

TEACHERS' ATTITUDES ABOUT THE NEEDS AND
CHARACTERISTICS OF ELEMENTARY
STUDENTS IDENTIFIED AS GIFTED:
A Q-METHODOLOGICAL
STUDY

By

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CHAPTER 1

INTRODUCTION TO THE STUDY

Knowledge of the characteristics and needs of students identified as gifted enables teachers responsible for the education of these students to design appropriate interventions for gifted learners in school. Both cognitive and affective characteristics and needs should be considered (Piiro, 1994). Every characteristic will not be displayed evenly among all gifted students (Renzulli, 1977). Instead, gifted students will vary in intensity in respect to each characteristic with some characteristics not displayed at all in some children (Clark, 1997). Cognitive characteristics of gifted children include curiosity, power of concentration, multiple interests, a preference for individual work, and an early interest in language. Affective characteristics of gifted children include a well-developed sense of humor, a strong sense of justice, emotional intensity, strong attachments and commitments, and perfectionism (Davis & Rimm, 1994; VanTassel-Baska, 1998).

These characteristics can be translated into a set of educational needs. These needs include, but are not limited to, the following: high levels of abstract thinking, focused in-depth work, multiple domains of inquiry, acceleration, student choice, complexity, the opportunity to help

others, acceptance, expression of humor, variety of experiences, and exposure to fine arts (VanTassel-Baska, 1998). These characteristics and needs should be considered when designing and implementing an appropriate program of instruction for students identified as gifted.

Elementary students identified as gifted typically spend the majority of their time at school in a regular classroom (Winebrenner, 1992). General education teachers are primarily responsible for meeting the academic, social, and emotional needs of these students (U. S. Department of Education, 1993), although specialists in gifted education may be available for direct services or consultation about services. Because general education teachers play such a crucial role in the education of students identified as gifted, a description of teachers' attitudes about these students is important because teachers' attitudes affect the way teachers instruct students, teachers' expectations of students, and teachers' behavior toward students (Alexander & Strain, 1978).

A description of general education teachers' attitudes toward students identified as gifted is important in the general education classroom (Tallent-Runnels & Tirri, 2000) and in the gifted education program (Ehlers, 2000). The academic environment of the classroom in which a student identified as gifted is placed has an effect on student self-image and achievement level (Alexander & Strain, 1978). An

academic environment consists of the set curriculum materials, the physical setting, supplementary resources, and teaching methodology (Alexander & Strain, 1978). Students identified as gifted will not have a sufficient opportunity to sharpen their intellectual skills if any of these facets are stifling or inhibiting (Delisles, 1989; Gleason, 1988). Teachers' attitudes toward students affect teaching style, behavior, lesson development, and interactions with students. These behaviors in turn directly influence the students' self-image and academic performance in the classroom (Rosenthal, 1991).

Teachers who do not have an understanding of their students' needs are generally not as effective in the classroom as those who do (Lethbridge, 1986). Upon examining the background of many general education teachers, the findings indicate that teachers seldom receive any training to help them meet the needs of students identified as gifted (Sisk, 1982). Research (Delisles, 1989) on teacher effectiveness clearly shows that educators judged to be most influential in their students' progress are those who have a connection with their pupil's needs and characteristics; they are teachers who know their students' special needs from the inside out and are willing to work on them. Ideally, teachers responsible for the education of students identified as gifted should possess the ability to develop flexible programs. These teachers should

have a respect for creativity, innovativeness, individuality, and giftedness (Davis & Rimm, 1994).

A description of general education teachers' attitudes provides important feedback to the gifted education program. This information can be used to improve program design and implementation, to judge overall program effectiveness, to design in-service teacher training, and to improve support services offered to students identified as gifted and general education teachers.

Statement of the Problem

Teachers' attitudes have far-reaching effects on the performance of children and on teachers' instructional practices. Part of the problem is in the nature of the meaning of attitude. Attitude is a personal belief based on what seems to be true to an individual. As such, it is highly subjective and not easily predicted. The result is a lack of a clear idea of the attitudes teachers have toward the characteristics and needs of students identified as gifted. Regular classroom teachers and gifted program teachers have better attitudes toward gifted children and programs for them than preservice teachers do is one conclusion that has been made (Tallent-Runnels & Tirri, 2000). This conclusion does not answer many questions that exist about teachers' attitudes. Does every regular classroom teacher and gifted program teacher have a better attitude

toward gifted children and programs for them than preservice teachers do? Of what does a better attitude consist? What are these teachers' attitudes about the best way to serve gifted students? Do these teachers feel more strongly about one aspect of gifted education than others? These unanswered questions indicate the importance of choosing the right instrument to measure attitudes.

Evidence suggests there is a wide spectrum of attitudes, from oppositional to ambivalence to profound conviction, about the characteristics and needs of students identified as gifted (Begin & Gagne, 1994). General education teachers often have negative attitudes toward these students and base their beliefs about students identified as gifted on misconceptions concerning giftedness. These negative biased attitudes force gifted students to change their classroom behavior, disguise their real talents, and mimic the "normal" child (VanTassel-Baska, 1998). Many variables such as training, degrees earned, and years of experience help form these misconceptions and influence the attitudes teachers have about the characteristics and needs of students identified as gifted (Weiner & O'Shea, 1963). Out of 48 variables examined in 35 different studies, none have been found to be a reliable predictor of teachers' attitudes about these students (Begin & Gagne, 1994).

While a gifted education specialist is unable to have an effect on all of the possible variables that shape teachers' attitudes, there are some areas where a person with knowledge of gifted and talented students is in a prime position to influence teachers' attitudes in a positive manner. In order to do this, the gifted education specialist must first understand the attitudes that general education teachers possess. The problem this study will address is the lack of understanding of the attitudes elementary general education teachers have about the characteristics and needs of students identified as gifted.

Purpose of the Study

Most students identified as gifted are taught primarily by teachers who have had no, or very little, special training in the needs and characteristics of gifted students (Sisk, 1982). Because of this, it is important to understand how teachers perceive giftedness (Ehlers, 2000; Guskin, Peng, & Majd-Jabbari, 1988). One way to examine the perceptions and attitudes that teachers hold about students identified as gifted is to use Q-methodology. With Q-methodology, subjectivity can be observed and studied with reliability (Brown, 1993; McKeown & Thomas, 1988). In the science of subjectivity, the only thing that matters is what is on the person's mind. In other words, the person responds then meaning is

determined (Brown, 1993). Q-methodology is an effective method of studying beliefs, attitudes, perceptions, and personal opinions because it allows teachers' subjective attitudes and beliefs to be interpreted using quantitative methods, including correlations, factor analysis, and z-score calculations. Similar belief clusters form based on variables such as attitudes, preferences, or thinking behavior (Stephens, 1985).

In view of the benefits derived from a greater understanding of general education teachers' attitudes, the purpose of this study is to describe the attitudes that elementary general education teachers have about students identified as gifted.

Research Question

Based upon the purpose of this study, the following question is posed:
What are the attitudes that general education elementary teachers have about the characteristics and needs of students who are identified as gifted?

CHAPTER 2

REVIEW OF RELEVANT LITERATURE

The purpose of this study is to describe the attitudes that elementary teachers have about the characteristics and needs of students identified as gifted. The relevant literature is clustered around four areas: attitudes teachers have about gifted students, categories influencing teachers' attitudes, teachers' conceptions of giftedness, concerns of teachers and/or parents about gifted. The importance of the general education classroom teacher's attitudes is discussed.

Attitudes Teachers Hold about Gifted Students

Teachers' attitudes toward students identified as gifted are positive or negative. Kindergarten and first grade staff of one school district held a generally negative attitude toward children identified as gifted. The impact of this negative attitude may subtly teach the gifted child that it is more desirable if they hide their talents so they would appear more normal and thus be more acceptable to the world (Jacobs, 1972). A pattern of educators versus parents was discovered by a questionnaire given to 113 teachers, 23 administrators, and 91 parents. However, an overall favorable impression of what a gifted student is likely to be was

discovered. Seven clusters were investigated: definition, characteristics, identification, educational needs, funding priority, teacher characteristics, and current provisions. Statistically significant differences occurred in five of the seven clusters. Findings indicate that, as a group, parents' responses were the farthest removed from the position supported in the literature. This was probably because parents were less informed of gifted issues. Parents were less critical of existing public school programs than were the administrators and teachers. Participants with a college degree were more likely to respond in greater agreement with expert opinion than did participants without a college degree. (Cavin, 1980). A questionnaire was designed to determine if student teachers hold a positive or negative attitude toward gifted students and if knowledge of the gifted affects the attitudes or perceptions of student teachers. Out of 250 student teachers, 59.5% had a positive attitude toward gifted students and 40.5% had a negative attitude toward gifted students. Knowledge of the gifted did seem to affect the attitudes or perceptions of student teachers. A positive correlation between the number of correct answers and the number of positive responses was discovered (Morris, 1987).

Different school role groups possess different attitudes toward the learning needs of gifted and talented children. A total of 22 statistically significant differences out of 30 statements concerning learning needs,

prescriptions for those needs, and the capacity to meet those needs were found among regular classroom teachers, teachers of the gifted, building principals, and school psychologists Overall, regular classroom teachers differed significantly from teachers of the gifted 11 out of 30 times. Teachers of the gifted differed significantly from principals 8 out of 30 times and with school psychologists 5 out of 30 times. Regular classroom teachers differed significantly from principals and school psychologists 1 out of 30 times. No significant differences existed between building principals and school psychologists (Dettmer, 1985). Based on the belief that cooperation between gifted educators and middle school educators is needed to plan appropriate services for gifted middle school students, a study was conducted to investigate the attitudes that both of these groups hold toward gifted students. A survey was developed to identify areas of concern and areas of mutual agreement for gifted middle school students. The areas of grouping strategies, identification, curriculum modifications, teacher preparation, program evaluation, and social/emotional needs were investigated. While there were differences between the gifted educators and the middle school educators, most of the differences were in the intensity of agreement. The only opposing positions were found in grouping practices, and social development (Coleman & Gallagher, 1992). Preservice teachers, regular classroom

teachers, and teachers of gifted students in the United States and Finland agree that special education for gifted learners is important. The teachers from Finland recognized that students identified as gifted have special needs, but the American teachers believe that these needs result in a right to special services to meet those needs (Tallent-Runnels & Tirri, 2000).

Categories Influencing Teachers' Attitudes

Several factors influence teachers' attitudes about gifted students. Degrees held, lectures on the gifted, classes for the gifted, teaching of the gifted, and class level were the most significant factors that influenced the attitude of university faculty, administration, teachers, supervisors, and university students about students identified as gifted (Wiener & O'Shea, 1963). When teachers feel more informed about gifted students and their programs, a more positive attitude toward these students is discovered (Bransky, 1987). The "gifted label" itself doesn't appear to influence teachers' attitudes in any significant way unless it appears along with other student characteristics (Robinson, 1985). The number of years of teaching experience and the amount of prior training in gifted studies has an influence on teachers' attitudes and perceptions about gifted programs and students (Rogers, 1988).

Teachers' Conceptions of Giftedness

Teachers have different conceptions about giftedness. Seven conceptions of giftedness were identified in a study done in Australia. The seven categories were excellence, potential, rarity, noticeable ability, overt behaviors, innate ability, motivation, and asynchrony (Lee, 1999). American teachers associate intelligence, creativity, and achievement to giftedness while West German teachers associate logical problem solving and verbal proficiency with giftedness. American teachers reported higher percentages of gifted students than the West German teachers (Busse & Dahme, 1986). Seventy-nine graduate students, all experienced teachers, and 111 undergraduate education students with no teaching experience agreed on 5 categories of giftedness. These categories were analytic or cognitive ability, personality and social skills, creative arts, motor skills, and verbal ability. These categories are similar to Howard Gardener's Multiple Intelligence model (Guskin, Peng, & Majd-Jabbari, 1988). Teachers believe that their gifted students are well-rounded individuals. However, these teachers believe that a small percentage of gifted students do have social problems. The teachers also reported a wide range of differences between boys and girls in nonacademic areas (Campbell & Verna, 1998).

Teacher and/or Parent Concerns about Gifted

The concerns teachers and/or parents have about various programs available for students who are identified as gifted are the focus of other studies. One district surveyed teacher attitudes and concerns regarding the pull-out gifted program (Meyers, 1984). Teachers expressed a need for shared ownership and better communication about a pull-out gifted program. They had concerns about the criteria used for selection into the pull-out program, scheduling and fragmentation, and the impact of the pull-out program on student performance in the classroom (Meyers, 1984). Administrators, regular education teachers, both regular and gifted education teachers, and other education teachers feel unsatisfied with the current program in their school district in Texas. The administrators in this district were more positive about the gifted program than the other groups (Perez, 1999).

Importance of the General Education Classroom Teacher

A description of general education teachers' attitudes toward students identified as gifted is important in the general education classroom and in the gifted education program. The academic environment of the classroom in which a student identified as gifted is placed has an effect on student self-image and achievement level. An

academic environment consists of the set curriculum materials, the physical setting, supplementary resources, and teaching methodology (Alexander & Strain, 1978). Students identified as gifted will not have a sufficient opportunity to sharpen their intellectual skills if any of these facets are stifling or inhibiting (Delisles, 1989; Gleason, 1988). Teachers' attitudes toward students affect teaching style, behavior, lesson development, and interactions with students. These behaviors in turn directly influence the students' self-image and academic performance in the classroom (Rosenthal, 1991).

Teachers that do not have an understanding of their students' needs are generally not effective in the classroom (Lethbridge, 1986). Upon examining the background of many general education teachers, the findings indicate that they seldom receive any training to help them meet the needs of students identified as gifted (Sisk, 1982). Research on teacher effectiveness clearly shows that educators judged to be most influential in their students' progress are those who have a connection with their pupil's needs and characteristics; they are teachers who know their students' special needs from the inside out and are willing to work on them (Delisles, 1989). Ideally, teachers responsible for the education of students identified as gifted should possess the ability to develop flexible

programs. These teachers should have a respect for creativity, innovativeness, individuality, and giftedness (Davis & Rimm, 1994).

Summary

The relevant literature analyzed for the attitudes teachers have about the characteristics and needs of students identified as gifted is clustered around four areas: attitudes teachers have about gifted students, categories influencing teachers' attitudes, teachers' conceptions of giftedness, concerns of teachers and/or parents about gifted. While there are some areas of agreement about concerns of teachers and/or parents about gifted, there is no clear consensus in any of the other areas. The importance of the general education classroom teacher's attitudes is discussed.

CHAPTER 3

METHOD

The purpose of this study is to describe the attitudes that elementary teachers have about students identified as gifted. Included in this chapter is a description of the instruments and procedures that were utilized in this study as well as a description of the subjects that were invited to participate.

Instrumentation

Two instruments were used to collect data for this study. A Q-sort was administered to determine the attitudes that teachers have about the characteristics and needs of students who are identified as gifted. Further information was collected with a follow-up questionnaire. Following is a description of each instrument that was used.

Q-Sort

A Q-sort is a set of statements with relevant items about a topic. The statements are a matter of opinion and not fact (Brown, 1993). The statements, or concourse, for this study are a set of opinion statements representing different characteristics and needs of gifted children. The statements from the Attitudes Toward Giftedness Scale developed by

Gagne and Nadeau in 1985 (Tallent-Runnels & Tirri, 2000) were chosen for this study. The scale contains 60 statements that cover different issues related to attitudes toward giftedness. The statements encompass gifted education principles, common objections, needs, assessment of existing services, preferable types of intervention, and acceleration. This list can be found in Appendix A. By having the participants rank these statements according to which items are most like (+5) or most unlike (-5) their own attitudes toward students identified as gifted a description of their attitudes can be written.

Follow-Up Questionnaire

Upon completion of the Q-sort, respondents were asked to complete a follow-up questionnaire that included questions about gender, ethnicity, age, current position, years of teaching experience, type of educational certification, educational level, training in gifted education, graduate coursework in gifted education, and their personal philosophy of gifted education. A copy of the questionnaire can be found in Appendix B.

Subjects

Subjects invited to participate in this study were teachers of elementary children in general education classrooms, whether or not any students identified as gifted were enrolled in their class in the last year. Subjects

were diverse in experience, as novice and veteran teachers were sought. None of the teachers were expected to have completed graduate level course work in the needs and characteristics of gifted students. Fifty-two teachers in grades one through four were invited to participate in this study with a letter of invitation (Appendix C). Typical of most elementary school professional personnel profiles, more females than males responded to the invitation.

Procedures

The proposal for this research study was submitted to the Institutional Review Board for approval in meeting the regulatory requirements for research involving human subjects. It was approved with exempt status on August 26, 2001 (Appendix D). Informed consent of each subject was obtained (Appendix E). Confidentiality procedures, including an identification number being assigned to each subject, were used in the collection and reporting of data.

Local school district procedure was followed to obtain approval to conduct this study on several different dates and times and to solicit participation from the elementary teachers in the school district. A copy of the letter seeking permission from the school district to conduct this study is in Appendix F.

Elementary teachers in grades first through fourth grade were presented with information regarding the purpose of this study in a letter. Nineteen teachers who expressed an interest in the study were invited to participate. Each educator signed an informed consent form that details his or her participation in the research study before participating.

Respondents were presented with all necessary materials in a folder. Materials included a standardized script of directions detailing the condition of instruction, directions on completing the sort, the follow-up worksheet, and procedures to follow when all forms were completed (Appendix G), the statements to be sorted, a distribution matrix form and a form board pattern (Appendix H), and the follow-up worksheet.

The standardized script asked respondents to divide the Q-set statements into three sets: those which are most like the respondent's attitudes toward students identified as gifted, those which are most unlike the respondent's attitudes toward students identified as gifted, and those about which the respondent is unsure or has no reaction. The subjects were instructed to rank-order all of the items in the Q-sort along a continuum according to a condition of instruction. The condition of instruction is the criteria by which all participants are to sort the statements. For this study, the condition of instruction was to rank the statements according to which items are most like (+6) or most unlike (-6)

their own attitudes about students identified as gifted. Data was reported on the Matrix Form.

Participants were instructed to complete the questions on the follow-up worksheet once the matrix form was complete. After all forms were finished, subjects placed all of their forms, which had previously been marked with an identifying number, back into the folder. The folder was then placed in a specified location.

Q-Sort data from all participants was entered in the computer using PCQ for Windows, Academic Edition (Stricklin & Almeida, 2000) software. Q-sorts were correlated, factor analyzed using a central components analysis, and a varimax rotation was performed. The theoretical arrays that resulted were described according to the placement of items on each array.

Summary

Students identified as gifted are taught primarily by general education teachers who lack any special training in the area of gifted education. Because of this, it is important to understand the attitudes teachers have about the characteristics and needs of these students. The purpose of this study was to describe the attitudes that elementary teachers have about the characteristics and needs of students identified as gifted. A Q-sort and a follow-up worksheet were the instruments that were used as the

method of determining the subjects' attitudes about the characteristics and needs of students identified as gifted. Fifty-two elementary teachers were invited to participate in this study.

CHAPTER FOUR

RESULTS

The purpose of this study was to describe the attitudes that general education teachers have about the characteristics and needs of students identified as gifted. Included in this chapter is a description of the subjects who participated in this study and the results of the data analysis, including the interpretation of each of the factors.

Subjects

Twenty (20) teachers participated in this study each completing one Q-sort yielding twenty (20) Q-sorts. All subjects were elementary general education teachers employed by an Oklahoma school district with the exception of the researcher. The researcher chose to participate in this study to serve as a data point to help define factors because of the strong opinions that the researcher possesses. Teachers ranged in age from 21 to 60 years.

- 15% were under age 30 (3 teachers)
- 50% were age 31-40 (10 teachers)
- 25% were age 41-50 (5 teachers)
- 10% were age 51-60 (2 teachers)

All of the teachers (100%) were female, mirroring the school district's elementary general education teacher population. Teaching experience in education ranged from the first year of teaching to thirty (30) years of teaching experience (mean=12.05 years: standard deviation=8.03 years). Teachers, with the exception of the researcher, taught first, second, third, and fourth grade general education classes.

- 10% taught First Grade (2 teachers)
- 25% taught Second Grade (5 teachers)
- 25% taught Third Grade (5 teachers)
- 35% taught Fourth Grade (7 teachers)
- 5% researcher (1 teacher)

All of the teachers (100%) had a Bachelors degree in Elementary Education. Four teachers have completed a Master's degree with two additional teachers having at least 29 hours of graduate level course work completed after the bachelor's degree. One teacher had a PhD.

Twelve teachers reported having no training in gifted education. Five teachers reported having limited training through staff development and/or experience with gifted and talented students in the classroom. One teacher reported training through numerous workshops. Two teachers chose not to answer this question. Four teachers reported having completed graduate level course work in gifted and talented

education. Specifics of this report included graduate course work in special education, including a section on gifted education and assessment strategies for exceptional learners. In other words, no teachers, other than the researcher, had completed coursework designed for gifted education exclusively.

Analysis of Data

Q-Sort data from all participants were entered in the computer using PCQ for Windows, Academic Edition (Stricklin & Almeida, 2000) software. Q-sorts were correlated, factor analyzed using a central components analysis, and a varimax rotation was performed. Trial rotations for this study included two, three, four, and five factor solutions. A two-factor solution was selected to be interpreted for its best fit in terms of the statistics. A two-factor solution with a .50 significance level was able to account for 42% of the variance of responses. Each factor has six sorts that load as significant which enables the factors to be defined. Five sorts are considered confounded because they have significant loadings ($>.50$) on both factors. Three sorts are considered not significant. See Table 1 for the Factor Solution with X marking the defining factors.

Table 1

Factor Solution with Defining Factors

Sort Number	Factor A	Factor B
1	.46	-.52X
2	-.14	-.19
3	.46	-.53X
4	.01	-.42
5	.11	.5
6	.62X	-.31
7	-.03	-.73X
8	.31	-.9
9	.48	-.59X
10	.59X	-.26
11	.31	-.56X
12	.84X	-.23
13	.22	-.71X
14	.40	-.54X
15	.30	-.35
16	.59X	-.38
17	.68X	-.20
18	.17	-.59X

19	.69X	-.20
20	.81X	.04

Research Question

The question for this study was "What are the attitudes that general education elementary teachers have about the characteristics and needs of students who are identified as gifted?"

The response to this question is a two-factor solution as demonstrated in Table 1. To respond to this research question, each factor is described using the array position for the item distribution for each factor (Table 2). This array is considered the factor array, or theoretical factor. Other information used to interpret the factors includes discriminating items (those items that differ on each of the factors by at least two array positions); consensus items (those items that were similarly placed in the theoretical array); and interview data from the survey question. The factors are named, "Individual Needs Teachers" and "Egalitarian Needs Teachers."

The items from the Attitude Toward Giftedness Scale (Gagne & Nadeau, 1994; Tallent-Runnels & Tirri, 2000) that were used in the Q-sort

are listed in Table 2 with the theoretical array position for each item for each of the two factors in the factor solution.

Table 2

Items with Array Positions

Item #	Item Description	Array Position Individual Needs Teachers	Array Position Egalitarian Needs Teachers
1	Talent is a rare commodity which we must encourage.	4	-3
2	Devoting special funds to the education of our gifted children constitutes a profitable investment in the future of our society.	5	-4
3	Offering special help to the gifted helps perpetuate social inequalities.	-2	0
4	Special services for the gifted constitute an injustice to other children.	-4	4
5	Special programs for gifted children have the drawback of creating elitism.	-2	0

6	Since we invest supplementary funds for children with difficulties, we should do the same for the gifted.	2	-1
7	It is unfair to deprive gifted children of the enrichment which they need.	3	-3
8	Children with difficulties have the most need of special educational services.	-2	-5
9	In our schools, it is not always possible for gifted children to fully develop their talents.	4	-1
10	Our schools are already adequate in meeting the needs of the gifted.	-5	-4
11	Gifted children don't need special educational services.	-6	4
12	The gifted are already favored in our schools.	-3	0
13	Whatever the school program, the gifted will succeed in any case.	-4	-1

14	Because of a lack of appropriate programs for them, the gifted of today may become the dropouts and delinquents of tomorrow.	2	5
15	The gifted waste their time in regular classes.	-1	5
16	If the gifted are not sufficiently motivated in school, they may become lazy.	2	0
17	The gifted come mostly from wealthy families.	-4	3
18	All children are gifted.	0	-2
19	People are born gifted, you can't become gifted.	-1	1
20	A greater number of gifted children should be allowed to skip a grade.	-2	4
21	Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students.	3	-5
22	Schools should allow gifted students to progress more rapidly.	2	-3

23	Enriched school programs respond to the needs of gifted children better than skipping a grade.	3	-5
24	An enriched school program can help gifted children to completely develop their abilities.	2	-3
25	The best way to meet the needs of the gifted is to put them in special classes.	-2	-2
26	Most teachers do not have the time to give special attention to their gifted students.	4	-2
27	By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc.	3	-2
28	Special programs for gifted children make them more motivated to learn.	5	-1
29	When the gifted are put in special classes, the other children feel devalued.	-1	2
30	Often, gifted children are rejected because others are envious of them.	1	5

31	Gifted children might become vain or egotistical if they are given special attention.	-1	1
32	The speed of learning in our school is far too slow for the gifted.	1	0
33	I am sometimes uncomfortable before people I consider to be gifted.	0	2
34	Average children are the major source of our society, so, they should be the focus of our attention.	-2	0
35	We should give special attention to the gifted just as we give special attention to children with difficulties.	6	-3
36	Some teachers are jealous of the talents their gifted students possess.	1	6
37	It isn't a compliment to be described as a "whiz kid".	0	3
38	The enrichment tract is a good means with which to meet certain special needs of gifted children.	2	-4

39	The gifted need special attention in order to fully develop their talents.	5	1
40	It is less profitable to offer special education services to children with difficulties than to gifted children.	-3	3
41	Gifted students often disturb other students in the class.	0	4
42	The idea of offering special services to gifted children goes against the democratic principles of our society.	-6	2
43	Sooner or later, regular school programs may stifle the intellectual curiosity of certain gifted children.	4	-1
44	We have a greater moral responsibility to give help to children with difficulties than to gifted children.	-3	-2
45	In order to progress, a society must develop the talents of gifted individuals to the maximum.	3	1
46	Gifted children are often unsociable.	-1	3

47	The gifted should use their spare time helping those who progress less rapidly.	-5	1
48	It is parents who have the major responsibility for helping gifted children develop their talents.	-3	-6
49	It is more damaging for a gifted child to waste time in class than to adapt to skipping a grade.	0	1
50	Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child.	6	-6
51	Special educational services for the gifted are more a mark of privilege.	-3	0
52	Generally, teachers prefer to teach gifted children rather than those who have difficulties.	1	2
53	Some children are more gifted than others.	3	-5

54	In our schools, it is possible to meet the educational needs of the gifted without investing additional resources.	-4	2
55	A child who has been identified as gifted has more difficulty in making friends.	-1	3
56	All children could be gifted if they benefited from a favorable environment.	0	-1
57	When gifted children are put together in a special class, most adapt badly to the fact that they are no longer at the head of the class.	0	2
58	Skipping a grade emphasizes scholastic knowledge too much.	1	-3
59	Skipping a grade forces children to progress too rapidly.	0	0
60	There are no gifted children in our school.	-5	6

Individual Needs Teachers

Six sorts achieved a significant load that was not confounded for Individual Needs Teachers. All six of the teachers whose sorts achieved a significant load for Individual Needs Teachers range in age from 31-60

year. Three teach second grade, one teaches first grade, and one teaches third grade. Teacher 20 is the researcher. The years of experience range from 11 years to 26 years. Additional information about Individual Needs Teachers can be found in Table 3.

Table 3
Information About Individual Needs Teachers

Subject #	Grade Level	# of Years	Certification	Degrees	Training in GT
6	2	14	ELEM ED	MASTERS ELED	
10	3	26	K-8	BS +29	0
12	2	11	EARLY CHILDHOOD	B.S.	
17	1	17	ELEM ED	B.S.	A workshop
19	2	15	ELEM ED AND SCHOOL COUNSELING	B.A. & M.A.	3 hours + staff classes
20	1 2 3 4	12	K-8	BSE	Graduate work

The first factor was named Individual Needs Teachers. These teachers value equal opportunity in education by having programs adapted to

meet the specific needs of each child. These teachers believe that students identified as gifted need special educational services in order to fully develop their talents.

Individual Needs Teachers are defined by the way a set of 60 belief items were sorted as Most Like their attitudes toward the needs and characteristics of students identified as gifted and Most Unlike their attitudes toward the needs and characteristics of students identified as gifted. A list of only the extreme items, or those placed in the +6, +5, and +4 columns on the array, is presented in Table 4. These items help determine the description of the belief held by Individual Needs Teachers. Additionally, a list of only the extreme items, or those placed in the -6, -5, and -4 columns on the array, is presented in Table 5.

Table 4

Array Positions of Items Most Like Individual Needs Teachers' Attitudes
Toward the Needs and Characteristics of Gifted Students

Item	Item Description	Array
#		Position
35	We should give special attention to the gifted just as we give special attention to children with difficulties.	+6

50	Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child.	+6
39	The gifted need special attention in order to fully develop their talents.	+5
28	Special programs for gifted children make them more motivated to learn.	+5
2	Devoting special funds to the education of our gifted children constitutes a profitable investment in the future of our society.	+5
26	Most teachers do not have the time to give special attention to their gifted students.	+4
43	Sooner or later, regular school programs may stifle the intellectual curiosity of certain gifted children.	+4
9	In our schools, it is not always possible for gifted children to fully develop their talents.	+4
1	Talent is a rare commodity which we must encourage.	+4

Table 5

Array Positions of Items Most Unlike Individual Needs Teachers Attitudes
Toward the Needs and Characteristics of Gifted Students

Item #	Item Description	Array Position
11	Gifted children don't need special educational services.	-6
42	The idea of offering special educational services to gifted children goes against the democratic principles of our society.	-6
47	The gifted should use their spare time helping those who progress less rapidly.	-5
60	There are no gifted children in our school.	-5
10	Our schools are already adequate in meeting the needs of the gifted.	-5
13	Whatever the school program, the gifted will succeed in any case.	-4
4	Special services for the gifted constitute an injustice to other children.	-4
17	The gifted come mostly from wealthy families.	-4

54	In our schools, it is possible to meet the educational needs of the gifted without investing additional resources.	-4
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Individual Needs Teachers appear to recognize that gifted students are in the school, item 60, "There are no gifted children in our school" at -5. These teachers may believe that gifted students have specific needs that are not met in the classroom, item 10, "Our schools are already adequate in meeting the needs of the gifted" at -5 and that different levels of giftedness exist, item 50, "Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child" at +6.

Individual Needs Teachers seem to believe that special educational services tailored to the individual needs of students are considered necessary in order to meet those varied needs. Support for this statement comes from:

- Item 50, "Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child" at +6 on the array.
- Item 35, "We should give special attention to the gifted just as we give special attention to children with difficulties" placed at +6 on the array.

- Item 39, "The gifted need special attention in order to fully develop their talents" at +5.
- Item 28, "Special programs for gifted children make them more motivated to learn" at +5.
- Item 26, "Most teachers do not have the time to give special attention to their gifted students" at +4.
- Item 43, "Sooner or later, regular school programs may stifle the intellectual curiosity of certain gifted children" at +4.
- Item 1, "Talent is a rare commodity which we must encourage" at +4.
- Item 11, "Gifted children don't need special educational services" at -6.
- Item 47, "The gifted should use their spare time helping those who progress less rapidly" at -5.
- Item 13, "Whatever the school program, the gifted will succeed in any case" at -5.

One teacher with this belief thinks that all children would benefit from a gifted curriculum. "I believe all children should be presented (exposed) with gifted curriculum to absorb whatever they are capable of "getting." Some students may gain more than others but I believe all can profit! Use Bloom's Taxonomy and see! Exposure is a good thing." This comment

reinforces the idea of meeting individual needs by recognizing that each student will have educational needs met if presented with gifted curriculum. Another Individual Needs Teacher said, "Children have a right to an education that will most meet their needs." Meeting the needs of gifted students is considered necessary to Individual Needs Teachers.

Individual Needs Teachers appear to support equality of services to all students. These teachers do not seem to place one group's needs over another group's needs. Items in support of this view are:

- Item 50, "Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child" at +6.
- Item 35, "We should give special attention to the gifted just as we give special attention to children with difficulties" at +6.
- Item 7, "It is unfair to deprive gifted children of the enrichment which they need" at +3.
- Item 4, "Special services for the gifted constitute an injustice to other children" at -4.
- Item 44, "We have a greater moral responsibility to give help to children with difficulties than to gifted children" at -3.
- Item 51, "Special educational services for the gifted are more a mark of privilege" at -3.

- Item 40, "It is less profitable to offer special education services to children with difficulties than to gifted children" at -3.

Equal access to services that meet the needs of students seems to be important to Individual Needs Teachers.

Individual Needs Teachers believe that schools are currently not meeting the needs of gifted students, as stated by item 10, "Our schools are already adequate in meeting the needs of the gifted" placed at -5 on the array. Further items that support this belief are item 54, "In our schools, it is possible to meet the educational needs of the gifted without investing additional resources" at -4 and item 9, "In our schools, it is not always possible for gifted children to fully develop their talents" at +4. Teacher six comments, "As a regular classroom teacher, I feel the gifted students need to be challenged more. I have a tendency to put these needs at the bottom of my priority list, after average and low student needs. Having a pull-out for these students makes me feel less guilty when I feel that I am neglecting them somewhat. There are only so many minutes in my school day!" Further supported by Item 26, "Most teachers do not have the time to give special attention to their gifted students" at +4 on the array. Another Individual Needs Teachers commented about the need for more enrichment activities. Teacher 19 stated, "Too little funding as well as enrichment activities are offered in behalf of these children."

Individual Needs Teachers do not appear to be elitist in their beliefs about providing services to gifted and talented students. Items that support this view are:

- Item 42, "The idea of offering special services to gifted children goes against the democratic principle of our society" at -6.
- Item 17, "The gifted come mostly from wealthy families" at -4.
- Item 4, "Special services to the gifted constitute an injustice to other children" at -4.
- Item 51, "Special educational services for the gifted are more a mark of privilege" at -3.
- Item 44, "We have a greater moral responsibility to give help to children with difficulties than to gifted children" at -3.

Individual Needs Teachers acknowledge the presence of gifted students in the school. Gifted students have specific needs that are not always met in the classroom and that different levels of giftedness exist appear to represent the belief of Individual Needs Teachers. Equality of services to all students is important to these teachers. Individual Needs Teachers do not seem to believe that the school is currently doing a good job in meeting the needs of students identified as gifted. Individual Needs Teachers do not appear to be elitist in their view of gifted education.

Egalitarian Needs Teachers

Six sorts achieved a significant load that was not confounded for Egalitarian Needs Teachers. All six of the teachers whose sorts achieved a significant load for Egalitarian Needs Teachers range in age from 21-45 years. Three teach fourth grade, two teach third grade, and one teaches first grade. The years of experience range from 2-16 years. Additional information about Egalitarian Needs Teachers can be found in Table 6.

Table 6
Information About Egalitarian Needs Teachers

Teacher	Current Grade	# of Years	Certification	Degrees	Training in GT
4	4	16	ELEM. Math, SS, Lang	BS ELED	workshops, GT in class last 10 years
7	4	2.5	ELEM ED.	Bachelor	NONE
11	3	12	ELEM ED., Home Ec., Lang., SS	BA	0
13	1	4	ELED Lang -8	B in ELED	NONE
15	3	2	ELED	BS	none

18	4	15	SPED &	Bachelor	-
ELED K-8					

The second factor was named Egalitarian Needs Teachers. These teachers believe that students identified as gifted do not need and/or are not entitled to special educational services with the possible exception of acceleration by skipping a grade. These teachers recognize that gifted students may have specific social problems that need to be addressed.

Egalitarian Needs Teachers are defined by the way a set of 60 belief items were sorted as Most Like their attitudes toward the needs and characteristics of students identified as gifted and Most Unlike their attitudes toward the needs and characteristics of students identified as gifted. A list of only the extreme items, or those placed in the +6, +5, and +4 columns on the array, is presented in Table 7. These items help determine the description of Egalitarian Needs Teachers' belief. Additionally, a list of only the extreme items, or those placed in the -6, -5, and -4 columns on the array, is presented in Table 8.

Table 7 Array Positions of Items that are Most Like the Attitudes that Egalitarian Needs Teachers have About the Needs and Characteristics of Students Identified as Gifted

Item #	Item Description	Array Position
36	Some teachers are jealous of the talents their gifted students possess.	+6
60	There are no gifted children in our school	+6
30	Often gifted children are rejected because others are envious of them.	+5
14	Because of a lack of appropriate programs for them, the gifted of today may become the dropouts and delinquents of tomorrow.	+5
15	The gifted waste their time in regular classes.	+5
20	A greater number of gifted children should be allowed to skip a grade.	+4
4	Special services for the gifted constitute and injustice to other children.	+4
11	Gifted children don't need special educational services.	+4
41	Gifted students often disturb other students in the class.	+4

Table 8 Array Positions of Items that are Most Unlike the Attitudes that Egalitarian Needs Teachers have About the Needs and Characteristics of Students Identified as Gifted

Item #	Item Description	Array Position
50	Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child.	-6
48	It is parents who have the major responsibility for helping gifted children develop their talents.	-6
53	Some children are more gifted than others.	-5
23	Enriched school programs respond to the needs of gifted children better than skipping a grade.	-5
8	Children with difficulties have the most need of special educational services.	-5
22	Schools should allow gifted students to progress more rapidly.	-4
10	Our schools are already adequate in meeting the needs of the gifted.	-4

2	Devoting special funds to the education of our gifted children constitutes a profitable investment in the future of our society.	-4
38	The enrichment tract is a good means with which to meet certain special needs of gifted children.	-4

Egalitarian Needs Teachers believe that the general education classroom is a place of equal rights for all students. These teachers do not believe that the school has gifted students because their presence is rare, item 1, "Talent is a precious commodity which we must encourage" at -3. Egalitarian Needs Teachers seem to recognize that these students have some specific problems. If the school did have a gifted student, Egalitarian Needs Teachers believe that the way to accommodate these students would be to accelerate them to the next grade level.

All students have equal rights so no special services should be offered appears to represent the belief of Egalitarian Needs Teachers. Item 50, "Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child" placed at -6 on the array is a strong statement of this belief. More items that describe the belief that all students should have equal rights so no special services are needed are:

- Item 8, "Children with difficulties have the most need of special educational services" at -5, item 11, "Gifted children don't need special educational services" at +4.
- Item 4, "Special services for the gifted constitute an injustice to other children" at +4.
- Item 2, "Devoting special funds to the education of our gifted children constitutes a profitable investment in the future of our society" at -4.
- Item 7, "It is unfair to deprive gifted children of the enrichment which they need" at -3.
- Item 35, "We should give special attention to the gifted just as we give special attention to children with difficulties" at -3.

Egalitarian Needs Teachers have difficulty believing that there are any gifted students in the school as described by their placement of item 60, "There are no gifted children in our school" at +6 on the array. While Egalitarian Needs Teachers do not believe gifted students are present in the school, these teachers recognize that gifted students have some specific problems.

- Jealousy of others:
 - Item 36, "Some teachers are jealous of the talents their gifted students possess, at +6.

- Item 30, "Often gifted children are rejected because others are envious of them" at +5.
- Social problems:
 - Item 46, "Gifted children are often unsociable" at +3.
 - Item 55, "A child who has been identified as gifted has more difficulty in making friends" at +3.
 - Item 42, "Gifted students often disturb other students in the class" at +4.
 - Item 37, "It isn't a compliment to be described as a "whiz kid" at +3.
- The potential to be a dropout or delinquent:
 - Item 14, "Because of a lack of appropriate programs for them, the gifted of today may become the dropouts and delinquents of tomorrow" at +5.

Perhaps the problems are so extreme that the only way a teacher would recognize a gifted students is from the serious issues presented in the previous items.

If there were gifted students in the school, Egalitarian Needs Teachers would choose to accelerate these students to the next grade level.

- Item 20, "A greater number of gifted children should be allowed to skip a grade", at +4.

- Item 23, "Enriched school programs respond to the needs of gifted children better than skipping a grade", at -5.
- Item 58, "Skipping a grade emphasizes scholastic knowledge too much", at -3 supports this idea.

These teachers do not feel that continuous progress within a classroom or an enrichment program for gifted students are good ideas, item 22, "Schools should allow gifted students to progress more rapidly" at -3 and item 23, "Enriched school programs respond to the needs of gifted children better than skipping a grade", at -5 support this conviction. Since our schools do not have any gifted students, Egalitarian Needs Teachers do not have a strong opinion about item 32, "The speed of learning is far too slow for the gifted", at 0.

Egalitarian Needs Teachers strong disagreement with item 48, "It is parents who have the major responsibility for helping gifted children develop their talents" at -6 indicates that these teachers may believe that schools have the major responsibility for the education of gifted students. However, these teachers might not believe the schools are adequate in meeting the needs of gifted students, item 10, "Our schools are already adequate in meeting the needs of the gifted" at -4 This is probably because the school is not accelerating gifted students to the next grade level since Egalitarian Needs Teachers believe that

acceleration to the next grade level is the way to meet the needs of gifted students.

These teachers placed item 26, "Most teachers do not have time to give special attention to their gifted students." at -2 on the array supporting this belief. This placement indicates that Egalitarian Needs Teachers feel that they have the time to serve gifted students in their classroom. But, item 15, "Gifted waste their time in regular classes." at +5, indicates that these teachers do not meet the needs of gifted students. Teacher 15 states, "I feel that some gifted children don't get the special attention they need in the regular classroom due to the lack of time."

Egalitarian Needs Teachers might say that the general education classroom is a place of equal rights for all students. While these teachers apparently do not believe that the school has gifted students, they recognize that gifted students have some specific problems. Egalitarian Needs Teachers believe that if the school did have gifted students the way to accommodate these students would be to accelerate them to the next grade level.

Consensus Items

Consensus items are those Q-set items that all teachers in the study sort similarly. These items are important when analyzing data since they do

not distinguish between any of the factors. Consensus items in this study and their relative placement in each of the theoretical factor arrays are listed in the following table.

Table 9

Consensus Items with Array Positions for Each Factor

Item #	Item Description	Array Position Factor A	Array Position Factor B
10	Our schools are already adequate in meeting the needs of the gifted.	-5	-4
25	The best way to meet the needs of the gifted is to put them in special classes.	-2	-2
32	The speed of learning in our school is far too slow for the gifted.	1	0
44	We have a greater moral responsibility to give help to children with difficulties than to gifted children.	-3	-2
49	It is more damaging for a gifted child to waste time in class than to adapt to skipping a grade.	0	1

52	Generally, teachers prefer to teach gifted children rather than those who have difficulties.	1	2
56	All children could be gifted if they benefited from a favorable environment.	0	-1
59	Skipping a grade forces children to progress too rapidly.	0	0

These items must be interpreted according to the belief of each factor. Individual Needs Teachers and Egalitarian Needs Teachers are equal in the strength of their opinion about item 10, "Our schools are already adequate in meeting the need of the gifted." Individual Needs Teachers may interpret this statement to mean that schools need to do more to meet the needs of gifted students. Egalitarian Needs Teachers might interpret this statement to mean that since the schools do not have any gifted students, there are no students that need to have their needs met.

Individual Needs Teachers and Egalitarian Needs Teachers are similar in the strength of their opinion about Item 44, "We have a greater moral responsibility to give help to children with difficulties than to gifted children." Individual Needs Teachers placed Item 44 at -3, indicating

that these teachers believe everyone should have equal access to services that will best meet their educational needs. Egalitarian Needs Teachers place Item 44 at -2. These teachers believe that the classroom is a place of equal rights for all so there is no greater moral responsibility to one special population over another special population.

Individual Needs Teachers and Egalitarian Needs Teachers placed item 25, "The best way to meet the needs of the gifted is to put them in special classes" at -2. Individual Needs Teachers interpret a special class as a full time, self-contained gifted and talented classroom. These teachers want to include gifted students in their classroom and provide special services as needed. Egalitarian Needs Teachers do not believe in special classes for anyone.

Summary

Included in this chapter was a description of the twenty teachers who each completed a Q-sort that resulted in 20 sorts. Each teacher was asked to sort a set of 60 items about the needs and characteristics of students identified as gifted according to those items that were Most Like their attitudes and Most Unlike their attitudes. The Q-sorts and items were analyzed using PCQ Methods software (Stricklin & Almeida, 2000). Q-sorts were correlated, factor analyzed using a central components analysis,

and a varimax rotation was performed. Findings resulted in two explanations of what teachers' attitudes are about the needs and characteristics of students identified as gifted. A description of each explanation and a discussion about consensus items were included.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The purpose of this study was to describe the attitudes that elementary general education teachers have about students identified as gifted. Teachers' attitudes were evaluated based on their own interpretation of a set of 60 items. These items were from the Attitudes Toward Giftedness Scale (Gagne & Nadeau, 1994; Tallent-Runnels & Tirri, 2000), developed as statements relevant to the needs and characteristics of students identified as gifted. Participants were asked to rank the items according to which items were Most Like and Most Unlike their own attitudes toward the characteristics and needs of students identified as gifted. Using Q-methodology, a two-factor solution emerged from the data analysis. These factors were interpreted to represent the beliefs of the Individual Needs Teachers and the Egalitarian Needs Teachers.

This chapter presents a summary of findings, conclusions developed from the study results, and implications for practice and research.

Bias of Researcher

While I found the results of this study to be fascinating, I struggled with the interpretation of the data presented for the factor on which my Q-sort did not load, eventually named the Egalitarian Needs Teachers. This is

most likely accounted for because of my strong agreement with Individual Needs Teachers. My Q-sort had a factor load of .81 for Factor A, Individual Needs Teachers, and a factor load of .04 for Factor B, Egalitarian Needs Teachers.

I taught in a general education classroom for the first ten years of my teaching career. While in the classroom, I consistently worked to develop processes and curriculum to meet the needs of my more advanced students. It is very difficult for me to envision a successful environment where all students are participating in the same activities, in the same way, at the same time every day. This bias toward meeting individual needs made it very difficult for me to interpret in a positive manner another view.

Summary of Findings

Two attitudes emerged from this study: all students deserve to have their individual educational needs met (Individual Needs Teachers) and equality of services for all students (Egalitarian Needs Teachers). The attitudes that surfaced in this study describe two different theoretical beliefs systems among this group of teachers.

Results of this study reveal that Individual Needs Teachers acknowledge the presence of gifted students in the school. These teachers believe that

gifted students have specific needs that are not easily met in the classroom. These teachers believe that different levels of giftedness exist. Equality of services to all students is important to Individual Needs Teachers; however, it appears that teachers who hold this belief would not say that the school is currently doing a good job in meeting the needs of students identified as gifted.

Egalitarian Needs Teachers believe that the general education classroom is a place of equal rights for all students. While these teachers do not believe that the school has gifted students, they recognize that gifted students have specific problems. Egalitarian Needs Teachers probably believe schools with gifted students should accommodate them by accelerating them to the next grade level.

Conclusions

Two attitudes teachers have toward the needs and characteristics of students identified as gifted emerged in this study: Individual Needs Teachers and Egalitarian Needs Teachers. Individual Needs Teachers believe that all students should have their individual educational needs met. Egalitarian Needs Teachers believe that services should be equal for all students so no special services are needed.

Several studies (Cavin, 1980; Jacobs, 1972; Morris, 1987; Tallent-Runnels & Tirri, 2000) conclude that teachers' attitudes toward students identified as gifted are positive or negative. These studies stop short at defining of what a positive or negative attitude consists. This could be because the instrumentation used was not able to allow researchers to do this. The results of this study offer an in-depth description of the attitudes teachers have toward the needs and characteristics of students identified as gifted.

Several factors have been found that influence teachers' attitudes about gifted students. Amount of information a teacher has about gifted students and their programs results in a more positive attitude toward gifted students (Bransky, 1987). Degrees held, amount of training about gifted students' needs, and years of teaching experience are some of the most significant factors found to influence attitudes about students identified as gifted (Rogers, 1988; Wiener & O'Shea, 1963). This study seems to support these findings.

Even though this population is not large enough to draw any generalizations, it is interesting to note the demographic differences between Individual Needs Teachers and Egalitarian Needs Teachers. While the Individual Needs Teachers were older and had more experience (range 31-60 years old with 11-26 years experience) the Egalitarian Needs

Teachers were younger and had less experience (range 21-45 years old with 2-16 years experience). Individual Needs Teachers appear to have a higher level of education (two teachers hold a Masters' degree, one teacher has 29 hours of graduate level work, and the researcher has completed all coursework for a Masters' degree) while Egalitarian Needs Teachers have a Bachelor's degree with no graduate level course work reported. Three of the Individual Needs Teachers currently teach second grade students, one teaches third grade students, one teaches first grade students, and one teaches first-fourth grade students in the gifted and talented pull-out program. Three of the Egalitarian Needs Teachers currently teach fourth grade students, two teach third grade students, and one teaches first grade students.

One study (Tallent-Runnels & Tirri, 2000) attempted to investigate the attitudes teachers have toward gifted children and programs for gifted children among American and Finnish teachers. The instrument utilized was the Attitude Toward Giftedness Scale. This Likert-type scale was used to discover 18 possible factors that could affect the attitudes teachers might have toward gifted students. No discrimination between positive or negative attitudes or descriptions of each of these attitudes was given. These factors were further analyzed to look for differences among demographic variables, between cultures, and among teacher types.

No significant differences existed among demographic variables, but differences were suggested by country and by teacher type.

American teacher types differed in the belief that gifted education should be a right and a priority but that schools should be careful about isolating the gifted learners from others (Tallent-Runnels & Tirri, 2000). How did these teachers differ? What methods do these teachers believe would work best to accomplish this? These questions are unanswered. This study provided a clearer description of the differences of beliefs. Individual Needs Teachers seem to believe that gifted education is a right and a priority and Egalitarian Needs Teachers appear to believe that equality in education is a priority and that gifted students do not have a right to differentiated services.

Finnish teacher types differed in the belief that gifted learners have advantages and are different from others so they have special needs (Tallent-Runnels & Tirri, 2000). What advantages do gifted learners have? How are gifted learners different? Do Finnish teachers believe that those special needs must be met? How does this belief differ from what American teacher types believe? Since no further information is offered it is difficult to determine the value of this conclusion.

This pattern continues through the analysis of differences among teacher types. Preservice teachers differed in the belief that gifted

children have a right to special classes that were not considered elitist but deserved. Practicing teachers differed in the belief that gifted learners have special needs and deserve equality of opportunity and that these needs deserve enrichment and special programs. Gifted program teachers differed in the belief that gifted learners would not make it on their own with out special classes and the freedom to progress at their own pace. Further, these teachers differ in the belief that gifted programs are just as important as those for children with difficulties or learning problems. What are the differences in belief?

Q-methodology facilitated the writing of a comprehensive description of attitudes teachers have toward the needs and characteristics of gifted students. Q-methodology allowed descriptions of beliefs based on the placement of items on the theoretical array. Items that evoked the most extreme opinions were at each end of the array while items placed in the middle of the array did not affect the participants' attitudes as much. The researcher was then able to observe which items each factor felt most strongly about. The relationships and groupings of items could be described because the meaning was determined by the placement of each item on the theoretical array.

The results of this study have provided insight into the attitudes that teachers in one Oklahoma school district have toward the needs and

characteristics of students identified as gifted. Two attitudes emerged in this study: Individual Needs Teachers and Egalitarian Needs Teachers.

Individual Needs Teachers believe that all students should have their individual educational needs met. Egalitarian Needs Teachers believe that services should be equal for all students so no special services are needed.

Implications

The results of this study have implications in several areas. Administrators, professional development committees, district coordinators, and building-level gifted and talented program teachers could use the results to make decisions that impact gifted education in their district. This study adds new knowledge to the field of gifted education by the use of a non-traditional instrument to collect and analyze information. Several implications for future research emerge as a result of this study.

Implications for Practice

Results of this study may be useful to educational administrators as they make decisions about placement of gifted students in general education classrooms, ways to meet the individual needs of students identified as gifted, and making teaching assignments. Gifted students

may be more successful in classrooms in which the teachers' attitude is accommodating toward the needs and characteristics of students identified as gifted (Alexander & Strain, 1978; Delisles, 1989; Rosenthal, 1991).

There are implications for professional development. These results could be used to design and implement workshops, mentor relationships, and staff development to help teachers understand the needs and characteristics of students identified as gifted. Individual Needs Teachers may benefit from training that helps develop the skills needed to differentiate work in the general education classroom to best meet individual needs. The results of this study indicate that Egalitarian Needs Teachers would be more likely to use strategies, materials, and ideas that would benefit all students in their classroom. High-level questions, creative thinking, critical thinking, and tiered assignments would be appropriate interventions to be taught for use in an Egalitarian Needs Teacher's classroom. The implication for building level teachers and coordinators of gifted students are diverse. This study reveals two of the attitudes that teachers in one school district possess. Gifted and talented teachers and coordinators can use this information to facilitate working relationships with general education classroom teachers. Better understanding of teachers' attitudes promotes better cooperation between the general education

teacher and the gifted and talented teacher. The building-level gifted teacher could begin working with Individual Needs Teachers to implement teaching strategies, differentiated curriculum and assignments, alternative assessment procedures, and independent projects in the general education classroom. The gifted teacher could keep Individual Needs Teachers and Egalitarian Needs Teachers more informed about what goes on in the gifted classroom. Research (Bransky, 1987) has indicated that the amount of information a teacher has about gifted students and their programs results in a more positive attitude toward these students. Egalitarian Needs Teachers would benefit from a short newsletter filled with information about gifted needs and characteristics, accomplishments of gifted individuals, and simple strategies teachers can use that benefit gifted students and other students in the classroom.

Implications for Theory

This study advances new knowledge in the field of gifted education by the use of a non-traditional instrument to describe factors related to attitudes toward the needs and characteristics of students identified as gifted. The item statements from the Attitudes Toward Giftedness Scale (Gagne & Nadeau, 1994; Tallent-Runnels & Tirri, 2000), a traditional Likert-type rating scale, were utilized in Q-methodology for this study. This

enabled the researcher to explain each theoretical factor according to the placement of items on the array instead of only identifying that there is a difference of beliefs but not explaining of what those differences consist.

Q-methodology offers a different way to look at people's ideas, attitudes, beliefs, and opinions because it determines factors based on the placement of items on the theoretical array. Items that have the most importance are placed at each end of the array while items placed in the middle do not have as much importance to the participants.

By using Q-methodology, two different attitudes about the needs and characteristics of students identified as gifted were discovered among the group of general education elementary teachers who participated in this study. Because participants were asked to rank items according to which items were Most Like or Most Unlike their attitudes toward the needs and characteristics of students identified as gifted, the rankings reflect those items that have the most importance in respect to the other items. The relationships and groupings of items reveal information that is not available when a Likert-type scale is used. The factors can be described with depth of meaning in this way.

Implications for Further Research

Results of this study indicate that, for this group of teachers, there are two attitudes toward the needs and characteristics of students identified as gifted. These same items and processes could be used with a larger group of teachers to find out if the same attitudes would emerge and/or if additional attitudes would be evident. This would help determine if these attitudes are unique to this group of teachers or if they are common to all groups. In this way, generalizability may be established. A follow-up interview using a broader cast of questions with participants to discuss their placement of items would reveal additional insights to what teachers really believe and why they believe the way they do. Some questions that might be asked are:

- Do you have a member of your family or someone else close to you that is gifted?
- How do you define special services?
- How do you accommodate gifted learners in your classroom?
- Why do you believe there are no gifted learners/are gifted learners in our school?
- What do you believe the school should do to meet the needs of gifted students?

The answers to these questions may help explain attitudes teachers have toward the needs and characteristics of students identified as gifted.

Limitations of This Study

One limitation of this study is the results are based on self-report of information. Although, Brown (1980) and others have used Q method to describe the tacit knowledge a subject might have about a topic, the study used a group of elementary teachers to report their perceptions. Additionally, the group of elementary teachers came from the same school, which means caution must be used in purporting these results represent the entire population of elementary teachers.

Another limitation of this study relates to the fact that the teachers were colleagues of the researcher. Perhaps the results were reported as a personal favor or for other reasons and a representative sample of teachers in another elementary school would view the education of students who are gifted or talented very differently.

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APPENDIX A

Q-SORT ITEMS

- Item 1 Talent is a rare commodity which we must encourage.
- Item 2 Devoting special funds to the education of gifted children constitutes a profitable investment in the future of our society.
- Item 3 Offering special help to the gifted helps perpetuate social inequalities.
- Item 4 Special services for the gifted constitute an injustice to other children.
- Item 5 Special programs for gifted children have the drawback of creating elitism.
- Item 6 Since we invest supplementary funds for children with difficulties, we should do the same for the gifted.
- Item 7 It is unfair to deprive gifted children of the enrichment which they need.
- Item 8 Children with difficulties have the most need of special educational services.
- Item 9 In our schools, it is not always possible for gifted children to fully develop their talents.
- Item 10 Our schools are already adequate in meeting the needs of the gifted.
- Item 11 Gifted children don't need special educational services.
- Item 12 The gifted are already favored in our schools.
- Item 13 Whatever the school program, the gifted will succeed in any case.

- Item 14 Because of a lack of appropriate programs for them, the gifted of today may become the dropouts and delinquents of tomorrow.
- Item 15 The gifted waste their time in regular classes.
- Item 16 If the gifted are not sufficiently motivated in school, they may become lazy.
- Item 17 The gifted come mostly from wealthy families.
- Item 18 All children are gifted.
- Item 19 People are born gifted, you can't become gifted.
- Item 20 A greater number of gifted children should be allowed to skip a grade.
- Item 21 Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students.
- Item 22 Schools should allow gifted students to progress more rapidly.
- Item 23 Enriched school programs respond to the needs of gifted children better than skipping a grade.
- Item 24 An enriched school program can help gifted children to completely develop their abilities.
- Item 25 The best way to meet the needs of the gifted is to put them in special classes.
- Item 26 Most teachers do not have the time to give special attention to their gifted students.
- Item 27 By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc.
- Item 28 Special programs for gifted children make them more motivated to learn.
- Item 29 When the gifted are put in special classes, the other children feel devalued.

- Item 30 Often, gifted children are rejected because people are envious of them.
- Item 31 Gifted children might become vain or egotistical if they are given special attention.
- Item 32 The speed of learning in our schools is far too slow for the gifted.
- Item 33 I am sometimes uncomfortable before people I consider to be gifted.
- Item 34 Average children are the major resource of our society, so, they should be the focus of our attention.
- Item 35 We should give special attention to the gifted just as we give special attention to children with difficulties.
- Item 36 Some teachers are jealous of the talents their gifted students possess.
- Item 37 It isn't a compliment to be described as a "whiz kid".
- Item 38 The enrichment tract is a good means with which to meet certain special needs of gifted children.
- Item 39 The gifted need special attention in order to fully develop their talents.
- Item 40 It is less profitable to offer special education to children with difficulties than to gifted children.
- Item 41 Gifted students often disturb other students in the class.
- Item 42 The idea of offering special educational services to gifted children goes against the democratic principles of our society.
- Item 43 Sooner or later, regular school programs may stifle the intellectual curiosity of certain gifted children.
- Item 44 We have a greater moral responsibility to give special help to children with difficulties than to gifted children.

- Item 45 In order to progress, a society must develop the talents of gifted individuals to a maximum.
- Item 46 Gifted children are often unsociable.
- Item 47 The gifted should spend their spare time helping those who progress less rapidly.
- Item 48 It is parents who have the major responsibility for helping gifted children develop their talents.
- Item 49 It is more damaging for a gifted child to waste time in class than to adapt to skipping a grade.
- Item 50 Equal opportunity in education does not mean having the same program for everyone, but rather programs adapted to the specific needs of each child.
- Item 51 Special educational services for the gifted are a mark of privilege.
- Item 52 Generally, teachers prefer to teach gifted children rather than those who have difficulties.
- Item 53 Some children are more gifted than others.
- Item 54 In our schools, it is possible to meet the educational needs of the gifted without investing additional resources.
- Item 55 A child who has been identified as gifted has more difficulty in making friends.
- Item 56 All children could be gifted if they benefited from a favorable environment.
- Item 57 When gifted children are put together in a special class most adapt badly to the fact that they are no longer at the head of the class.
- Item 58 Skipping a grade emphasizes scholastic knowledge too much.
- Item 59 Skipping a grade forces children to progress too rapidly.

Item 60 There are no gifted children in our school.

APPENDIX B

FOLLOW-UP WORKSHEET

Gender: ___Male ___Female

In what ethnic category would you place yourself (optional)?

- | | |
|----------------------|---------------------|
| ___Caucasian | ___African American |
| ___Hispanic American | ___Asian American |
| ___Native American | ___Other |

In which of these ranges of age do you belong? (please circle appropriate range):

- | | | | | |
|-------|-------|-------|-------|-------|
| 21-25 | 31-35 | 41-45 | 51-55 | 61-65 |
| 26-30 | 36-40 | 46-50 | 56-60 | 66-70 |

What do you currently teach (grade level and subject(s))?

How many years in your current position?

How long have you been teaching?

In what area(s) do you hold certification?

What degrees do you hold?

How much training in gifted education have you had?

What graduate level course work about gifted education have you completed?

Describe your beliefs about the education of the gifted.

APPENDIX C

LETTER OF INVITATION

September 16, 2001

Dear Teachers,

As a graduate student at Oklahoma State University-Tulsa, I have developed a research study titled Teachers' Attitudes About the Needs and Characteristics of Elementary Students Identified as Gifted: A Q-Methodological Study.

I need as many elementary (1st-4th) teachers to take part as possible. Participants will be asked to sort a set of 60 statements according to your personal beliefs and attitudes. A brief follow-up worksheet will also be completed. Your participation in this study may require up to 45 minutes of your time. Several days and times will be available to participate. You may choose the session that best fits your schedule. Please see the attached schedule.

Confidentiality of results will be strictly enforced. Your name will not be requested on any materials. Identifying numbers will be placed on all paperwork. At no time will your name or identifying information be revealed in print or otherwise. Results of this study will be used to complete my master's thesis at Oklahoma State University-Tulsa and a summary will be available if you are interested in the findings of this study.

If you have any questions or concerns, I can be contacted at home (449-0751), at work (2836), or by e-mail (_____ or _____). You may also contact Dr. Diane Montgomery, thesis adviser, at 405-744-9441 or Sharon Bacher, IRB Secretary, at 405-744-5700.

Thank you for taking the time to read this letter and to consider participating in this study.

Sincerely,

Laurie Francis

APPENDIX D

IRB APPROVAL PAGE

Oklahoma State University Institutional Review Board

Protocol Expires: 8/5/02

Date: Monday, August 06, 2001

IRB Application No ED026

Proposal Title: TEACHERS' ATTITUDES ABOUT THE NEEDS AND CHARACTERISTICS OF
ELEMENTARY STUDENTS IDENTIFIED AS GIFTED: A Q-METHODOLOGICAL STUDY

Principal
Investigator(s):

Laurie B. Francis
OSU-Tulsa 13411 S 128th
Broken Arrow, OK 74011

Diane Montgomery
424 Willard
Stillwater, OK 74078

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI :

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 46 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,



Carol Olson, Chair
Institutional Review Board

APPENDIX E

PARTICIPANT AGREEMENT

I, _____, hereby authorize Laurie Francis to perform the following procedure: a Q-sort and a follow-up worksheet. This procedure is being used in an investigation entitled Teachers' Attitudes about the Needs and Characteristics of Elementary Students Identified as Gifted: A Q-Methodological Study.

This study will investigate the subjects' attitudes about the characteristics and needs of students identified as gifted. Participation in this study may take up to 45 minutes and will involve the rank ordering of 60 statements according to personal agreement with each statement. A follow-up worksheet consisting of demographic data and personal opinion questions will also be completed. All records of participation and results of this study are considered confidential. Identification of each participant will be by a unique identification number during the study.

I understand that participation in this study is voluntary, and that I am free to withdraw my consent and participation in this study at any time without penalty. I may contact Laurie Francis at 449-0751 or 366-2245, Dr. Diane Montgomery at 405-744-9441, or Sharon Bacher at 405-744-5700.

I have read and fully understand the consent form. I sign freely and voluntarily. A copy of this signed form has been given to me.

Date signed: _____

Signature: _____

Witness: _____

APPENDIX F

LETTER TO ADMINISTRATOR

June 14, 2001

Dear _____,

As a graduate student at Oklahoma State University-Tulsa, I have developed a research study titled Teachers' Attitudes About the Needs and Characteristics of Elementary Students Identified as Gifted: A Q-Methodological Study. Results of this study will be used to complete my master's thesis at Oklahoma State University-Tulsa.

Participants in this study will be asked to sort a set of 60 statements according to their personal beliefs and attitudes. A brief follow-up worksheet will also be completed. Participation in this study may require up to 45 minutes of the participants' time. Confidentiality of results will be strictly enforced. Identifying numbers will be used on all materials instead of names. At no time will names or other identifying information be revealed in print or otherwise.

I would like your permission to invite 1st through 4th grade teachers to participate in this study. If permission is obtained, a letter of invitation will be given to each first through fourth grade classroom teacher at the beginning of the 2001-2002 school year. I would also welcome the opportunity to share information about this study with teachers during back to school in-service sessions. Teachers will then have the choice of whether or not to participate. The Q-sort and follow-up questionnaire would be administered in several sessions after school has dismissed for the day.

If you have any questions or concerns, I will be available to speak with you at your convenience. You may also contact Dr. Diane Montgomery, thesis adviser, at 405-744-9441 or Sharon Bacher, IRB Secretary, at 405-744-5700.

Sincerely,

Laurie Francis

APPENDIX G

STANDARDIZED SCRIPT OF DIRECTIONS AND PROCEDURES

This research study is designed to investigate your views concerning the characteristics and needs of elementary students identified as gifted. Strict confidentiality is guaranteed to all participants in this study. You will notice an identification number on all of the forms in this folder and on the folder itself. It is not necessary to write your name on any of the papers or the folder.

DIRECTIONS

Your first step is to rank order a set of statements according to those statements that best describe your attitudes toward the characteristics and needs of elementary students identified as gifted to those statements that are most unlike your attitudes toward elementary students identified as gifted. Begin by reading all 60 statements to become familiar with their contents. As you read through the statements, divide the statements into three sets: those which are most **like** the respondent's attitudes toward students identified as gifted, those which are most **unlike** the respondent's attitudes toward students identified as gifted, and those about which the respondent is **unsure** or has no reaction. As you progress through the sorting process, please remember the condition of instruction: What best describes your attitudes towards elementary students identified as gifted?

After you have completed the initial sorting into three sets, select the set that is most like your attitudes towards students identified as gifted. Identify the two items that are **most like** your attitudes toward elementary students identified as gifted and place those statements in the far right column on the distribution matrix board that is provided. Vertical placement on this matrix board does not indicate more or less importance to the statements. Looking at the set of statements that are most unlike your attitudes toward elementary students identified as gifted, select the two statements that are the **most unlike** your attitudes toward elementary students identified as gifted. Place these two statements in the far left column on the distribution matrix board. Continue this process until all sixty statements are assigned a position on the distribution matrix board. Once all statements have been placed on the matrix, please review your responses for accuracy. Record each statement's identifying number in the corresponding location on the matrix form.

FOLLOW-UP QUESTIONNAIRE

Please complete the questions on the follow-up worksheet once the matrix form is complete.

FINAL PROCEDURES

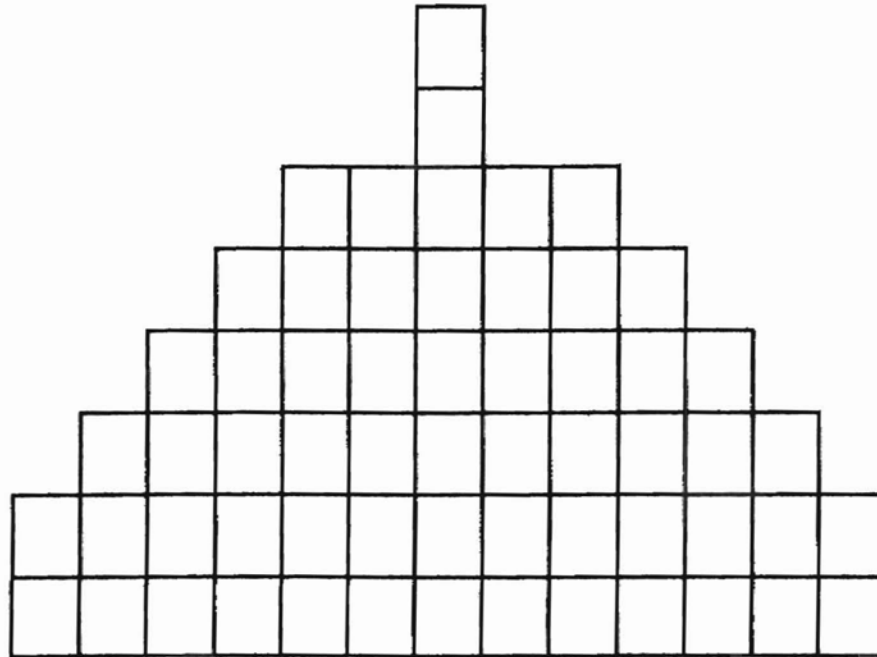
After all forms are finished, please return them to the folder that matches the identifying number on your papers. Place the folder in the box on the table by the door. Return the distribution matrix board and the

set of statements to their specified location on the table by the door.

Thank you for your participation in this study.

APPENDIX H

DISTRIBUTION MATRIX FORM AND FORM BOARD PATTERN



Array Position -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

Frequency 2 3 4 5 6 6 8 6 6 5 4 3 2

2

VITA

Laurie B. Francis

Candidate for the Degree of

Master of Science

Thesis: TEACHERS' ATTITUDES ABOUT THE NEEDS AND CHARACTERISTICS OF
ELEMENTARY STUDENTS IDENTIFIED AS GIFTED: A Q
METHODOLOGICAL STUDY

Major Field: Applied Behavioral Studies

Biographical:

Education: Graduated from Mountain Home High School, Mountain Home, Arkansas in May 1984; received Bachelor of Science degree in Elementary Education from the University of Arkansas, Fayetteville, Arkansas, 1989. Completed the requirements for the Master of Science degree with a major in Applied Behavioral Studies Gifted and Talented at Oklahoma State University, Stillwater, December 2001.

Experience: Elementary teacher of the Gifted and Talented, Bixby, Oklahoma, February, 2000 to present; second grade teacher, Bixby, Oklahoma, 1991-2000; 1st grade teacher, Liberty-Mounds, Oklahoma, 1990-2000; 4th grade Language Arts and 4th, 5th, 6th grade Social Studies teacher, Omaha, Arkansas, 1989-1990.

Professional Memberships: Oklahoma Association for Gifted, Creative, and Talented, Inc.

