifted; what impact a program has on gifted students; the effectiveness of these characteristics in meeting program objectives; and the type of training a teacher needs to be successful teaching gifted students.