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A SURVEY OF SECONDARY SCHOOL COMPLIANCE
WITH THE GIFTED AND TALENTED MANDATE
OF HOUSE BILL 72 FOR GRADES 9-12

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF EDUCATION

By

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The purpose of the study is to determine what selected school districts throughout the state of Texas are doing to meet the Texas Gifted and Talented mandate at the high school level, grades 9-12. The study is also to help determine if more guidelines from the state are needed, or if schools are able to meet student needs and mandate requirements as they currently exist.

The data source is a mail-out survey to 120 Texas public high schools. From a 60% response rate, data were analyzed by grouping schools by size based on Texas University Interscholastic League classifications, tallying responses to questions on the questionnaire, determining frequencies of responses, and reporting the data in tables by percentages.

The study is divided into five chapters, with Chapter I a general introduction stating the need and purpose of the study, 12 research questions, 5 assumptions, definition of terms, curriculum planning models, and grouping patterns.

Chapter II is a review of current literature on gifted education in reference to the six parts of the

Texas plan: evaluation and planning, student identification, program organization, curriculum development, staff development, and parent and community involvement. Chapter III is the method of research, discussion of the sample, instrumentation, and procedure. Results of the survey are presented in Chapter IV, with a discussion of the findings as they relate to the six components of the Texas plan. Chapter V is a recapitulation of the study with a discussion and recommendations.

The findings of this study indicate that some areas of the Texas plan are adequate as they presently exist. However, due to the general nature of the plan, more extensive guidelines are needed in areas of student identification, program organization, and curriculum development.

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TABLE OF CONTENTS

	Page
LIST OF TABLES.....	vii
Chapter	
I. INTRODUCTION.....	1
Need for the Study	
Purpose of the Study	
Research Questions	
Assumptions	
Definition of Terms	
Models of Curriculum Planning	
Grouping Patterns	
II. REVIEW OF LITERATURE.....	10
Evaluation and Planning	
Student Identification	
Program Organization	
Curriculum Development	
Staff Development	
Parent and Community Development	
III. METHOD OF RESEARCH.....	33
Sample	
Instrumentation	
Research Questions	
Procedures	
IV. RESULTS AND DISCUSSION.....	38
Student Identification and Program Admittance	
Program Organization	
Staff Development	
Evaluation and Planning	
Parent and Community Involvement	
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS..	77
Need for the Study	
Purpose of the Study	
Assumptions	

Method of Research
Findings
Conclusions
Recommendations

APPENDIX A: Questionnaire.....	86
APPENDIX B: Cover Letter.....	94
APPENDIX C: Sample Student Matrix.....	96
BIBLIOGRAPHY.....	98

LIST OF TABLES

	Page
TABLE 1: Types of Nominations.....	39
TABLE 2: Nomination Inventories (Instruments).....	40
TABLE 3: Screening Criteria.....	41
TABLE 4: Number of Criteria on Matrix.....	42
TABLE 5: Areas of Identification.....	43
TABLE 6: Program Admittance for Transfer Students.....	44
TABLE 7: Grouping Patterns.....	45
TABLE 8: Criteria for Professional Development.....	46
TABLE 9: Required Professional Training.....	47
TABLE 10: Use of Para-Professionals.....	48
TABLE 11: Curriculum Models Used.....	49
TABLE 12: Number of Curriculum Models Used.....	50
TABLE 13: Methods of Choosing Curriculum Models.....	51
TABLE 14: Curriculum Documents.....	52
TABLE 15: Staff Developing Curriculum Documents.....	53
TABLE 16: Gifted/Talented Program Length.....	53
TABLE 17: Supervisory Personnel for Teachers.....	54
TABLE 18: Schools with Gifted Co-ordinators.....	55
TABLE 19: Evaluation Instruments.....	56
TABLE 20: Frequency of Program Evaluation.....	57
TABLE 21: Methods of Parental Involvement.....	58
TABLE 22: Constituency Involvement in Program Planning.....	59

CHAPTER I

INTRODUCTION

With the advent of educational reforms, local school districts have been called upon to make changes in many areas. Curricular and instructional changes have been included. One mandate by the Texas Legislature states, "...each school district shall adopt a process for identifying gifted and talented students in the school district's population, and not later than the 1990-1991 school year, shall establish a program for those students in each grade level" (Texas Public Education Handbook, [House Bill 72], Update No. 1, August, 1988, III-65).

Specific areas of giftedness have been identified; i.e., general intellectual ability, specific subject matter aptitude, creative and productive thinking, and leadership ability. However, local districts have the discretion to choose precisely which of these areas they will address. This determination is to be done by a committee of teachers, administrators, parents, and community members (The Texas State Plan and Guidelines for the Education of the Gifted and Talented, 1990). Each district may also determine how the needs of the identified students will be met, within general guidelines, and schools are allowed to modify these guidelines for their student populations.

Public schools in Texas, and secondary schools in particular, currently are in a nebulous area when addressing the gifted and talented mandate. Although general guidelines exist in the form of The Texas State Plan and Guidelines for the Education of the Gifted and Talented, (1990), specific plans do not. Consequently, it is left up to each individual school district to institute a plan that works within the context of the local setting.

Although gifted education is fairly recent in Texas, it has existed in written form since the 1970s in other areas of the country. Models of curriculum exist, such as Renzulli's Enrichment Triad (Renzulli, 1977), as do models for student identification, program administration, and program evaluation. Some of these models are being used in Texas with modification. Some districts, however, are developing their own models.

Need for the Study

It is because there are no specific guidelines for program development that it is desirable to determine what schools are doing to meet the needs of their gifted students. By surveying a sample of school districts, it may become possible to determine whether general guidelines appear to be enough direction, or whether further specific requirements are needed. Similarities and differences in the ways schools are meeting the mandate will be determined also. Finally, the general success of the mandate (by

implication) will be examined, by noting how the schools are attempting to meet it.

Purpose of the Study

The purpose of the study is to determine what selected districts throughout the state of Texas are doing to meet the Texas gifted and talented mandate at the high school level, grades 9-12.

Research Questions

In order to determine how different districts meet the gifted and talented mandate, a number of research questions will be investigated. The questions will address how districts are identifying students for the program, what curriculum models are used and how they are chosen, how personnel are chosen and trained, and how the program is supervised. How the program is evaluated and how parents and community are involved will also be investigated. Questions to be answered include the following:

Student Identification and Program Admittance

- 1) [A] Who can nominate a student to the program? [B] What types of nomination instruments are used? [C] Is a screening matrix used, and if so, how many criteria are used?
- 2) Are students identified by general intellectual ability, specific subject matter aptitude, leadership ability, or creative and productive thinking ability?

- 3) What procedures are used to accommodate gifted and talented students transferring into the district after the school year has started?

Program Organization

- 4) What grouping patterns are used?

Staff Development

- 5) How are personnel chosen, both professional and para-professional, if any?

Curriculum Development

- 6) [A] What curriculum models are used? [B] Is one model used throughout the district?
- 7) How are the curriculum models chosen?
- 8) Have curriculum documents been developed for the program, and if so, by whom?
- 9) How long has the school's gifted and talented secondary program (grades 9-12) been in existence?

Evaluation and Planning

- 10) [A] Who is the immediate supervisor of the teachers of gifted classes? [B] Is there a single administrator in charge of the entire program?
- 11) What evaluation procedures are used for the program and how often does the program evaluation occur?

Parent and Community Involvement

- 12) How are parents and community members involved in the program, and to what extent?

Assumptions

For the purpose of this study, the following assumptions are made:

- 1) School districts in Texas are meeting the gifted and talented mandate in some way by offering the gifted and talented program in grades K-12.
- 2) Individual programs differ among districts, based on the population size, number of personnel, amount of funding available beyond the state level, geographic location, various other demographics, and district needs.
- 3) Qualified personnel are involved in the program, both administratively and in the classroom.
- 4) Students are identified for the program according to the general guidelines outlined in the state plan.
- 5) Other general guidelines as outlined in the state plan are being followed.

Definition of Terms

- 1) Curriculum compacting--assessing what portion of the curriculum a student has already mastered and allowing that student to move on to the remainder of the curriculum
- 2) Creative thinking--mental processes requiring new, original, and unique ideas

- 3) Criterion-referenced instrument--a measurement, the results of which are evaluated in reference to predetermined standards
- 4) Differentiated curriculum--modification of student goals, objectives, learning experiences, and instructional strategies
- 5) Gifted and talented--exceptional ability or the potential for exceptional ability in one or more of the following areas: general intellectual ability, specific subject matter aptitude, creative and productive thinking ability, and/or leadership ability (The Texas State Plan and Guidelines for the Education of the Gifted and Talented, 1990)
- 6) Identification--determination of which students are to be admitted to the program and carry the label gifted
- 7) Individual Education Plan (IEP)--plan containing information and goals to individualize learning for each student
- 8) Mentorship--learning experiences in which a student works with a community member to learn specific information
- 9) Norm-referenced instrument--a measure, the results of which are evaluated against the performance of a specific group
- 10) Screening--steps taken in identifying gifted and talented students

- 11) Self-instructed program--program in which students work at their own pace in a one to one setting, such as computer assisted instruction
- 12) Specific subject matter aptitude--achievement or potential in academics; i.e., math or social studies
- 13) Telescoping--more than one year of work accomplished in one year

Models of Curriculum Planning

- 1) Bloom's Taxonomy of Educational Objectives (1956)--contains six levels of cognitive behaviors. Originally intended to be used as a basis for classifying educational objectives
- 2) Clark's Integrative Education Model (1986)--based on brain/mind research. Combines use of student thinking, feeling, sensing, and intuiting skills
- 3) Debono's CoRT Thinking Model (1986)--thinking is taught directly as a skill
- 4) Gallagher's Model for Content Modification (1985)--model which uses content acceleration, enrichment, sophistication, and novelty appropriately for gifted students
- 5) Krathwohl's Taxonomy of Objectives for the Affective Domain (1964)--originally intended for use as a basis of classifying affective objectives. Set of skills students can develop pertaining to their feelings

- 6) Parnes' Creative Problem-Solving Model (1977)--model that develops creative thinking skills
- 7) Renzulli's Enrichment Triad Model (1977)--model allowing for building of different skills and pacing and depth appropriate to each student
- 8) Suchman's Inquiry Development Model (1983)--model which trains students in developing skills of the inquiry approach
- 9) Treffinger's Model for Encouraging Creative Learning (1986)--model which begins with basic elements and extends to more complex areas of cognitive thinking and problem solving
- 10) Williams' Model for Implementing Cognitive-Affective Behaviors in the Classroom (1978)--teaches students to think creatively in all areas of cognitive and affective domains

Grouping Patterns

- 1) Pull-Out Program--includes special classes, resource room, and Revolving Door Identification Model of Renzulli
 - a) Special classes--can be advanced, university-based, or interest based. Includes honors, Advanced Placement, and special gifted and talented classes
 - b) Resource room--students go to the resource room

for a given amount of time periodically for enrichment purposes

- c) Revolving door--students submit a research plan to the resource room teacher; they enter the resource room for the purpose of fulfilling their plans. They may exit when their plans are finished

2) Full-Time Program

- a) Magnet schools--schools that pull students from throughout the district and which specialize in one or more areas of study
- b) School-within-a-school--a school, usually with a small enrollment, which houses both its regular students and the gifted students. The gifted school acts as a magnet school, but it is housed in the same building as the regular school
- c) Consortia program--school districts join in a cooperative manner to offer full time placement for gifted students

CHAPTER II

REVIEW OF LITERATURE

The Texas plan for education has faced many changes in recent years. Included among them is the challenge to better meet the needs of all students. One group in particular, gifted and talented students, has not had all the opportunities that could be made available to them. It is apparent that the state gifted and talented mandate attempts to rectify this situation.

The Texas state plan identifies gifted students as those "...with exceptional ability or the potential for exceptional ability" (The Texas State Plan and Guidelines for the Education of the Gifted and Talented, 1990). However, research has indicated that gifted and talented students also possess characteristics not generally found in other students (Parke, 1989). For example, gifted students usually learn at a very rapid pace, they like to learn in-depth, and they tend to be independent, persistent, and highly committed to task. In addition, they are sensitive to themselves, to others, and to their environment. They often prefer working with adults rather than with their peers, and they tend to concentrate intensely. Perfectionism is also another trait, and consequently, they sometimes perform either highly or not at all (Parke, 1989). Gifted students

are also capable of taking advantage of most opportunities made available to them (Renzulli, 1981).

Because of these characteristics, gifted students sometimes work at levels below their capabilities. They may lack motivation, experience developmental delays, or have an academic skill deficit in a subject area in which they are not gifted (Parke, 1989). However, program research indicates that adequate programs improve academic performance, attitudes, and social relations of gifted and talented students, as well as reducing behavior problems in the classroom (Martinson, 1974). It is to meet the specific needs of these students that the Texas plan is aimed.

Texas is not alone, however, in attempting to do this. In fact, other states such as California, New York, and Minnesota have recognized the needs of gifted students and have been attempting to address them for several years (Parke, 1989). These states have looked at various sources to determine what best meets these needs, which is what Texas is now attempting to do (The Texas State Plan, 1990). Although Texas has had a plan for meeting needs of these students since 1981, it is only with the recent educational reforms of House Bill 72 and Chapter 75 Rules of Curriculum that it has been revised, and a mandated time-line has been implemented.

The Texas plan has as its main objective the identification of students with exceptional ability and the provid-

ing of planned programs for them. Individual areas such as staff development, curriculum and program evaluation, and parent involvement are discussed. Goals and objectives exist for these areas. However, individual districts may, within these guidelines, meet these goals and objectives in their own ways. In addition, schools must address six separate areas: evaluation and planning, student identification, program organization, curriculum development, staff development, and parent and community involvement (The Texas State Plan, 1990).

Evaluation and Planning

In any program, evaluation and planning should play an integral part. Depending on the district, planning may be done mainly at the central office level, the building level, or as a cooperative effort between levels. Policy influencers, however, are often included in the planning and evaluation stages, as these people can be the key to the success of the program (Parke, 1989).

Since a successful program is often the result of policy decisions and actions that influence instruction, the policy makers should keep in mind the objectives of their program (Renzulli, 1975). In Texas, state guidelines indicate that planning should be done by committee and should include written needs assessments, goals, and objectives (The Texas State Plan, 1990). According to planning

experts, planning can be a dynamic process with both administrative and community support. The planning process should include an overview of the entire program and should also include staff development and program evaluation (Geogiades, 1986).

In addition to planning, program evaluation needs to occur periodically. Student evaluation occurs during the year and at year's end; curriculum evaluation usually occurs at the end of the school year. A full program evaluation, while including both of these elements, does not always occur each year (The Texas State Plan, 1990). An initial program evaluation, can, nevertheless, include several areas: program description, identification of goals and objectives, determination of evaluation questionnaire, development of evaluation design and instrumentation analysis, and report and planning of on-going evaluation (Parke, 1989). Once this entire process has been completed, evaluation can then occur periodically. Questionnaires, surveys, standardized tests, sociograms, observations, journals, case studies, and interviews are all methods of program evaluation (Parke, 1989). In addition, several program evaluation models exist, and they are easily adapted to the gifted and talented requirements, which are broad-based and require that both qualitative and quantitative measures are considered in evaluating the program (The Texas State Plan, 1990). Meanwhile, the evaluation must be concerned with

program improvement and should give feedback and make suggestions as the program continues (Renzulli, 1975).

Student Identification

Student identification is another area to be addressed when determining how Texas schools are meeting the gifted and talented mandate. General guidelines in the state plan indicate that subjective as well as objective criteria are to be used (minimum of five sources), no one method or instrument carries more weight than any other, and students in groups such as racial or ethnic minorities or handicapped students are not overlooked. In addition, the identification process contains three steps--student nomination, screening, and selection (The Texas State Plan, 1990).

Student nomination occurs as a part of the subjective criteria. Teachers, parents, peers, and sometimes the actual student nominate a student for the program by completing a questionnaire about the student's interests, abilities, and characteristics. This step allows for subjective judgment about a student's traits, which in gifted individuals often include divergent thinking, intense behaviors and feelings, and non-traditional views (Webb, 1982). This is followed by screening, which is the further investigation into class grades, IQ scores, and criterion- or norm-referenced standardized test scores (The Texas State Plan, 1990). A special standardized test, based on the type of

giftedness being identified, may be administered (Tuttle, 1988). This action meets the state guidelines. Also, this type of testing allows for interpretation of identified abilities that extend beyond the IQ and indicates some special skills or talents (Martinson, 1974).

Some districts may choose to follow an already established model, while others may develop their own models for identification. Again, general state guidelines are to be followed in nomination as well as in identification. The school's identification process must be established in writing (The Texas State Plan, 1990).

Program Organization

Program organization, as the name implies, is the structure dealing with types of classes or rooms to be utilized, as well as various options available to meet student needs. Many items play a role in determining the structure of the program: student needs, physical facilities of the district, funding, and administrative cooperation. Since the state plan allows for local choice and control or organization, it is necessary to have the local building level administrator enthusiastic about the program. This is the person who sets the tone of the whole school, oversees personnel, and makes decisions. This individual can make or break any program within his building (Parke, 1989).

District philosophy also helps determine the structure of the program--will the program be one mainly of enrichment, or one of acceleration? Depending on the answer to that question, the district will choose one program structure over another (Roets, 1989). Another factor involved in determining program structure is the area or areas in which the school identifies gifted students--general intellectual ability, specific subject matter aptitude, creative and productive thinking ability, or leadership ability. A program that works for schools identifying in general intellectual ability, for example, may not be at all feasible for schools identifying in specific subject matter aptitude. The most frequently used models of structure include special classes for the gifted and talented, magnet schools, schools-within-schools, mentorships, and consortia programs (Parke, 1989).

Specific Subject Matter Aptitude

Within specific subject matter programs, many variations exist. The Texas State Plan (1990) does not specify in particular what plans must be used, although possible examples such as honors classes are given.

Acceleration is often used by teachers in specific subject matter programs in which students are grouped together in one class. By grouping students this way, teachers can move the class more quickly, allow students to move

at their own pace, and differentiate the curriculum for the entire class, rather than grouping students within a regular classroom (Parke, 1989). In addition to acceleration, the inquiry approach is often utilized in special classes. Students that are gifted in social studies, for example, are given opportunities to explore particular topics by following the methods of inquiry characteristic of that particular discipline. Other approaches and activities are also characteristic of content area classes, such as mentors, guest lecturers, and real-life simulations (Parke, 1989).

Various other methods may also be used in specific subject area classes. For example, schools may offer honors classes only to gifted students, or separate gifted-honors classes. These classes could be university based, in which students actually attend classes at an institute of higher learning. Concurrent credit classes are also possible. In these, a student simultaneously receives high school and college credit for a subject, although the class is taught at the high school campus. The college Board Advanced Placement classes are also utilized for gifted students. These classes generally are accelerated; at the end of the course, students take an exam to determine if they receive college credit for the course (Van Tassel-Baska, 1989). State advanced placement is also an alternative. In this case, students may be accelerated through classes in school if they meet state criteria of certain scores on standard-

ized tests, local test scores, and aptitude (The Texas State Plan, 1990).

A variation of the magnet school is the school-within-a-school. In this setting, students in gifted classes share the facilities with students in the regular school. The students are, as in the magnet school, pulled from throughout the district. However, the content of their classes is differentiated from that of the students within the regular school, as are some of the instructional approaches, such as interest-based grouping (Parke, 1989).

A final structure in specific subject matter programs is the resource room. This is a room, staffed by a teacher of gifted education, in which students are admitted for individualized research and special projects. Some students may attend on a regular basis, while others only infrequently attend (Renzulli, 1981). Unlike the other structures in specific content, this can be either a full time or a pull-out program, allowing students extra time and help for specific projects. According to state guidelines, (The Texas State Plan, 1990), all of these plans are acceptable to meet the Texas gifted and talented requirements.

General Intellectual Ability

Many general intellectual ability programs are similar to specific content programs in structure. In this type of program, students may be placed in special classes in con-

tent areas. These include honors classes, separate gifted and talented classes, or concurrent credit or Advanced Placement classes (Parke, 1989). A general intellectual program may also be structured through a specific course, such as a humanities class, that uses an interdisciplinary approach and sometimes, block scheduling and team teaching (Van Tassel-Baska, 1988).

There are at least two procedures from which to choose in setting up a class in the general intellectual ability program. In the first, the teacher decides on a set of major ideas to explore, then builds the content outline around these ideas, and finally chooses materials to facilitate the teaching of the ideas or concepts. In the second procedure, the teacher generates ideas from existing content topics, decides what aspects of the ideas to explore, and finally chooses the materials. In either process, the teacher is concerned with teaching concepts and holistic views. The holistic approach is used extensively by the College Board Advanced Placement program, especially in English and history (Van Tassel-Baska, 1988).

Creative and Productive Thinking

Students identified in creative and productive thinking may be placed in separate classes within specific content areas. If this is the case, these classes would be the same as for students identified in that content area. Another

possible program structure is to place these students in an elective class, such as a humanities class, like students identified in general intellectual ability. A third choice is to restructure the curriculum for gifted students so that critical thinking is taught in all of their classes (Paul, 1989). Still a fourth possibility is for these students to participate in nationally competitive programs that test their creative abilities (Van Tassel-Baska, 1988). Whether students participate in specific content classes or a single gifted and talented class, they are specifically taught various methods and models of critical and creative thinking.

According to Ennis (1962), there are 12 critical thinking aspects. These are as follows:

- 1) To grasp the meaning of a statement
- 2) To judge ambiguous reasoning
- 3) To judge if a statement is contradictory
- 4) To judge if a conclusion follows a premise
- 5) To judge if a statement is specific
- 6) To judge if a statement is applicable to a principle
- 7) To judge if an observation is reliable
- 8) To judge if an inductive conclusion is warranted
- 9) To judge if a problem has been identified
- 10) To judge if a statement is an assumption
- 11) To judge if a statement is adequate

- 12) To judge if a statement made by an alleged authority is acceptable

A teacher in a creative-productive thinking class teaches information such as this directly to the students, so that they are aware of what to look for when making a judgment. Consequently, the procedure becomes the curriculum. Students are then given opportunities to apply this knowledge in their other classes and to specific problems designed to exercise their abilities.

Creative thinking skills may also be taught. If Bloom's Taxonomy of Educational Objectives (1956) is taught as content, for example, students become more aware of their questions and levels of thinking. Thinking skills may also be taught by choosing appropriate strategies, such as the Socratic method of questioning. According to Paul (1989), there are three levels of Socratic questions: spontaneous, which are unplanned but occur after a comment or statement is made; exploratory, which help teachers probe student thinking; and issue-specific, which question a concept in depth. When used correctly across the curriculum, these questions can strengthen student thinking skills.

These types of thinking skills may be emphasized in a class in a specific subject, such as English, or in a separate class, such as a humanities class. In addition, students may also be given various tests in this program, such as the Developing Cognitive Abilities Test (1980), or the

Torrance Test of Creative Thinking (1974). No matter in which types of classes students are enrolled, additional material, such as thinking skills, may be taught as long as the essential elements of that class are also met (The Texas State Plan, 1990).

Another component of this type of program is student participation in national contests designed to test creative thinking. Programs such as these include Future Problem Solving, Odyssey of the Mind, and the Science Olympiad (Parke, 1989).

Future Problem Solving exposes students to problems that deal with life in the future. Students are guided by the instructor, they work in teams, and they compete against other teams in a Problem Solving Bowl. Odyssey of the Mind also involves competition. Students are given long-term problems in advance so that they may work on solutions. They are also given spontaneous problems for which they have to quickly and extemporaneously find innovative solutions. The Science Olympiad is a competition involving both individual and team efforts in quizzes, bowl competitions, and computer programming. Students may also participate in scientific demonstrations and lectures (Parke, 1989). Although this particular competition revolves around one academic area, science, critical and creative thinking skills are required for a student to do well and to advance to more difficult levels of competition.

Leadership Ability

Identifying students gifted in leadership ability is often more difficult than identifying them in other areas because in some circumstances, a student who is normally a leader will be a follower. However, for one to be a good leader, the student does need to possess and exercise certain skills (Van Tassel-Baska, 1988).

Since the purpose of teaching leadership skills is for them to be used in a productive manner, schools identifying students in leadership ability should be aware of two factors concerning their program. First, students must clearly be identified as gifted in leadership potential, and secondly, schools must determine what exact definition of leadership will be used. Several approaches may be taken, such as that of the charismatic leader or that of the leader as a manager of groups of people (Van Tassel-Baska, 1988).

Schools teaching leadership skills to gifted students generally use one of two program structures. If leadership is viewed as a goal for all gifted and talented students, the skills are taught in regular gifted classrooms along with other subject matter. If, however, leadership is taught as a specialized curriculum, then a separate class is used, in which leadership skills and techniques are taught (Van Tassel-Baska, 1988).

Since leadership is an area that affects other people, not just the individual learner, a question of ethics might arise. When teaching skills, characteristics, and techniques of leadership, the teacher is also passing on a set of assumptions about leaders. Kohlberg (1972) recommends that students be taught morals or ethics by allowing them discussions of moral choices. Including ethics in the curriculum of leadership would help give students another view of what leadership is (Van Tassel-Baska, 1988).

Although less has been written on this area of giftedness than others, schools do have the responsibility to teach leadership skills if students are identified as gifted in leadership ability. Again, as in other areas, The Texas State Plan (1990) does not indicate what specific program structure to use. It does, however, suggest types, and it stipulates that any class must meet its essential elements.

Curriculum Development

According to The Texas State Plan (1990), curriculum must be differentiated for gifted students in content, process, and product. At the same time, however, it must meet the essential elements and provide for feedback to the student.

Numerous curriculum development models exist for gifted programs. Which ones work in any district depends on several factors, including the specific definitions of giftedness

beyond state guidelines that the school adopts. Also, what model is chosen depends on whether general intellectual ability, specific subject matter aptitude, leadership ability, or creative and productive thinking ability is identified. As with any educational program, the quality of the gifted program depends not only on the teacher, but also on the curriculum and the degree to which it corresponds to the learners' needs (Van Tassel-Baska, 1988). Consequently, curriculum planning and development are vital.

Renzulli's Enrichment Triad Model (1977) divides the curriculum into three basic areas: General Exploratory Ideas, (Type I); Group Training Activities, (Type II); and Investigation into Real World Problems, (Type III). Type I activities introduce the learner to potential topics of interest through field trips, guest speakers, interviews, and other similar situations. Type II activities deal with the development of thinking and feeling processes. Brainstorming, hypothesizing, and elaboration are examples of this type of activity. Type III activities build on the two previous varieties, with students practicing inquiry into real world problems. In so doing, they assume the persona of an investigator, whether it is a musician, a horticulturist, or a grammarian.

This particular model modifies both the process and the product and is flexible by giving teachers a method for dealing with different learning rates and interests. It

also exposes students to experiences they otherwise might miss (Parke, 1989). This model can be used with any identified area, but it is especially good for specific subject matter and general intellectual ability.

Suchman's model (1983) is a four step process involving data collection, data organizing, hypothesizing, and hypothesis testing. In this model, students are given a dissonant or discrepant situation for which they must collect data. Part of the data collection consists of asking questions which can be answered Yes or No, and then testing the hypothesis. Since this is an inquiry model, it modifies both the process and the environment. It can be used throughout the curriculum in different content areas, although it is especially suited to science and the scientific method.

Clark's model (1986) utilizes content as well as process, product, and environment. Content is expanded to include numerous subjects, while in the process area, different teaching strategies are used to address student feelings and creativity. Student products may include the usual essays or reports, but they also may be feelings of self-esteem or skills in independent learning and self-management.

This particular model is based on brain-mind research, and it combines thinking, feeling, sensing, and intuiting skills. Teachers are able to use an integrative approach to appeal to four different parts of the brain that interact

and support each other. These areas deal with the cognitive domain, where analysis, problem-solving, and sequencing occur; the affective domain, which controls emotions and feelings; the physical domain, which controls movement, physical encoding, and the senses; and the intuitive domain, which governs total conceptual understanding. Since this model addresses these four different and distinct areas, it is pragmatic, and the teacher can teach to the whole human being, not just to the intellect. Although this model will work for content areas, it is also acceptable for general intellectual ability and creative and productive thinking.

Other models are concerned with creative thinking, such as Treffinger's model (1986), which addresses skill-building activities. This model starts with the basic tools of thinking, moves to practice by different processes, and concludes with working with real problems. Students are able to find ways to incorporate thinking skills into course content while simultaneously practicing problem-solving methods. They can eventually solve real problems, having progressed in their skills.

Parnes' model (1977) also addresses methods of creative problem-solving. Students are given a scenario containing a problem. They must first determine what the problem is and then brainstorm solutions to it. Afterwards they develop criteria to judge the most feasible solutions and create a plan for acceptance of the solution by other members of the

class. This model is itself a type of content modification, as teachers must first teach the model before presenting any problems.

Krathwohl's (1964), Gallagher's (1985), and Williams' (1978) models can be combined and used with other models. Krathwohl's model deals with a taxonomy of the affective domain. The skills of this taxonomy are in hierarchical order of attainment only; each is equal to the others and all are necessary. The students learn the taxonomy as content in an effort to become more sensitive to their own beliefs, as well as to the beliefs of others. These skills include receiving or sensing the feelings of other people, responding to these feelings, placing value on emotions, organizing one's own emotions into a value system, and characterizing, or translating values into behaviors. This model can be used in all program structures for all four types of identification, but it is especially suited to leadership and to general intellectual ability.

William's and Gallagher's models each deal with modification in the classroom. Williams addresses three different dimensions--curriculum, which is divided into six subject areas; teacher behaviors, which are teaching strategies; and student behaviors, which are eight different skills (four cognitive, four affective) to be learned. Gallagher, meanwhile, has a four-prong approach to content differentiation. These methods include acceleration, enrichment, sophistica-

tion (which allows students to see a larger system of ideas), and novelty (which introduces students to content they normally would not study). Both of these models may be used in specific content classes or for students in classes addressing creative and productive thinking and general intellectual ability.

Debono's CoRT model (1986) teaches thinking as a skill, beginning with basic skills training, moving to creative thinking, and finally advancing to critical and interactive thinking. Instructional process is primarily differentiated in this model. However, it also affects content when students learn the model as subject matter. It is well suited for a creative and productive thinking class.

Bloom's Taxonomy of Educational Objectives (1956), although originally intended as a method of classification, is also used as an instructional model. Students learn the hierarchical classification of objectives as thinking skills, beginning with knowledge and progressing to comprehension, application, analysis, synthesis, and evaluation. Teachers may teach the taxonomy as content, so that students recognize how they are thinking and thus ask better questions. Also, this model gives a framework for cognitive abilities, as the world outside of the classroom requires the use of these different levels of thought. Although this model is used for creative thinking skills, it can be taught in a content classroom as well.

These models differ from one another; each is adaptable in varying degrees to the requirements outlined in the Texas plan. Therefore, each district may make a determination based on local needs as to which, if any, of these models to use.

Staff Development

The fifth area of the Texas plan is staff development, which must address the needs of the teachers of the gifted classes as well as those of other staff members, including teachers of regular classrooms, teachers in other programs, and administrators. Basically, staff development is on-going and should be appropriate for each individual district. In addition, there are several other factors to be considered (The Texas State Plan, 1990).

Staff development needs to occur in segments and should begin with an orientation (Van Tassel-Baska, 1988). Many teachers are unaware of the characteristics of gifted students or of their special needs. The orientation phase also needs to include an introduction to the goals and structure of the program (The Texas State Plan, 1990).

Follow-up sessions should also occur in order to keep the staff informed of progress and action. Finally, visits by the administrator in charge should be made into the classrooms of the gifted students. Here the administrator can observe student-teacher interaction, student progress,

and appropriateness of the setting (Van Tassel-Baska, 1988). It is also beneficial for teachers to be involved in planning in order to see flexibility needs and the overall picture. Again, individual districts are given options to choose the methods to fulfill state requirements, within broad guidelines, so that they may best meet the needs of their students (The Texas State Plan, 1990).

Parent and Community Involvement

The last area the state plan addresses concerns parent involvement. Flexibility exists for each district, based on several factors, as the guidelines are general in nature. Parents and community members are to be involved in planning and evaluation, are to be kept informed, and are to be encouraged to participate in the program (The Texas State Plan, 1990).

Guidelines are somewhat specific involving the planning and evaluation stages, as parents are to be included on the district planning committee that establishes the program (The Texas State Plan, 1990). However, only general comments are made concerning communication with parents.

One method to keep parents informed is to hold parental meetings or to form a gifted and talented booster club. Newsletters are also informative. Some schools involve parents by inviting them to be guest lecturers in the classrooms (Parke, 1989). Other methods can be used in addition

to these, including the personal contact by the teacher or administrator. How parents are involved is determined, as are many other aspects of the gifted program, by the district's needs and traits.

CHAPTER III

METHOD OF RESEARCH

Sample

The research sample was based on data from a mail-out survey, the sample being composed of 120 public high schools in the state, chosen at random, to represent 10% of the 1184 public high schools in Texas. This random sample was stratified by school size, based on Texas University Interscholastic League (1991) classifications. These are as follows:

Class	Number of students per school	Number of schools per classification	Number sampled
1A	139 or fewer	317	32
2A	140-284	227	23
3A	285-689	219	22
4A	690-1459	159	16
5A	1460 or more	262	27
	Totals	1184	120

Instrumentation

The instrument was a survey, written by the researcher, covering questions about student identification and entrance into the gifted and talented program; student grouping patterns; curriculum models, bases, and development; and administrative policies. (See Appendix A). Prior to mail-

ing, the survey was submitted to a panel of three professional educators for suggestions and input, and to determine if, in their opinions, it addressed the issues of the state plan. These people included a high school principal and a high school assistant principal, both of whom were gifted and talented building level co-ordinators for their schools. The third person was a district-level gifted and talented co-ordinator.

Research Questions

For the purpose of this study, the following questions were posed:

Student Identification and Program Admittance

- 1) [A] Who can nominate a student to the program? [B] What types of nomination instruments are used? [C] Is a screening matrix used, and if so, how many criteria are used?
- 2) Are students identified by general intellectual ability, specific subject matter aptitude, leadership ability, or creative and productive thinking ability?
- 3) What procedures are used to accommodate gifted and talented students transferring into the district after the school year has started?

Program Organization

- 4) What grouping patterns are used?

Staff Development

- 5) How are personnel chosen, both professional and para-professional, if any?

Curriculum Development

- 6) [A] What curriculum models are used? [B] Is one model used throughout the district?
- 7) How are the curriculum models chosen?
- 8) Have curriculum documents been developed for the program, and if so, by whom?
- 9) How long has the school's gifted and talented secondary program (grades 9-12) been in existence?

Evaluation and Planning

- 10) [A] Who is the immediate supervisor of the teachers of gifted classes? [B] Is there a single administrator in charge of the entire program?
- 11) What evaluation procedures are used for the program and how often does the program evaluation occur?

Parent and Community Involvement

- 12) How are parents and community members involved in the program and to what extent?

Procedures

The survey was mailed to the principals of the selected high schools. A return-addressed, stamped envelope was included in the mailing. If there was no return, a follow-up telephone call was made. Respondents answered directly on the instrument, and a cover letter was attached. (See Appendix B). There was a two-week wait time after the initial mailing before the follow-up telephone call was made. If after a week there was still no response, a second telephone call was made. If there was no response after one more week, the school was dropped from the sample.

A 60% response rate was anticipated for this survey, and that was indeed the return. Classified by school size, the response rate varied from 50% to 70%, with the overall rate for all schools being exactly 60%. After this response rate was determined from the mailing, the data were analyzed in order to describe what selected high schools were doing to meet their gifted students' needs as well as the requirements of the state mandate. This data analysis included the following steps:

- 1) Schools were grouped by size based on UIL classification
- 2) Tallies were kept on responses from the schools to each question on the questionnaire

- 3) Frequencies of response were determined
- 4) Data were reported by percentages in tables

By observing how schools classify students, train and utilize staff, and involve parents, the researcher could distinguish between differences and similarities in approaches by the schools. By inference, this descriptive analysis could help determine how successfully the schools were meeting the mandate requirements for secondary schools, and if, indeed, more direction from the state were necessary.

CHAPTER IV

RESULTS AND DISCUSSION

Results

For the gifted and talented survey mailed to randomly selected Texas public high schools in April, 1991, a minimum 60% response rate was anticipated. The sample was stratified according to school size, based on University Interscholastic League classifications of 1A, 2A, 3A, 4A, and 5A. The following response rate by category was received from a total of 120 questionnaires mailed.

Class	Number Mailed	Number Received	% Returned
1A	32	18	56%
2A	23	13	57%
3A	22	13	59%
4A	16	9	56%
5A	27	19	70%

The overall response rate was 60%, with the 5A schools having the largest return, 70%. The smallest percentage of responses came from schools classified 4A and 1A, with each returning 56% of the questionnaires. Although the survey was addressed to the principals of the selected high schools, in some cases other personnel completed and re-

turned the instrument. The numbers of surveys completed by various personnel were as follows:

Principal	47	Vice Principal	8
Counselor	3	Gifted coordinator	13
Superintendent	1		

The survey addressed the following research questions:

Student Identification and Program Admittance

Research Question 1 [A]: Who can nominate a student to the program?

As shown in Table 1, 100% of all schools reporting allowed nominations to the gifted and talented program by educators.

Table 1

Types of Nominations by School Size Reported in Percentages

Size	Total Responding	Educator	Peer	Parent	Self	Other
1A	19	100%	17%	78%	33%	11%
2A	13	100%	15%	92%	30%	15%
3A	13	100%	23%	69%	39%	23%
4A	9	100%	0%	100%	56%	11%
5A	19	100%	37%	74%	68%	15%
Total Group		100%	21%	81%	46%	15%

Parent nominations were the next largest amounts, with 81% of all schools allowing these, and self nominations were third at 46%. The percentages of 1A, 2A, and 3A schools all fell within the 30%-40% range for self nominations, whereas

the larger 4A and 5A schools allowed for considerably more, at 56% and 68%, respectively. Nominations by peers had the smallest amounts, with only 21% of all schools allowing them.

Research Question 1 [B]: What types of nomination instruments were used?

There was a direct relationship between who could nominate students and nomination inventories, as 86% of the schools used teacher inventories, 57% used parent inventories, and 31% used student self-inventories. These figures are reflected in Table 2.

Table 2

Nomination Inventories

Class	Sample	Teacher	Self	Parent	Peer	Other
1A	18	89%	22%	63%	11%	0%
2A	13	77%	23%	54%	8%	15%
3A	13	85%	15%	46%	8%	15%
4A	9	100%	67%	89%	0%	0%
5A	19	84%	37%	53%	21%	11%
Total Group		86%	31%	57%	11%	8%

One school official said that student names were merely submitted to the counselor by teachers. At that point, a parent inventory or a student interest survey was administered as the main nomination instrument. All other officials indicated that nominations were made in writing on a standard form used by the school.

In addition to nomination inventories, 89% of all schools reporting used a standardized achievement test as a tool for screening, as indicated in Table 3.

Table 3

Screening Criteria by Schools Reported in Percentages

Size	Sample	Class Grades	IQ Tests	Achievement Tests	Aptitude Tests	Other
1A	18	33%	78%	33%	33%	17%
2A	13	69%	85%	92%	31%	39%
3A	13	69%	69%	92%	62%	0%
4A	9	67%	89%	89%	67%	22%
5A	19	79%	68%	95%	58%	11%
Total Group		63%	76%	89%	49%	14%

IQ tests were second in usage at 76%, and aptitude tests were used by 49% of the schools. Although grades are not a standardized instrument, 63% of the schools reported using them as a screening device.

Research Question 1 [C]: Is a screening matrix used, and if so, how many criteria are used?

Table 4 reflects the percentages of schools using a matrix and how many criteria they used. As shown, only 8% of the responding schools did not use a matrix.

Seventy one percent of all schools used the minimum of five criteria on the matrix. One hundred percent of the 3A schools used five criteria, while 72% of the 1A, 69% of the 2A, and 68% of the 5A used five. Only in the 4A size

category did less than half of the schools use just five criteria on the matrix.

From the data pertinent to student identification and program admittance, it was found that all schools allowed educator nominations and most allowed parent nominations. Self nominations by students and peer nominations were used by the fewest number of schools, as were self and peer inventories. For screening purposes, most schools used the minimum number of five criteria on the matrix. The criteria included achievement tests, which were used more than any other criterion, IQ scores, which were used next, and then class grades, aptitude tests, and various other criteria determined by the districts.

Table 4

Number of Criteria on Matrix Reported by School Size in Percentages

Size	Sample	5	More than 5	No matrix used
1A	18	72%	11%	17%
2A	13	69%	23%	8%
3A	13	100%	0%	0%
4A	9	38%	62%	0%
5A	19	68%	21%	11%
Total Group		71%	19%	8%

Research Question 2: Are students identified by general intellectual ability, specific subject matter aptitude,

leadership ability, or creative and productive thinking ability?

As seen in Table 5, students were identified primarily by general intellectual ability and creative and productive thinking ability.

Table 5

Areas of Gifted and Talented Identification Reported by School Size in Percentages

Size	Sample	Subject Matter	General Intellectual	Leadership	Creative Thinking
1A	18	28%	78%	11%	44%
2A	13	23%	77%	15%	46%
3A	13	39%	69%	23%	69%
4A	9	44%	89%	33%	47%
5A	19	58%	68%	0%	47%
Total Group		39%	75%	14%	53%

Seventy five percent of all schools reporting indicated that officials identified students by general intellectual ability. Of these schools, the greatest percentage was 4A size, with 89%. Additionally, 53% of all reporting schools indicated that students were identified by creative and productive thinking ability. The 3A size identified most by this area, (69%). Twenty eight schools, or 39% of those reporting, identified by specific subject matter aptitude. 5A was the size identifying most by this area, with 58%. The fewest number of schools identified by leadership ability, with 14% reporting that identification was made in this

area. Although 4A was the size identifying most by leadership ability, only 33% of them did so. Also, no school identified exclusively by leadership ability.

Research Question 3: What procedures are used to accommodate gifted and talented students transferring into the district after the school year has started?

Most of the reporting schools (92%) indicated that students transferring from out-of-district who qualified for the gifted program in the sending district would be admitted to the program in the receiving district without re-screening, as noted in Table 6.

Table 6

Program Admittance for New and Transfer Gifted Students
Reported by School Size in Percentages

Size	Total Responses	Admitted	Not Admitted
1A	18	94%	6%
2A	13	100%	0%
3A	13	69%	31%
4A	9	89%	11%
5A	19	100%	0%
Total Group		92%	8%

One hundred percent of the 2A and 5A schools, 94% of the 1A, and 89% of the 4A schools accepted transfer gifted students without re-screening into their programs. Only 69% of the 3A schools, however, did so. Those 3A schools that did not accept indicated that students would be admitted to

the school's program only if they were re-screened and met the receiving school's criteria. They would then be admitted at the beginning of the school year or the next semester. None of the other schools that did accept transfer students indicated a need to meet local criteria or a specific time-frame.

Program Organization

Research Question 4: What grouping patterns are used?

Meeting state guidelines for program organization varied by school size, as noted in Table 7.

Table 7

Grouping Patterns for Gifted/Talented Classes Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Total Group
Sample	18	13	13	9	19	
Gifted Class	44%	39%	39%	56%	58%	47%
Gifted/Honors	22%	39%	46%	33%	53%	39%
Regular Class	39%	8%	8%	11%	5%	15%
Resource Room	0%	23%	8%	22%	5%	8%
School-within-School	0%	0%	0%	0%	5%	1%
Magnet School	0%	0%	0%	0%	0%	0%

Forty seven percent of the schools stated that they offered separate elective gifted classes, while 39% stated that gifted students were grouped with honors students in honors classes. Fifteen percent of all schools placed gifted students in the regular classroom. This was espe-

cially evident in the 1A schools, where 39% used this grouping method. The two least used methods of grouping were the resource room (8%) and the school-within-a-school (1%).

Staff Development

Research Question 5: How are personnel chosen, both professional and para-professional, if any?

As shown in Table 8, 72% of the responding districts indicated that professional personnel were chosen primarily for their ability to work with gifted students. Sixty eight percent chose personnel for their interest in the program, and 58% chose them for their educational background.

Table 8

Criteria for Choosing Professional Personnel Reported in Percentages by School Size

	1A	2A	3A	4A	5A	Total
Sample	18	13	13	9	19	
Education	50%	46%	69%	56%	68%	58%
Program Interest	50%	77%	77%	78%	68%	68%
Seniority	0%	0%	0%	0%	5%	1%
Ability/students	12%	77%	62%	67%	79%	72%
Other	11%	15%	8%	0%	1%	10%

As a method of choosing teachers, seniority carried little weight for the gifted and talented programs. Only one school reported that seniority was a factor in choosing the teachers. However, this particular 5A school also used other methods to choose teachers.

The term educational background was purposefully left ambiguous in the questionnaire because it was followed by the question of what special training did the district require for its teachers of gifted classes. (See Appendix B). State guidelines say that teachers of gifted classes must be certified in the subjects or levels to which they are assigned, but they are not required to be certified in gifted education. However, all teachers new to the program must have a minimum of five days in-service in gifted education. As shown in Table 9, 83% of the reporting schools required in-service as per state guidelines, with 17% requiring gifted certification or endorsement.

Table 9

Training Required for Professional Staff Reported by School Size in Percentages

Size	Sample	State Minimum	Certification
1A	18	100%	0%
2A	13	100%	0%
3A	13	69%	31%
4A	9	67%	33%
5A	19	79%	21%
Total Group		83%	17%

It was only in the three largest size categories that any educational requirements beyond state minimum were required, as 100% of both 1A and 2A schools required only state mandated in-service, with no gifted certification

required. However, not all schools in the three largest sizes required certification, as 31% of 3A, 33% of 4A, and 21% of 5A schools required it.

Para-professionals were used in gifted classrooms in only 10% of the reporting schools, as shown in Table 10. Six percent of the schools indicated that they used para-professionals for clerical duties to support their gifted and talented programs. Eighty four percent of the schools did not use them.

Table 10

Use of Para-Professionals in Gifted Programs Reported by Schools in Percentages

Class	Sample	Classroom	Clerical	Not Used
1A	18	11%	11%	78%
2A	13	15%	8%	77%
3A	13	0%	0%	100%
4A	9	22%	0%	78%
5A	19	5%	5%	90%
Total Group		10%	6%	84%

At least a few schools in each size category except 3A used para-professionals, with all schools falling within the 10%-25% range.

The personnel data indicate that while schools generally required only minimum training in gifted education for their professional staff, they also used criteria other than educational background for selection of personnel. These

criteria included ability to work with gifted students, which was used more than any other criterion, as well as interest in the program.

Curriculum Development

Research Question 6 [A]: What curriculum models are used?

As seen in Table 11, 72% of school officials stated that their teachers used Bloom's Taxonomy of Educational Objectives (1956) as the curriculum model for their program.

Table 11

Gifted/Talented Curriculum Models Used Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	13	13	9	19	
Bloom	78%	46%	85%	89%	68%	72%
Clark	0%	0%	8%	0%	0%	1%
Renzulli	33%	31%	31%	11%	16%	25%
Treffinger	0%	0%	8%	0%	5%	3%
Suchman	0%	0%	8%	11%	5%	4%
Debono	0%	8%	0%	0%	11%	4%
Gallagher	11%	8%	0%	0%	11%	7%
Krathwohl	0%	8%	0%	11%	0%	3%
Parnes	6%	38%	0%	33%	5%	14%
Williams	0%	0%	0%	22%	5%	4%
Other	0%	8%	15%	0%	0%	6%

The second largest percentage of schools (25%) reported using the Renzulli Enrichment Triad (1977). This model,

like Bloom's, was used by schools in each size classification. The only other model that had a fairly large percentage (14% of the reporting schools) was the Parnes model (1977). All the other models named had a scant percentage of schools using them, ranging from 1% to 7%. Also, 6% of the schools indicated that they used other models, none of which they named.

Research Question 6 [B]: Is only one model used throughout the district?

As shown in Table 12, 65% of the reporting schools indicated that more than one curriculum model was used for the gifted and talented program.

Table 12

Number of Curriculum Models Used Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	12	11	7	15	
One model	22%	42%	27%	57%	40%	35%
More than one	78%	58%	73%	43%	60%	65%

The 1A schools reported the greatest usage of more than one curriculum model, 78%. Additionally, in all size categories except 4A, over half the schools used more than one model. In the 4A size, 43% used just one model.

Research Question 7: How are the curriculum models chosen?

Whatever models were chosen, they were done so primarily by teachers, as seen in Table 13.

Table 13

Methods of Choosing Curriculum Models Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	12	13	9	18	
Written for District	6%	17%	31%	22%	58%	29%
Administrative Mandate	11%	8%	15%	0%	0%	7%
Teacher Choice	56%	50%	38%	44%	36%	46%
Other	5%	0%	0%	0%	0%	1%

Forty six percent of the reporting schools indicated that teachers chose the models they used, while 29% stated that the models were written especially for the district. Only a small portion of schools (7%) indicated that models were chosen by administrative mandate, and these schools were all in the three smallest size classifications. Although it was possible that the models for these schools were chosen with teacher input, the question was not phrased that way, and none of the responding officials indicated that this was indeed the case.

As seen from this data, most schools responded to the questions concerning curriculum documents by indicating that Bloom was the model of choice, and teachers generally were the responsible parties for choosing curriculum models.

Research Question 8: Have curriculum documents been developed, and if so, by whom?

Most school officials indicated that documents had been written, as Table 14 indicates.

The largest percentage of schools (72%) reported that curriculum guides had been written, while 58% stated that a scope and sequence had been written for the program. Forty four percent of the schools had unit plans, while 35% had course plans. It should also be noted that 6% of the schools (three 1A and one 2A) did not have any documents at all.

Table 14

Developed Curriculum Documents Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	13	13	9	19	
Curriculum Guides	50%	38%	77%	78%	84%	72%
Scope/Sequence	56%	77%	46%	67%	53%	58%
Course Plans	11%	31%	31%	44%	37%	35%
Unit Plans	39%	62%	39%	56%	37%	44%
None	17%	8%	0%	0%	0%	6%

As noted in Table 15, 57% of all reporting schools stated that teachers wrote their own curriculum documents.

Some schools (27%) indicated that a combination of staff members wrote the documents. These individuals were named as teachers plus gifted and talented co-ordinators, curriculum directors, or other central office personnel. In

addition to these, 10% of the schools stated that others had written the documents for them, and these were all cited as the Regional Service Centers.

Table 15

Staff Developing Curriculum Documents Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	13	13	7	19	
Central Office	6%	0%	0%	0%	11%	7%
Teachers	56%	54%	62%	86%	47%	57%
Building Administrator	0%	0%	0%	0%	0%	0%
Combination of Staff	17%	23%	38%	14%	42%	27%
Other	22%	23%	0%	0%	0%	10%

Research Question 9: How long has the school's gifted and talented program (grades 9-12) been in existence?

Eighty three percent of the responding schools indicated that their gifted and talented programs were five years old or newer, as seen in Table 16.

Table 16

Gifted and Talented Program Length Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	13	13	7	19	
New This Year	56%	39%	31%	42%	32%	40%
1-5 Years	44%	61%	62%	29%	21%	43%
6-10 Years	0%	0%	7%	29%	26%	11%
More than 10 Years	0%	0%	0%	0%	21%	6%

Only schools in the three largest size categories reported programs between six and ten years old (11%), and only 21% in the 5A category had any programs more than ten years old.

Evaluation and Planning

Research Question 10 [A]: Who is the immediate supervisor of the teachers of gifted classes?

In 93% of the responding schools, teachers of gifted students were supervised by their building level administrators, as indicated in Table 17.

Table 17

Immediate Supervisory Personnel for Teachers of Gifted/Talented Classes Reported by School Size in Percentages

Size	Sample	Building Level	Central Office
1A	17	94%	6%
2A	12	100%	0%
3A	13	100%	0%
4A	8	100%	0%
5A	19	79%	21%
Total Group		93%	7%

In all but the 5A size, building level supervisors were in the 94%-100% range. In the 5A size, 79% of the schools used building level personnel as the immediate supervisors of teachers of gifted classes.

Research Question 10 [B]: Is there a single administrator in charge of the entire program?

As indicated in Table 18, 42% of all responding schools had a full time administrator--a gifted and talented coordinator or director--for the district.

The greatest number of these schools that did have a full time gifted director were 5A schools (68%) in districts large enough to have such an individual. One school spokesman said that the district did have a gifted director, but this person had other duties as well. In sum, most schools used building level administrators as supervisors of teachers of gifted students, and slightly less than half the schools had full-time gifted and talented directors.

Table 18

Schools with Full Time Gifted/Talented Directors Reported by School Size in Percentages

Size	Sample	With Director	Without Director
1A	18	22%	78%
2A	13	38%	62%
3A	13	46%	54%
4A	9	22%	78%
5A	19	68%	32%
Total Group		42%	58%

Research Question 11: What evaluation procedures are used for the program and how often does the program evaluation occur?

As noted in Table 19, 74% of all schools used a combination of instruments to evaluate their programs.

Thirteen percent of the schools used questionnaires to faculty, students, and parents. This type of instrument allowed for comments from the respondents while also asking specific questions the evaluator needed answered. Eight percent of the schools used faculty inventories, while only 5% used standardized instruments. These were cited as achievement tests administered to students to determine their progress.

Table 19

Gifted/Talented Program Evaluation Instruments Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	16	13	10	6	16	
Questionnaires	6%	8%	30%	33%	6%	13%
Standardized Tests	6%	0%	0%	0%	13%	5%
Faculty Inventory	19%	15%	0%	0%	0%	8%
Combination	69%	77%	70%	67%	81%	74%

The last part of the question concerning program evaluation dealt with the program time-frame. The Texas State Plan (1990) indicates that although evaluation should be ongoing, and although a comprehensive evaluation should occur every five years, not all aspects of the program need to be evaluated each year. Forty six percent of the schools responded to the question of how often program evaluation

occurred by stating that it occurred yearly, as shown in Table 20.

While 18% of the schools said evaluation occurred as needed, 8% said it occurred at set periodical, but not yearly, intervals. Additionally, 25% of the schools said that program evaluation had never occurred.

Generally schools responded by stating that evaluation was a yearly occurrence, at least in part. Questionnaires were used by more schools than any other single type of instrument, although most schools used a combination of instruments.

Table 20

Frequency of Program Evaluation Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	14	13	7	9	
Never	11%	7%	30%	71%	31%	25%
Yearly	61%	71%	61%	0%	21%	46%
Periodically (Not Yearly)	5%	0%	7%	0%	26%	8%
As Needed	22%	21%	0%	29%	21%	18%

Parent and Community Involvement

Research Question 12: How are parents and community members involved in the program, and to what extent?

Although parents were involved in the programs in several ways, 72% of the schools relied on direct teacher contact with parents, as shown in Table 21.

Table 21

Methods of Parental Involvement in Gifted/Talented Programs
Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	13	13	9	19	
Teacher Contact	72%	69%	77%	67%	74%	72%
Newsletter	33%	15%	23%	56%	26%	29%
Parent Group (Communication)	28%	31%	15%	22%	53%	32%
Publicity	56%	46%	46%	33%	32%	43%
Guest Speakers	33%	31%	46%	67%	47%	43%
Volunteers	39%	62%	15%	56%	26%	38%
Mentors	11%	15%	39%	22%	26%	22%
Parent Group (Activities)	44%	39%	54%	33%	58%	46%

Parent activity groups (46%), local media publicity (43%), and guest speakers (43%) were other favored means of involvement with parents. Many of the schools also used parents as class volunteers (38%), or as mentors (22%).

As noted by school officials, the parent activity groups often acted as booster clubs and participated in various activities throughout the school year. In addition, newsletters were sent home, especially in the 4A schools, with 56% indicating that they sent newsletters to parents.

Fifty three percent of the 5A schools used parent groups for communication purposes, while 56% of the 1A schools relied on local media publicity.

Although the mandate states that parents should be involved in the planning of the gifted and talented program, only 47% of the schools met this requirement, as noted in Table 22.

Thirty six percent of the schools reported that local educators planned the program, while 17% said that the program plans were a local administrative decision. Thus, slightly less than half of the schools involved parents in program planning.

Table 22

Constituency Involvement in Gifted/Talented Program Planning
Reported by School Size in Percentages

	1A	2A	3A	4A	5A	Totals
Sample	18	13	13	9	19	
Educators	50%	46%	46%	11%	21%	36%
Educators/Parents	39%	46%	39%	67%	53%	47%
Administrative Mandate	11%	8%	15%	22%	26%	17%

Discussion

Student Identification and Program Admittance

Since every reporting school responded that students may be nominated for their local gifted and talented program by teachers and other educators, it was apparent that school personnel felt that teachers were able to use their profes-

sional judgment in the nomination process. Teachers see students in many situations, both in and out of the classroom, and consequently, they often have an insight into a particular student's abilities that other people do not have. It was also apparent that school officials felt that parents know their children well enough to determine if they have potential for the gifted program, as 81% of all reporting schools allowed this method of nomination. It was also interesting to note that self nominations increased with the 4A and 5A schools. Having more students, these schools would find it expedient to allow self nominations from students.

In the area of student screening, 89% of the schools used an achievement test for this purpose. Two schools specifically named the California Achievement Test as being used. Although no one test such as this is required, it is certainly allowed, along with aptitude tests and IQ scores. Also, although grades are not a standardized instrument, 63% of the schools replied that they used grades as a screening tool.

Schools generally stayed with the minimum of five criteria when using a student matrix. Actually, a matrix is a relatively efficient method of keeping a record of student scores to determine program entry. (See Appendix C). Five criteria were required by the state plan in an attempt to give a good balance from various areas. With 71% of the

schools choosing to use five, they met the requirement, and at the same time, were not adding more paperwork than necessary.

Flexibility is a major pattern in The Texas State Plan, as stated in the introduction to the 1990 revision. Consequently, it should be noted that while students may be identified by all four different categories, the majority of schools in this study identified by general intellectual ability and creative and productive thinking.

The Texas State Plan (1990) states that curriculum must be differentiated for gifted students in content, process, and product, and that students must be grouped in order to meet this requirement. However, it continues by stating that local needs are a consideration for each district in determining program organization and grouping patterns. Although suggestions are made, such as honors classes or cluster grouping in regular classes, no specific mandate states that each school must follow a certain pattern. The main specific directive says merely that a minimum of 2.5 hours each week of differentiated instruction must be provided for grades that have a full-day schedule. In other words, local needs and policies are to be taken into consideration when grouping students. There are several possible methods for doing this.

First, the Plan indicates that specific subject matter identification is especially well suited to the high school

level, while the other areas are better suited to the lower level grades. However, this does not preclude high schools from identifying students by the other areas. Since the plan also states that a student does not need to be re-identified once in the program, students who entered in the elementary or junior high programs have already been identified in one of the other three areas. Therefore, it is a matter of fairness to high school students to be able to be identified in the same ways that their peers had been at an earlier age. Specific subject matter aptitude identification can be used as an alternative method for a student highly gifted in math, for example, but who would not qualify in general intellectual ability or creative thinking ability. Although only 39% of the schools in this study identified students by specific subject matter aptitude, none indicated that they used it as an alternative identification method.

Secondly, schools have the option of identifying by general intellectual ability and creative and productive thinking ability, and 75% and 53%, respectively, chose to do so. Since these two areas are not tied to specific subjects, students who are not gifted in a certain subject but whose abilities are exceptional overall may be nominated for the program. These two areas might also be used to identify students who qualify for the gifted program but who have not ever qualified for honors classes. While these students

could be placed in specific subject matter classes especially for gifted students, other class types also exist.

For instance, although 39% of the schools offered honors classes for gifted students within subject areas, 47% offered an elective class for gifted students only. This class could cover a myriad of topics and subjects and would not be isolated to just one academic area. Students identified as gifted by creative and productive thinking or by general intellectual ability could be offered this class.

There was a discrepancy, however, between the percentage of schools identifying by general intellectual ability (75%) and creative and productive thinking (53%) and those offering gifted elective classes. This indicates that while some schools identified students by one set of criteria, they organized their programs by another. For instance, students identified by general intellectual ability, rather than being placed in the elective type classes, were placed in subject matter classes.

The fact that only 14% of the schools identified by leadership ability reflected the ambiguity in this area. Leadership ability is often an elusive quality to identify, and since there are few curriculum models for this area, schools apparently were less likely to identify students in this manner. Although leadership skills could be incorporated across the curriculum for gifted students, this might not be feasible for all schools, as they could lack person-

nel to teach them as well as time to do so. In addition, the student who was a leader in one situation might not be in another, and so schools might choose other methods of identification.

In explaining why general intellectual ability was used so much in student identification, it is possible that administrative convenience also played a part. If a student were to be identified as gifted in one subject area, for instance, and then later nominated in another, the personnel in charge of the program would need to check scores, re-work the matrix, and possibly test the student in the new subject. If, however, the student were identified by more than one way, or if the student were identified by general intellectual ability, for example, some of the paperwork could be eliminated or at least reduced.

Most schools (92%) allowed transfer students into the receiving school's program. This high rate of acceptance may have been due to a feeling among administrators that students were identified in their sending districts by the same general criteria as in the receiving districts. Consequently, although there would be minor differences among the schools, the major guidelines were followed.

Secondly, students were identified in each district by educators who used their professional judgment in making a determination of admittance into a program. School officials were therefore accepting the discernment of their

colleagues when admitting students into the local program from a sending district.

The Texas State Plan states that districts must have a written board-approved plan for student placement. Included in it must be provisions for placing new and transfer students into the program when the program is determined to be the best placement for the student. The Texas State Plan does not have specific provisions for when students are to be admitted, other than when it is in the best interest of the student. Consequently, the 8% of the schools not placing students immediately when they entered could still be within state guidelines if they were following their district's written policy of when to place students.

Program Organization

Program organization is concerned with the way students are grouped, which is closely aligned with the ways by which students are identified. Some schools that identified students by specific subject matter aptitude offered classes in those subjects to their gifted students. This was especially true for 5A schools, which had more available resources and personnel; and 1A schools, some of which were small enough so that all students identified by a subject area could meet in a multi-grade classroom situation. Larger schools could maintain flexibility in offering gifted and talented classes in subject areas because they had a larger pool of staff from which to draw.

Only 8% of the schools indicated the use of a resource room, which enabled students to do additional research or work on a project out of their classrooms. Many schools, however, did not have the luxury of offering a resource room, possibly due to lack of space, personnel, or funds.

Although the questionnaire was mailed to a magnet school, there was no response. One school stated that it was a school-within-a-school. In a case such as this, the school itself became the grouping pattern, and other groupings within the classroom became sub-groupings. For example, the official from the school-within-a-school stated that the gifted students had differentiated content from the other students in the school, as well as differentiated products and processes. All the students, both gifted and others, however, were housed in the same facilities and shared other commonalities, such as extra-curricular activities.

It was apparent that local needs played a major role in school grouping patterns. Schools offered special gifted and talented classes (47%), as well as specific subject matter classes (39%). Others grouped students in regular classes (15%). Local officials know their students and their needs, as well as the district's facilities better than anyone else, and so they were able to determine what types of classroom settings were best.

Staff Development

One of the characteristics of the gifted and talented program is that teachers must deal with students who are extremely bright in one or more areas but who are also normal young people in other facets of their lives. They also have emotional and physical needs just as anyone else. In fact, sometimes gifted students may need more attention than other students due to the fact that since they are gifted, more is expected of them. Consequently, choosing staff members who can work with gifted students is crucial if the program is to succeed.

It is apparent that educators recognized the need for professional teachers who have the unique ability to work with gifted and talented students, as 72% of the schools stated this as a criteria for staffing choice. Teachers expressing interest in the program and those with suitable educational background were also placed high on the priority list. Teachers who are able to work with gifted students either because of their training or because of their personalities can often fulfill some of their students' emotional needs that the regular classroom teacher cannot, as he has other students to consider as well. Therefore, teachers who are able to work with these highly intelligent students can often keep them oriented and focused both intellectually and emotionally.

Program interest was a second priority in choosing staff among schools, with 68% of the schools using this as

one of their criteria. It ranked closely to teacher ability as a criteria.

Human nature is such that if an individual is interested in something, he will put forth his best effort for it. Therefore, school officials wisely used interest in the program as one of the criteria for choosing teachers. Not only would teachers who were interested in the program do a better job than those who were not, but also they would probably be effective as a public relations source. Interested teachers, excited about their classes and their students, would exude enthusiasm when talking, writing, or reporting about their programs.

A third measure for choosing teachers for a gifted program was their educational background, as 58% of the schools used this measure. However, 83% of the schools required only the minimum in gifted education--teachers must have at least 5 days of in-service prior to entering the program. There are several possible reasons why most schools would choose only minimum requirements.

The primary problem would be to find personnel certified in gifted education. This is especially true of the high school level, where teachers usually are content specialists first, and specialists in other areas second. With this in mind, school officials would be aware that content specialists, well-versed in their particular subjects and who are strong teachers in a general sense, would be appro-

priate for gifted students, especially for those identified as gifted in a specific subject area. Therefore, looking at teachers' educational backgrounds from this angle would be an acceptable reason for assigning them to the gifted program.

Since gifted certification is not a state requirement, districts requiring it, especially smaller districts, could have trouble finding and keeping personnel. In addition, since the program is newly mandated for grades 9-12, not all teachers have had enough time to return to school to obtain certification, although one school official did state that teachers must agree to obtain full endorsement or certification in gifted education in order to continue teaching in that school's program. Most schools, however, took the stance that minimum state requirements were sufficient.

As for the use of para-professionals, 84% of the schools did not use them in the gifted programs, perhaps due to economic constraints, the newness of the program, staffing problems, or a lack of need. Those that did use them, however, generally used them as classroom aides, (10%), rather than as clerks (6%). This is somewhat surprising, as it would be assumed that para-professionals could do much of the record keeping for gifted programs. However, since the program is new to many schools, the use of para-professionals may change as the volume of paper work increases or as the programs change, due to the passage of time.

Curriculum Development

Seventy two percent of the schools stated that Bloom was used as the curriculum model in gifted classes. Since the school reforms of HB 72, SB 1, and The Texas State Plan (1990), there was an emphasis placed on higher-level thinking skills, not just for gifted students, but for all. Bloom's taxonomy of cognitive skills has proved to be so educationally sound and has been around for so long that it is understandable that this model would be so popular. The Bloom model is easily adaptable to any grade level or subject area. In addition, many teachers apparently are familiar with Bloom, whereas they might not be aware of the other curriculum models especially designed for gifted students. It would be quite simple to modify Bloom for a gifted class, even if this model were used in other areas as well.

Renzulli's Enrichment Triad model (1977) also was noted as being used by 25% of the schools. Like Bloom, the Renzulli model could be adapted by teachers to their classes because it states what many teachers already do; i.e., introduce a topic in some form, allow students to brainstorm and hypothesize about it, and give students the opportunity to use an inquiry approach in solving problems associated with the topic. Since this model has been in existence since 1977, teachers have had a chance to see how it works and to determine its success. Accordingly, it was not

unusual to find this model in use by teachers of gifted students.

Higher level thinking skills have long been a part of gifted and talented teaching. Although other models exist for teaching these skills, Texas schools have chosen, by a large majority, to use the Bloom model, which originally was intended as a method of classifying educational objectives. It has been adapted, however, as a curriculum model. It is unfortunate, though, that with so many models in existence, teachers have limited themselves to a few. With the passage of time, however, gifted and talented teachers may be able to investigate other avenues available to them, keeping in mind the diversity of their students.

In dealing with curriculum documents, it is interesting that the largest percentage of schools (72%) reported that curriculum guides had been completed, while 58% stated that a scope and sequence had been developed. It would be expected that more schools would have reported that unit plans or course plans had been prepared, but only 44% stated unit plans were completed, while 35% indicated that course plans were written. Since course and unit plans are more specific than curriculum guides, and since teachers deal with them on a frequent, if not daily basis, it was unusual that so few schools indicated that these documents had been prepared. Conversely, schools apparently attempted to create an over-

all structure and broad plan by developing curriculum guides and scope and sequences.

Fifty seven percent of all reporting schools stated that teachers wrote their own curriculum documents. Since these are the people who use them, it was not surprising that they wrote documents that were feasible and useful for their needs. It was, however, understandable that not all documents were complete, as the programs were new.

For the same reason, it was also understandable that there was no standardization of programs throughout the state for gifted students. In the past, honors classes, accelerated classes, or other methods were used to meet students' needs. However, on a state-wide basis, gifted students were not identified as such, and programs were not created especially for them. Consequently, 83% of the responding schools were fairly new to the gifted and talented program (within 5 years). With the exception of a few 5A schools, most programs (94%) were, as expected, less than 10 years old, and still in the seminal phases of development.

Supervision of personnel is also a part of the gifted program, and 93% of the schools responded that teachers were supervised by building level personnel. Using building level administrators as supervisory personnel makes sense, as teachers see these people daily, whereas they may seldom see central office or other administrators at all, especially in large districts. This also coincides with the Texas

Teacher Appraisal System (1986), which states that a teacher's first appraiser must be an immediate supervisor. It was sensible for building level administrators to supervise the teachers also because even though the gifted teachers are part of a special program, they are still a part of their buildings, whether it is a regular school, a magnet school, or a school-within-a-school. Since over half of the schools did not have a gifted and talented director for the district, it is reasonable that the building level administrators were the teachers' supervisors.

Although 42% of the schools stated that they had a gifted director for the district, 58% did not, for several possible reasons. First, as the programs are new, schools might hesitate to hire or appoint such a person until they saw how much work was involved and if such a position were warranted. Secondly, districts might not have had the funds to hire someone. A third reason would be lack of need, in small districts especially, as one person who had other duties already could serve also as the gifted and talented director. It would be reasonable to think that as the programs developed in each school, more districts would have personnel who acted as directors of the gifted program.

Evaluation and Planning

Evaluation procedures varied among schools, possibly due to the newness of the programs. The Texas plan states that evaluation should occur periodically, should be on-

going, and should define program effectiveness. There is no specificity concerning instrumentation or procedures.

Consequently, schools must evaluate their programs based on their written plans within broad guidelines.

The State Plan also states that program evaluation should focus on student outcomes and program administration. In addition, a variety of methods may be used to evaluate the program, including student self-evaluations, checklists, parent interviews or questionnaires, student products, or criterion-referenced or norm-referenced tests. Therefore, schools should use standardized and non-standardized criteria when evaluating their programs.

Seventy four percent of the schools in this study stated that they used a combination of instruments to evaluate their programs. These included both standardized instruments, such as student achievement tests, and non-standardized instruments, such as questionnaires. By using standardized tests to check student progress, schools addressed the question of student outcomes, while the questionnaires and inventories were used to address student progress as well as program administration.

Parent and Community Involvement

Most schools involved parents in several ways, such as involving them in planning the programs, in parent activity groups, and as guest speakers and class volunteers. Forty seven percent of the schools indicated that parents helped

plan their programs, which is required by state guidelines. However, this means that in over half the schools, parents were not involved in program planning, perhaps due to lack of interest, lack of knowledge, or inaccessibility. It was within the three smallest school sizes that parent involvement in planning occurred least--in 39% of 1A, 46% of 2A, and 39% of 3A schools.

Parent activity groups were involved in 46% of the schools, guest speakers in 43%, and volunteers in 38%. These figures indicate that schools were actively involving parents in several ways, generally through teacher contact, as 72% of the schools relied on that method. It may be that as time goes on and programs continue, more parents will become involved in more ways.

It is apparent that there were considerable differences among Texas high schools in meeting the gifted and talented mandate. Some of these reflected different local needs; however, schools had to meet general guidelines with specific plans and programs. Local interpretations of the state plan have varied, and therefore the programs have been implemented in numerous ways.

This study originated in order to determine if the broad guidelines as they currently exist were enough, or if more specific plans were needed. Since so many variations occurred among the schools, it is apparent that state guide-

lines need more specificity and should give increased guidance to high school gifted and talented programs.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Due to the numerous educational reforms imposed upon Texas schools by the state legislature, public education has had to revise many programs and procedures. House Bill 72, which is now known as the Texas Public Education Handbook, states that "...each school district shall adopt a process for identifying gifted and talented students in the school district's population, and not later than the 1990-1991 school year shall establish a program for those students in each grade level" (Texas Public Education Handbook, Update No. 1, August, 1988, III-65). Consequently, all public high schools are responsible for offering a gifted and talented program for students who properly belong in such a program.

In order to carry the label gifted and participate in a program, students must be identified as gifted in one of four areas: general intellectual ability, specific subject matter aptitude, creative and productive thinking ability, or leadership ability. (The Texas State Plan and Guidelines for the Education of the Gifted and Talented, 1990). For students to be thus identified, districts must determine by committee and state in writing the area or areas of identification, the procedures for identification, the instruments used, and the method of final selection for the program.

The district must also follow within its plan the general guidelines set by The Texas State Plan. Since, however, the state guidelines are broad and general in nature, schools have several options which they may choose, as well as a large amount of flexibility in many diverse areas.

Need for the Study

Because state guidelines are broad, it was desirable to determine if more limiting specifications are needed in order for schools to comply with the mandate, or if, on the contrary, schools are currently meeting its requirements as well as the needs of their gifted students.

Purpose of the Study

The purpose of the study was to determine how selected districts throughout the state of Texas are complying with the gifted and talented mandate and meeting their students' needs, at the high school level, grades 9-12.

Assumptions

For the purpose of this study, the following assumptions are made:

- 1) School districts in Texas are meeting the state mandate in some way by offering the gifted and talented program in grades K-12.

- 2) Individual programs differ among districts, based on the population size, number of personnel, amount of funding available beyond the state level, geographic location, various other demographics, and district needs.
- 3) Qualified personnel are involved in the program, both administratively and in the classroom.

Method of Research

Sample

Data were obtained from a mail-out questionnaire sent to a stratified random sample of 120 Texas public high schools. This sample was stratified according to Texas University Interscholastic League (1991) classifications. The 120 high schools represent 10% of the 1184 public high schools in Texas.

Instrumentation

The instrument was a written survey, prepared by the researcher, covering questions about the six categories of the gifted and talented program discussed in The Texas State Plan (1990). (See Appendix A). The categories include evaluation and planning, student identification, program organization, curriculum development, staff development, and parent/community involvement.

The instrument was sent to high school principals, after being submitted to a panel of three educators--a high

school principal, a high school assistant principal, and a district gifted and talented co-ordinator--for professional suggestions and critique.

Findings

Student Identification and Program Admittance

One hundred percent of the schools in this study allowed educators to nominate students to the program, and 81% allowed parents to do so. Teacher inventories were the most frequently used nomination instruments, with 86% of the schools using them. The most frequently used screening instruments were achievement tests, at 89%. Most schools used a screening matrix, and 71% used the minimum of five criteria for it.

Seventy five percent of all schools identified students by general intellectual ability, 53% identified by creative and productive thinking ability, and 39% identified by specific subject matter aptitude. Leadership ability was the least frequently identified area.

Ninety two percent of the schools admitted transfer students to their programs without re-screening, but 5% only admitted students at the beginning of a semester.

Program Organization

Forty seven percent of the schools offered separate gifted classes to their identified students, while 39% placed them in honors subject matter classes. Fifteen

percent grouped gifted students in the regular classroom. Eight percent of the schools offered the use of a resource room to their gifted students.

Staff Development

Seventy two percent of the schools chose professional personnel for their ability to work with gifted students, 68% for interest in the program, and 56% for educational background. Additionally, 83% of the schools required only minimum professional staff development as per state guidelines. Only 16% of the schools used para-professionals in their programs.

Curriculum Development

Seventy two percent of all schools used Bloom's Taxonomy of Educational Objectives as their gifted and talented curriculum model. Twenty five percent used the Renzulli Enrichment Triad Model, and 14%, the Parnes model. Sixty five percent of the schools said that they used more than one model. Forty six percent of the schools indicated that teachers chose the curriculum models. Seventy two percent of the schools had already developed curriculum guides, and 58%, scope and sequences. In 57% of the schools, teachers wrote their own documents. Forty three percent of the schools had programs one to five years old, and 40% had programs that were in their first year.

Evaluation and Planning

In 93% of the schools, building-level administrators were supervisors of the gifted/talented teachers, while 42% of the schools had full time gifted/talented directors. Seventy four percent of the schools used a combination of instruments to evaluate their programs, and 46% of the schools stated that program evaluations occurred yearly.

Parent/Community Involvement

Seventy two percent of the schools involved parents in their programs through direct teacher contact, while 46% had parent activity groups such as booster clubs. Also, 47% involved parents in their initial program planning.

Conclusions

From the findings of the data, the following conclusions are drawn:

- 1) Although general guidelines exist for student screening, there are no standard specific requirements for program entry.
- 2) State guidelines recommend identification of high school students by specific subject matter aptitude. However, most schools identify students by general intellectual ability.
- 3) Although four areas of identification are named in the state guidelines (general intellectual ability, creative and productive thinking ability, specific subject

matter aptitude, and leadership ability), schools are basically operating on three--general intellectual ability, creative and productive thinking ability, and specific subject matter ability. Leadership ability is seldom used.

- 4) The alignment between program admission criteria and program offerings is not tight. (Students may be identified as gifted in general intellectual ability but placed in a subject matter class for gifted students).
- 5) Numerous curriculum models exist for gifted programs, but Bloom's and Renzulli's dominate the programs, as they are used more than any others.
- 6) The current broad state guidelines are not totally adequate for maintaining the gifted and talented programs at the high school level, as numerous differences and discrepancies exist among the local districts. Consequently, there is not enough consistency among high schools in the following areas:
 - a) Student nomination--Schools are not told specifically how or under what circumstances students are to be nominated. No procedures, methods, or forms are given.
 - b) Student identification--Identification for the programs is inconsistent in that there is no standard method or procedure to use. Also, while some

students in a school are identified by specific subject matter aptitude, others are identified by general intellectual ability or creative/productive thinking ability. These students are all in the same program and classes.

- c) Program alignment--Guidelines do not exist specifically for programs in which students are identified by specific subject matter aptitude, nor do they exist for programs in which students are identified by general intellectual ability.

Recommendations

From the conclusions already drawn, the following recommendations are made:

- 1) High schools need to consider identifying students more by specific subject matter aptitude and less by general intellectual ability and creative and productive thinking ability so that the students will be properly placed and schools will more closely follow the intent of the state guidelines.
- 2) Schools need to align their program entry criteria with the types of programs they offer so that identified students will be properly placed.
- 3) Teachers need to look at and consider using various curriculum models to determine what is best for their

classrooms so that they may better meet the needs of their students.

- 4) Further study should be done to determine how schools identifying students by general intellectual ability are addressing their program organization to determine if they are aligning their program offerings with their type of identification.
- 5) Further study needs to be done to determine what specific instruments schools are using for student screening and if schools use the same bases for identification. This would help determine if all students are identified by similar criteria.
- 6) State guidelines need to be studied further to determine what portions of them should offer more clarification and specificity to high schools, particularly in the areas of student nomination and identification, where more consistency is needed. Other areas for study include program organization, in order to determine that differentiation is occurring, and program alignment with the types of student identification, to determine that students identified by a certain set of criteria receive instruction and classes aligned with that same criteria.

APPENDIX A
QUESTIONNAIRE

GIFTED/TALENTED PROGRAM QUESTIONNAIRE

GRADES 9-12

Please answer each question below by circling the letter or letters that are most representative of your school's methods or activities concerning your Gifted/Talented program.

STUDENT IDENTIFICATION

1. Which of the following methods are used for student nomination:
 - a. Teacher/educator
 - b. Peer
 - c. Parent
 - d. Self
 - e. Other _____

2. Is the nomination instrument a(n):
 - a. Teacher evaluative inventory
 - b. Interest self inventory
 - c. Parent evaluative inventory
 - d. Peer evaluative inventory
 - e. Other _____

3. Which of the following objective criteria are used:
 - a. Class grades
 - b. IQ tests
 - c. Achievement test
 - d. Aptitude test
 - e. Other _____

4. How many criteria are used for the student matrix:
 - a. 5
 - b. More than 5
 - c. A matrix is not used

5. In which of the following areas are students identified:

- a. Specific subject matter aptitude
- b. General intellectual ability
- c. Leadership ability
- d. Creative/productive thinking ability

If the answer to 5 is a, go on to the next 4 questions.
If the answer to 5 is b, c, or d, skip to question 10.

6. Are different standardized tests administered for each subject area:

- a. Yes
- b. No

7. Are different teacher inventories used, based on the content, for each subject:

- a. Yes
- b. No

8. If students are identified in more than 1 subject area, which choices do they have in accepting program offerings.

- a. They must accept or decline services in all identified areas
- b. They may limit their participation to the subject or subjects of their choice
- c. They may decline all services
- d. Other _____

9. Must students be identified in more than one area to be labeled "gifted":

- a. Yes
- b. No

If yes, please explain _____

ADMITTANCE TO THE PROGRAM

10. When are students admitted to the program:

/89/

- a. The beginning of the school year
- b. The beginning of the semester
- c. Whenever they qualify
- d. Other _____

11. Are transfer students, entering after the school year has begun, admitted to the program if they were in the program in their prior school, or if they meet qualifications.

- a. Yes
- b. No

PROGRAM ORGANIZATION

12. Who determined how the program was to be organized:

- a. Committee of educators
- b. Committee of educators and community members
- c. Administrative mandate
- d. Teachers
- e. Other _____

13. Indicate which grouping patterns are used primarily in your program:

- a. Separate gifted/talented classes
- b. Gifted/talented-honors classes
- c. Regular classroom
- d. Regular classroom with access to resource room
- e. School within a school
- f. Magnet school

14. Do any identified students have access to a community mentor:

- a. Yes
- b. No

PERSONNEL

15. On what bases are teachers chosen for the gifted program:

/907

- a. Educational background
 - b. Interest in the program
 - c. Seniority
 - d. Ability to work with gifted students
 - e. Other _____
16. What training is required of the gifted/talented teachers in your district/school:
- a. Staff development as per state guidelines
 - b. Gifted/talented certification/endorsement
 - c. Other _____
17. How are para-professionals used in the program:
- a. Teacher-classroom aides
 - b. Clerical work for the program
 - c. Not at all
18. Does your district have a full-time gifted/talented supervisor or co-ordinator:
- a. Yes
 - b. No
19. Who has immediate supervision over the gifted/talented teachers:
- a. Building level administrator
 - b. Central office level administrator
 - c. Other _____

CURRICULUM

20. Indicate which of the following models are used primarily in your school:
- a. Bloom's Taxonomy
 - b. Clark's Integrative Thinking Model
 - c. Renzulli's Enrichment Triad
 - d. Treffinger's Model for Encouraging Creative Learning
 - e. Suchman's Inquiry Development Model
 - f. None _____

21. Indicate which, if any, of the following models are used in your school:
- Debono's CoRT Thinking Model
 - Gallagher's Model for Content Modification
 - Krathwohl's Taxonomy (Affective Domain)
 - Parnes' Creative Problem-Solving Model
 - Williams Model for Cognitive-Affective Behavior
 - None of these _____
22. How are your curriculum models chosen:
- Research/theory based: chosen by district
 - Written especially for the district
 - Administrative mandate
 - Individual teacher choice
 - Other _____
23. Does your school use one or more than one model:
- One
 - More than one
24. Indicate which of the following curriculum documents have been developed:
- Curriculum guides
 - Scope/-equence
 - Course/grade level plans
 - Instructional unit plans
 - None of these
25. Who developed the curriculum documents:
- Central office staff
 - Teachers
 - Building level administrators
 - Combination of staff members
 - Other _____
26. How long has the secondary (Grades 9-12) gifted/ talented program been in existence in your school:
- New this year
 - Between 1 and 5 years
 - Between 6 and 10 years
 - Over 10 years

EVALUATION

27. How often is the full program evaluated:
- a. Never has been
 - b. Yearly
 - c. Periodically, but not every year
 - d. As needed
28. What evaluation procedures are used:
- a. Subjective criteria
 - b. Objective criteria
 - c. Program description
 - d. Determined by student progress and evaluation
 - e. Other _____
29. Which of the following instruments are used in program evaluation:
- a. Questionnaires
 - b. Standardized instruments
 - c. Faculty inventories
 - d. Combination of subject and objective criteria
 - e. Other _____

PARENT/COMMUNITY INVOLVEMENT

30. Indicate which of the following methods are used for communication with parents and community:
- a. Teacher contact
 - b. Periodic newsletter
 - c. Parent group
 - d. Newspaper/media publicity
 - e. Other _____
31. Indicate which of the following methods are used to involve parents/community:
- a. Guest speakers
 - b. Volunteer program
 - c. Mentorships
 - d. Parent groups
 - e. Other _____

937

32. How is support for the program obtained from community members and parents who do not have students involved in the program:
- a. Personal contact by educators
 - b. Media contact
 - c. Use of mentors, speakers to classes, etc.
 - d. Other _____

Please circle the category below that identifies your school according to UIL classifications:

1A	2A	3A	4A	5A	(1A=139 or fewer 2A=140-284 3A=285-689 4A=690-1459 5A=1460 or more)
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Name of Contact Person Completing Questionnaire

Title

Name of School/District

Telephone Number

APPENDIX B
COVER LETTER

J. BARNES
PRINCIPAL

Cleburne High School

1501 Harlin Drive
Cleburne, Texas 76031

BARBARA COOKE
VICE-PRINCIPAL

BEN OEFINGER
VICE-PRINCIPAL

957

PO Box 764
Cleburne, Texas 76033
May 3, 1991

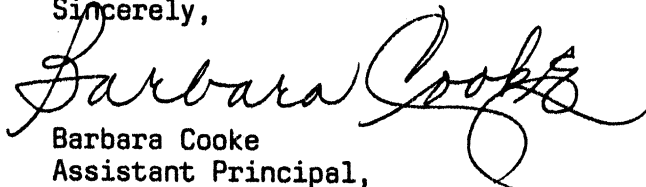
Dear School Administrator:

My name is Barbara Cooke, and I am currently a doctoral student at the University of North Texas, working on my dissertation in curriculum and instruction. The topic I have chosen is how Texas high schools are meeting the requirements of the gifted/talented mandate for grades 9-12.

As I am also a high school assistant principal, I realize your time is valuable, but I would appreciate your taking a few minutes to fill out and return the enclosed questionnaire. I have supplied a self-addressed, stamped envelope for your convenience. Your responses will be used only for this study, and all data will be reported by numbers and percentages, with no schools being named.

Thank you again for taking the time to answer this.

Sincerely,



Barbara Cooke
Assistant Principal,
Cleburne High School

APPENDIX C
SAMPLE STUDENT MATRIX

STUDENT MATRIX
GIFTED/TALENTED IDENTIFICATION

NAME: _____ GRADE: _____
SCHOOL: _____ DATE: _____
TEACHER NAME: _____ AGE: _____

						TOTAL SCORE
	5	4	3	2	1	
file						
Achievement Test Data:	99-8	97-6	95-4	93-2	91-90	
CAT NP						
Total Reading						
Total Language Arts						
DCAT (Total file)						
CAT: CSI (Group IQ)	128+	127-5	124-1	120-17	116-14	
Parent Inventory	25-30	20-4	15-19			
Teacher Inventory						
TOTAL SCORE:-----						

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