THE RELATIONSHIP BETWEEN INTELLECTUAL FACTORS AND READING ACHIEVEMENT IN THIRD GRADE GIFTED STUDENTS

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CHAPTER I

INTRODUCTION

The development of an individual's reading skills occurs at a very early level in the process generally recognized as formal education. As our reading skills improve, through the constant utilization of them, we tend to forget the original learning process involved in acquiring them. Individuals who are good readers pay very little attention to the fact that acquiring reading skills is not an automatic task. Students who do not encounter difficultY in learning to read do not rationalize having to learn to read.

For some students, learning to read is a chore. These individuals tend to perceive learning to read as a necessary evil. Since learning to read is a difficult process for them, they often justify having to learn to read by first convincing themselves that reading is no more than a vehicle to assist them in exploring areas they see as more interesting and useful. Although these students also apply their acquired reading skills to situations outside of the scope of formal education, they, unlike the first group mentioned, are much less adept at applying their reading skills to classroom settings.

It would seem that if the slow learner and average ability child could learn and utilize basic reading skills, the above average or, as often referred to, gifted child, within the classroom setting, should be able to master the art of learning to read effortlessly. This is not always true. The gifted child has the abilities, but is often bored and frustrated with the normal classroom routine (Fisher, 1982). To slow a child down to keep academic pace with the rest of the class is often most evident in the child's lack of motivation to learn and a lessening of interest for school in general (Riles, 1979).

Up to this point in time, researchers appear to have conducted more studies directed to the reading skills of students at or below grade level. The gifted student, as determined by a high intelligence quotient (IQ), has often been overlooked. The need for proper identification and placement of gifted students was recognized (Riles, 1978) a few years ago when initial steps were taken to establish classrooms for gifted students.

Proper implementation and follow-through for gifted students frequently became a problem. To help the gifted child develop to his fullest in any academic field, the area of reading skills was found as the most critical need to be addressed (Caldwell, 1985). Consequently, more information is needed to help children accelerate to their fullest potential.

Purpose of the Study

The purpose of this study is to investigate the relationship between reading achievement based on the scores of verbal comprehension and perceptual organization from the Comprehensive Tests of Basic Skills (CTBS) and full scale IQ from the Wechsler Intelligence Scale for Children-Revised (WISC-R) given to children identified as gifted in the third grade.

A review of the literature since 1974 shows only a few studies directly addressing the issue of gifted children and their reading abilities. For this reason further research is necessary in this area.

Significance of Problem

Research has shown that if young children are properly identified as gifted within the first three years of school, and correctly placed in reading programs based on individual levels of achievement, success (as determined by achievement scores) in all academic areas will be obtained. This academic success helps prevent failure due to lack of interest in the classroom, behavior problems and high levels of frustration.

Early identification of gifted children is difficult since intelligence is difficult to measure at early ages, and the use of an IQ score is the most common tool used for placement.

Once a gifted child is identified, placement in the proper program is the next step, but can a gifted child's academic success be reliably predicted from his/her IQ scores? Often a child with a high IQ has a reading achievement level well above grade placement (Whorton, Karnes, & Currie, 1985). However, one can not assume that the student has mastered the necessary lower level reading skills needed to successfully accomplish other classroom activities. Pretesting of the gifted child helps everyone involved in the placement of the child in a program (Durr, 191). Care should be taken, however, when making placement decisions based on achievement scores and IQ scores of the WISC-R (Coleman & Harmer, 1985; Shinn, Algozzine, Marston, & Ysseldyke, 1982).

Hypothesis

This study has been designed to test the following hypothesis which is stated in the null form:

HO: There is no significant relationship between reading achievement as measured by the CTBS and full scale IQ as measured by the WISC-R for third grade students identified as gifted.

Definitions of Terms

The following are definitions of terms as they were used in this study:

Gifted student - Students who are characterized by accelerated learning, keen perception, extraordinary performance and heightened sensitivity. Students at grades two to twelve in the district being studied are placed in the gifted program based on their score on the Cognitive Skills Index, a group IQ indicator. Students must score in the top three percent nationally to be classified academically gifted.

Reading performance - The score a student obtains on the Comprehensive Test of Basic Skills, indicating at what level of reading he/she can perform successfully.

IQ - The full-scale score obtained by a child on the WISC-R. This score represents the child's overall ability to perceive and process various kinds of information presented in both verbal and written forms.

Limitations of the Study

This study was limited to the Putnam City Oklahoma School System, and their identification and selection of gifted students. The tests chosen by the researcher to measure the child's verbal skills, performance skills, and full scale IQ were the Wechsler Intellegence Scale for Children - Revised. The test selected by the Putnam City School district to measure the child's reading achievement was the Comprehensive Test of Basic Skills. Initial testing and placement of the subjects into the gifted program was not controlled for, but based on the students scoring in the

top three percent on the Cognitive Skills Index, a group IQ indicator. Such factors as the time of day, testing location and the examiner's sex and rapport with the child have not been accounted for in this study.

Assumptions

The researcher assumes that the students used for the study were selected and placed in the Providing Enrichment Through Acceptance and Knowledge (PEAK) program, a program for gifted students, using the stated criteria provided by the school district (See Appendix A).

It is also assumed that all tests were administered under desirable conditions, lighting, correct chair and table heights for the child, limited outside noise as required by state testing regulations, and a positive attitude toward the testing situation, based upon the psychometrist having established a professional level of rapport with the student. All administrators were qualified psychometrists certified by the Oklahoma State Department of Education.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The need for specific academic programs for gifted children was recognized throughout the literature. Proper identification, placement, attitudes and motivation and achievement of goals for gifted students were investigated.

Identification of Gifted Students

Gifted students at one time were identified solely on the basis of an IQ score, but now each state can form its own definition of giftedness based on specific academic aptitude, creative or productive thinking, leadership, and visual or performing arts. Durr (1981) indicated that this broadening of the definition will continue as long as there are government grants to fund gifted programs and applications for those grants.

There have been strong arguments made to abolish the use of IQ scores as the sole means of determining the giftedness of a child. This has yet to become a reality. Brown (1984) investigated the use of several IQ tests to help determine the best one to use for the gifted handicapped child. The WISC-R was investigated more closely

since it is used more often to identify children in all areas of intellect. The major discovery noted by Brown was that a gifted learning disabled (LD) child was more likely to have a higher verbal score than a performance score. The average discrepancy between verbal and performance scores for the normal standardization population was 9.7 while the comparable difference for the gifted LD population was 18.6.

The administration of the WISC-R to handicapped gifted was discussed, but discouraged, due to the fact that no handicapped subjects were included in the sample population. The use of specific tests for the handicapped was discussed (Nebraska Test of Learning Aptitude, Blind Learning Aptitude Test, Arthur Adaptation of the Leiter International Performance Scale) and recommended for use whenever necessary.

A study by Brown and Yakimowski (1984) analyzed the WISC-R subtest scores rather than investigating the IQ scores. They felt that if a different factor solution pattern existed for gifted students, then the IQ scores may not be as important as the pattern of the WISC-R subtest scores in the identification of gifted children.

The method and procedure implemented used 25 school psychologists from the New York and New England area. They submitted a total of 599 WISC-R protocols. From these, a subsample was chosen of 120 children classified as gifted by local school district criteria, and a second subsample of average children was selected. Within the two groups there

was an equal distribution of sex and age range. The scaled scores for each of the subtests of the WISC-R were collected for each subject. The data was then coded and a factor analysis was conducted on each subsample. The results for the average sample was not surprising. The results of the gifted sample suggested that a major difference does exist in the way in which gifted subjects process information from those that are not identified as gifted. Therefore, they questioned whether the use of IQ scores as the basis of selection for gifted programs was appropriate. Brown and Yakimowski (1984) implied the need for further testing in this area.

Birch (1984) tackled the cut-off fallacy in the identification of gifted students. Initially, a parent or teacher "identifies" a potentially gifted student. The student is then given an individual psychological test (WISC-R or Binet, etc.) which verifies the ability of the student. He contends that setting a cut-off point for identifying gifted children is very misleading and out of touch with reality. He states that "it strengthens the mistaken notion that all gifted students are alike and reinforces the fallacious concept that, since they are all alike, one program should be concerned with each child's individual strengths and weakness -- the basis for any special education program." Birch concedes that time and effort by local school personnel will be the way to obtaining the changes. He suggested five principles that

may be helpful in making the necessary changes. These are:

> 1. Work toward the capability of providing full psycho-educational assessment of all children prior to school entry;
>
> 2. Link all assessment of children to the same purpose, namely to plan and conduct education in terms of the needs and interest of the children;
>
> 3. Keep alert for gifted children who show their capabilities through school achievement, from kindergarten through 12th grade;
>
> 4. Instruct parents, teachers, principals, librarians, physicians, counselors, supervisory, and other significant adults in what to look for to help them spot gifted children and youth at home, in school, and in the community; and
>
> 5. Avoid simplistic, narrow, one-dimensional approaches (like some minimum intelligence test scores), even though a state or regional education agency seems to encourage it, because such approaches are both educationally unsound and politically dangerous (p. 160)

Durr (1981) indicated that teacher judgment has always been a good predictor of giftedness, but nominations for gifted screening should come from parents and peers, as well as classroom teachers. He favored intelligence tests as the best predictors of academic success, but admitted that they were not always available or economical, concluding that "the definition and identification of gifted students should include but not be limited to those who have already demonstrated superior reading achievement" (p. 5). Thus, he added reading achievement or reading potentials well above grade level, to the simplistic IQ cut-off procedure.

Feldhusen (1984) confronted some other problems in the identification process for determining gifted students. The two major concerns of his process were the validity of and purpose for establishing the cutoff point for the gifted program. A cutoff can be done arbitrarily or randomly, such a procedure is hard to defend against questions from parents. Feldhusen, et. al. (1984) maintained that a sound identification process was vital but problem prone. They identified five basic steps where problems may occur. These five steps are: 1) defining program goals and types of gifted youth to be served; 2) nomination procedures; 3) assessment procedures; 4) individual differentiation; and 5) validation of the identification process.

Each of these steps were discussed in relation to how to avoid and how to recognize potential problems. The discussion and comments were very realistic as to their use within a school system. The authors appeared to be cautious in presenting any material that could be misread or misused.

Goliez (1982) discussed the importance of early identification of gifted underachievers who were often overlooked by regular screening and placement teams who were not cautious enough. She stressed that the underachiever does not perform because of "encountered conflicts during personality development and cognitive abilities development." She suggests that the use of the Estes Attitude Scales: Measures of Attitudes Toward School Subjects could be a beneficial tool in the identification

process. Among the positive aspects for the use of this scale are:

1. It may be administered to groups or individually.

2. It consists of 42 items and takes about 20 minutes to give.

3. It is flexible -- each topic may be given separately.

4. The child marks his responses while the test is read orally.

5. No special training is required to administer and score the items.

Goliez (1982) maintains that early identification is a starting place for program changes, especially for the gifted underachiever. She concludes that the Estes Scales are quick to administer, results are valid and reliable, and the manual provides suggested aids to help change the attitudes and underachievement among the gifted students.

Compton (1982) viewed the gifted underachiever at a higher level, within the middle school setting. At this level the physical development of the child may contribute to underachievement if it is lagging. Contributing basic reasons for the gifted underachiever could stem from one or more of several areas such as brain growth periodizations (plateaus), nutrition, peer influence, burnout, boredom, family relations, inappropriate curriculum, and incorrect identification.

Compton (1982) believed that these middle school students should be treated just as other groups, after all, they are more like their peers than unlike them at this age. She indicates the need for a flexible curriculum, use of adequately prepared teachers and guidance counseling. Compton (1982) concludes with the reminder that this is not the answer to all gifted early adolescent underachievers, but it is a starting place.

Brown and Rogan (1983) also stressed the importance of early identification and placement of K-1 children. They feel that these young children are often placed into the regular program which "frustrates and often destroys their belief that their schools and all the wonderful books found there were going to be exciting and joyful". These children often become "sloppy learners" and "generally lack motivation." Brown and Rogan suggest using a child's actual reading performance as the qualifier for giftedness with this young age group. This would not be foolproof since a number of gifted students do not necessarily begin reading early.

Another major problem confronted in Brown and Rogan's article is the implementation of a gifted program in a school systems are based on chronological age, not mental age (MA) criteria. Since it would be difficult to redo the entire school system, it was suggested that gifted primary children be instructed in small homogenous groups whenever possible. These groups should be guided toward reading more

creatively, critically, and more widely. They feel that this will give the children the opportunity to exercise their mental abilities and remain involved in their own education.

Early implimentation of gifted programs at the primary level is strongly advised. The use of motivated teachers to provided flexible, interesting, and fun classrooms is a must. However, it is agreed that proper identification of students classified as gifted is critical. The major concern yet to be agreed upon is what type of criteria to use and which instrument(s) is preferred for the purpose of identification. A summary of the litrature reviewed on identification of gifted students is given in Table I.

Placement of Gifted Students in a Proper Program

Reading, then seems to be a highly related factor in the identification of gifted students. Gifts and talent may be expressed in a variety of different academic and performance areas, and if reading skill can be an impairment or a contribution, such a relationship needs to be known to predict proper placement.

The Whorton, Karnes, and Currie (1985) study investigated whether apparently properly placed gifted students achieved in reading, math and spelling commensurate with their predicted ability. The subjects were 64 gifted students (30 male, 34 female) in grades 4 through 6.

TABLE I

IDENTIFICATION OF GIFTED STUDENTS

Author	Date	Discussion	Findings
Durr	(1981)	Identification and selection of gifted students and the responsibilities of the classroom instructors	The educational system must challenge and provide the gifted with the best education possible. Acceleration can be beneficial but also contributes to difficulties.
Compton	1982	Discussion of various reasons for underachievement in gifted students	Focus on middle school gifted programs, with various opportunities for the gifted to work independently as well as in small groups.
Goliez	1982	Attitude scales as diagnostic and identification tools	Their obtained reliabilities compare favorably with those obtained by the authors of the Estes Attitude Scales. Identification of gifted underachievers a must.

TABLE I (continued)

Author	Date	Discussion	Findings
Brown and Rogan	1983	The importance of early identification and placement of K-1 children identified as gifted.	A gifted child often knows how to read upon entering kindergarten (there are exceptions however) this reading level should be considered carefully when making placement decisions to help aleviate frustration, boredom and general lack of interest in school.
Birch	1984	Is an informal identification procedure necessary for gifted students.	Research indicates that the "gifted" vary widely in their talents, therefore no one method of selection is better than another.
Brown	1984	The use of the WISC-R in the identification and placement of gifted students.	Supports the need for continued research in the area of identifying a clinically observable pattern for the selection of gifted students.

TABLE I (continued)

Author	Date	Discussion	Findings
Brown and Yakimowski	1984	Analysis of 599 WISC-R protocols to help determine a possible factor pattern of the gifted child.	Gifted children qualitatively and quantitatively mentally process information differently than average children, therefore, selection procedures focusing on IQ only are inappropriate.
Feldhusen, et al	1984	Problems in the nominating process, individual assessment and identification process of the gifted youth.	Selection and identification programs need to be reviewed carefully. Validity and reliability of instruments need to be carefully examined, make revisions which will increase the validity of this process.

They had all taken the WISC-R and were then placed in the gifted program. The IQ's and MA's (mental age scores) were obtained from the WISC-R, the achievement scores were obtained from the Wide Range Achievement Test (WRAT) developed by Jastak and Jastak in 1978.

Expected Achievement Values were computed by subtracting "5" from the mental age obtained for each subject on the WISC-R. The mental age was computed by multiplying the intelligence quotient by chronological age. Actual Achievement Values (WRAT scores) were subtracted from Expected Achievement Values to compute the discrepancies. The findings indicated that discrepancies for females in fourth grade in the area of reading were less than for males. The t-tests showed no statistically significant differences between males and females at any grade level in reading, arithmetic and spelling.

Whorton, Karnes and Currie suggested that these students may have been taught at their grade placement level instead of their instructional level. They suggested additional studies be conducted to determine if their findings are similar for other groups, other grade levels and other parts of the United States. They recommend using a more powerful instrument than the WRAT for future studies.

Bloom, Wagner, Bergman, Altshuler, and Raskin (1981) investigated the relationship between intellectual status and reading skills in developmentally disabled children. They studied 80 children from ages 6.10 years to 10.0 years

of age. All had been administered the WISC-R and the Woodcock Reading Mastery Tests. Analysis of the correlational patterns was consistent with their hypothesis that reading skills involving comprehension correlated more highly with intellectual status than did concrete ones. Bloom and associates stated that "general school success may be predicted reasonably well when IQ's obtained are considered in conjunction with chronological age, educational experience, and motivational factors. Intelligence and general academic progress correlate well. Some academic skills, particularly those that require comprehension, often bear a stronger relationship to intelligence than do those involving more concrete or simple identification process" (Bloom, et. al., pg. 583).

When Durr (1981) investigated the aspects of special class placement, he made several discoveries. First, there had been little recent research in these areas, however, past research indicated positive results among gifted students (Terman, 1947). Second, classroom teachers tended to work more with slower students than advanced students. And third, just because a student had a high IQ and could read well above grade level did not mean that he had mastered all the necessary lower level skills. The skills of outlining, summarizing, drawing inferences, etc. must be taught, instead of merely acquired through exposure.

In their seven-year longitudinal study Butler, Marsh, Sheppard and Sheppard (1985), focused on whether they could

predict reading achievement for the first six years of elementary school, based on measures collected in kindergarten. In 1973, they tested all 392 kindergarten students in the metropolitan area schools of Sydney, Australia. In 1977, 320 of these children were retested and in 1980, 286 were again tested. Attrition can be a factor in longitudinal studies. The authors concluded, however, that the attrition factor had no major effects on the overall results.

> Reading scores collected at any particular point during the primary school years are most directly and strongly related to reading achievement scores from the testing conducted immediately prior to that point in time. Reading achievement in Grade 1 had a large direct effect on reading in Grade 2; Grade 2 reading level had a large direct effect on Grade 3, and so forth. This suggests that the acquisition of reading skills for students in this study followed a smooth, stable developmental pattern in which the acquisition of skills at any particular point in time depends on the mastery of prior skills. Students who were the poorest readers in the early years of primary school remained the poorest readers during all six primary school years, and nothing in their school experience altered this situation (pg. 357).

Kress (1985) studied Vanguard, a K-12 gifted program in the Houston Independent School District aimed at accelerating learning for the gifted. To qualify for the program, students demonstrated giftedness in the areas of general intellectual ability coupled with creative and productive thinking and leadership. Nationally normed achievement and school abilities tests were used for identification. IQ tests were not used. Vanguard was a total day program, the basic district curricula was used as

the basis of instruction, therefore, insuring that all requirements were met for graduation. Creative and critical thinking, logic, research and problem solving skills were taught through their relationship to the content areas. Field trips, speakers and special research projects also helped to stimulate the program.

The elementary and middle school programs focused on the academic areas and skill development. The high school program, however, worked with the student's interests, whether intellectual or community based. The Vanguard program, as viewed by Kress, had the basic goal of helping gifted students to become independent learners. Learners were exposed all day to other gifted students, were encouraged to learn and explore areas of interest, and to expand their abilities to their fullest. According to Vanguard, the program was highly successful.

The Vanguard students were seemingly properly placed, and as stated by Martin (1984) and Cushenberry (1984), once a child is properly provided for, attitude toward school improves. The child is more motivated and challenged. It is necessary, however, to also have an instructor with characteristics essential for teaching a curriculum geared for the gifted (Rupley, 1984).

Rupley (1984) stressed the importance of the teacher as the primary factor associated with students' learning. According to Rupley, teacher-directed instruction of content area materials should be directly under the control of the

teacher in reference to lesson presentation and pacing. He also contends that teachers need to closely monitor the student's progress and provide immediate academic feedback.

The opportunity to learn, as Rupley (1984) viewed it, was commensurate with learning to read and using reading as a means for learning. He developed the following guidelines for teachers of gifted students to help develop this opportunity to learn:

1. Assure that instruction focuses on reading outcomes appropriate to the student's needs;

2. Guard against isolated reading skills becoming ends in themselves rather than a means to enhanced reading comprehension;

3. Provide for application of reading skills in silent reading tasks where students focus on evaluation and interpretation of what they read; and

4. Allow students to have opportunities to apply their reading skills for the purpose of reading enjoyment in a variety of reading materials such as library books, catalogs, newspapers, and magazines (Rupley, pg. 71).

Finally, Rupley (1984) makes several suggestions for the classroom teacher to use to maintain and improve the level of interest and involvement of the student. He feels that the quality of reading instruction in gifted programs could be increased if teachers considered the students' different background knowledge, degree of interest, extent of capabilities, and level of understanding. He also

stressed the need for further research in the area of teacher effectiveness in the instruction of the gifted learner.

As a whole, the classroom designed for gifted students should act as a conductor between the student and the body of knowledge to be learned. The proper placement of students identified as gifted is very improtant. The coupling of students abilities with that of a specially selected environment with an effective teacher is one of the keys to helping develop a gifted child to his/her fullest potential. A summary of the literature reviewed on placement of gifted students in a proper program is given in Table II.

Attitudes and Motivation

Every educator is aware that the easiest child to teach, whether he/she be classified as normal, gifted, or otherwise, is one that is motivated. Motivation can be both positive or negative, thus helping determine the amount of success achieved by the individual.

Martin (1984) investigated the attitudinal resistance to effective teaching that is brought by the gifted child's poor attitude toward reading. His study began by

TABLE II

PLACEMENT OF GIFTED STUDENTS IN APROPER PROGRAM

Author	Date	Discussion	Findings
Terman	1947	A follow up study of now adult gifted students.	Positive results found relating to the intellectual level of the child and their academic success.
Bloom et al.	1981	The relationship between 80 developmentally disabled children's intellectual status and reading skills as measured by the WISC-R Full Scale IQ and the Woodcock Reading Mastery Tests.	Reading skills involving comprehension correlated more highly with intellectual status than did concrete learning patterns
Durr	(1981)	Identification and selection of gifted students and the responsibilities of the classroom instructors	The educational system must challenge and provide the gifted with the best education Acceleration can be beneficial but also contributes to difficulties.
Cushenberry	1984	Does the placement of a gifted child in courses more challenging improve this attitude?	Proper placement in academic levels tends to improve students attitudes towards academics. Boredom and behavior problems often result in gifted children who have been improperly placed.

TABLE II (continued)

Author	Date	Discussion	Findings
Martin	1984	A group of 124 sixth, seventh and eighth graders identified as gifted were administered reading attitude instruments.	19% of the gifted students expressed negative attitudes toward reading. Recommendations for classroom activities were suggested for four areas: selecting reading materials, designing prereading activities, provide challenges, and assess interests and attitudes.
Rupley	1984	The role of the reading teacher and their strategies in the gifted classroom.	Further research in teacher effectiveness in the areas of instruction of the intellectually gifted is much needed. Application of effective teaching practices in reading instruction is vital.
Butler, Marsh, Sheppard, Sheppard	1985	Determine how well a broad, comprehensive battery of tests administered in kindergarten predicted reading achievement in grades 1-6. (392 originally tested 1977 and 286 retested in 1980)	A seven year longitudinal study which suggested that the acquisition of reading skills followed a smooth stable develop- developmental pattern which depended on the mastery of prior skills. Poor reading performance in the early grades led to poor performance in later years. Characteristics measured before the start of school contri- bute little or nothing to the accuracy of reading in grades 1-6.

TABLE II (continued)

Author	Date	Discussion	Findings
Kress	1985	Indepth review of the Vanguard Program for gifted students.	2900 students being served. (60% black/ hispanic, 6% Asian, 34% Anglo, Indian or other) Established to meet the needs of gifted students from a variety of ethnic and economic backgrounds, their broad goal is to help gifted students become independent learners.
Whorton, Karnes and Currie	1985	Discrepancies between ability and achievement of 64 intellectually gifted students in grades 4-6.	T-test showed no statistically significant differences between males and females at any grade level in reading, math, and spelling.

identifying students of different ability levels with negative attitudes toward reading. He then identified students from these same groups who had positive attitudes toward reading. Their likes and dislikes were examined, and suggestions were made for ways of improving attitudes in the classroom.

The instruments implemented to determine the student's attitudes were the Rhody Attitude Assessment and a Leisure Time Activities Questionnaire (LTAQ). Scores of less than 75 on the Rhody were considered as reflecting poor attitudes, and scores above 100 were categorized as reflecting positive attitudes.

Negative attitudes toward reading were indicated in 46 percent of the below average ability group, 29 percent of the average ability group and 19 percent of the gifted group. Positive attitudes were indicated in 20 percent of the average ability students, 49 percent of the gifted students, and none of the below average group.

Results of the LTAQ indicated that instruction received in the schools was not challenging for gifted students. They most often felt that they had better things to do, that reading took to much time, or that reading was not interesting. The average student also indicated that uninteresting material was the major source for disliking reading. The below average students indicated that their dislike of reading was based on the difficulty of words and the inability to understand what was read. None of the

students scoring below 75 on the Rhody scale listed reading on the LTAQ as one of the ten things they liked to do outside of school.

Martin concluded with some basic ideas to help the classroom teacher to improve reading attitudes in all children, not just gifted. First, they should focus on the selection of reading materials, then design pre-reading activities, provide challenge for the students and identify attitudes and interests of the students. "The more interested students are in the materials they read, the more likely that their attitudes will be positive" (Martin, pg. 74).

Pirozzo (1982) reviewed and incorporated into the body of his paper specific studies to effectively support his view that gifted underachievement is a serious problem. The definition most often given for an underachieving student is one whose capacity for school work exceeds the present level of performance. Pirozzo stresses that it is necessary to have accurate IQ scores and academic predictors before determining the underachiever. He pointed out some interesting characteristics of gifted underachievers. For instance, they scored higher on a scale measuring delinquent, antisocial attitudes than did effective achievers. Unfavorable family and cultural factors were often evident. About half of the gifted children who scored in the top five percent of intellectual ability on the individualized IQ tests did not match this ability on the

school achievement tests. And finally, teachers appeared to treat gifted underachievers differently. They often tended to be satisfied with average work when more could be demanded of the gifted child, or they gave more work to the child, but of the same kind rather than more challenging material.

The only solutions discussed by Pirozzo were counseling and educational modification. Personal counseling was deemed often most beneficial but unless maintained the results quickly deteriorated. Homogenious grouping was the most common educational modification. Results of studies conducted over a two year period were conflicting as to the positive or negative effect this grouping had on gifted underachievers.

Delisle (1982) believes that gifted underachievement is a "complex web of learned behaviors." He feels that a child learns to underachieve as well as to feel poorly about him/herself because adults view any underachievement as a problem. Delisle states, however, that gifted underachievement is situation and content specific. He examines the role of education and life as a series of dualities, one constantly playing against the other. Push versus pull; the child feels he should be doing more, but can not judge how good is good. Risk taking versus risk making; bright children fear taking risks due to the uncertainty of the outcome and their fear of attaining less than perfection. Encouragement versus praise; a bright

student often learns to play the game for the rewards. Genuine praise is often more of an encouragement than any reward that can be provided. First best versus first worst; first worst is often an alternate form of gifted underachievement. It is both earned and learned. Acting out in class or social and academic withdrawal are both types of first worst behaviors. Delisle notes that the final duality is prevention versus remediation. The child's boredom results from discrepancies between the child's knowledge and the offerings of the school's curriculum. He sums up his article with the thought that through recognition of these behavior dualities and the use of preventive actions at home and at school, learning to underachieve for the gifted student will become a very hard task to accomplish.

By learning more about the relationships between the child's knowledge and skill strengths, the school would be able to make strides in gifted education. With improved attitudes and motivation, the students should with ease achieve more goals related to their gifted potential. A summary of research on attitudes and motivation is presented in Table III.

TABLE III

ATTITUDES AND MOTIVATION

Author	Date	Discussion	Findings
Delisle	1982	Underachievement of the gifted student. Why it exists and its consequences.	The boredom from the discrepancies between a child's knowledge and the schools programs leads to under-achievement and behavior disorders.
Pirozzo	1982	The cause of underachievement as a combination of personal adjustment problems and limited school programs available.	The family has a major role as to how they perceive their child as gifted and their expectations. The schools role is to provide a variety of activities to stimulate mental growth.

TABLE III (Continued)

Author	Date	Discussion	Findings
Martin	1984	A group of 124 sixth, seventh and eighth graders identified as gifted were administered reading attitude instruments.	19% of the gifted students expressed negative attitudes toward reading. Recommendations for classroom activities were suggested for four areas: selecting reading materials, designing prereading activities, provide challenges, and assess interests and attitudes.
Rupley	1984	The role of the reading teacher and their strategies in the gifted classroom.	Further research in teacher effectiveness in the areas of instruction of the intellectually gifted is much needed. Application of effective teaching practices in reading instruction is vital.

Achievement of Goals

There is general agreement that the overall goal of the gifted program is to help the gifted students realize their potential (Durr, 1981; Kress, 1985). Developing the child's potential in areas such as creativity, higher levels of thinking, processing environmental information, and applying appropriate concepts is usually approached gradually throughout the school years. A gifted child, however, is ready to tackle these at a much earlier age (Pennington, 1984; Caldwell, 1985). To stifle a child in these areas can result in debilitating problems along the way. Therefore, early identification of a child's potential is the key to attaining desired results both in the classroom and in the individual (Brown, 1984; Caldwell, 1985).

Caldwell (1985) studied twenty-four pre-schoolers enrolled in a summer program for gifted pre-schoolers. They ranged in age from two to six years and were divided by age into two groups for instructional activities. They were screened for reading by parent questionnaires or using the Durkin word list. All readers were given selected subtests from the Durrell Analysis of Reading Difficulty. All the children were given the Concept Assessment Scale to estimate their developmental level of functioning.

There were 13 readers and 11 nonreaders. They differed on chronological age, mental age, and Concept Assessment Scale scores. Overall, chronological age appeared to be the

only significant factor of difference. Conclusions based on the group data collected were as follows:

1. For the average early reader, comprehension of what is heard is superior to comprehension of what is read.

2 Oral and silent reading are at approximately equal levels and are about equal to vocabulary.

3. Reading in context is slightly above reading of isolated words, while reading of any kind is superior to phonics skills.

4. Listening comprehension was superior to reading comprehension in every case (pg. 168).

Caldwell further comments that it is most often difficult for teachers to use or adapt the classroom basal reader to the early reading child. She stated that there was no material found indicating any benefits from instructing early readers at the readiness level or below the level at which the child currently reads. Caldwell suggested that to teach early readers on their comprehension level would be a waste of their time and that of their teachers. But, she failed to recognize a previously stated premise that a gifted child is ready at a much earlier age. Comprehension levels change, and a gifted child could be expected, given opportunity with appropriate material, to boost his own comprehension.

Pennington (1984) attempted to synthesize the literature on reading for the gifted and developed a checklist based on identified desirable characteristics for use in evaluating books for gifted readers. She developed and included an evaluation form with the article. The checklist covered the four major areas of reading she felt

were important. The areas investigated were critical and developmental thinking skills, creativity, comprehension, and application. Each area then included individual specific points to be considered. The scale was scored on a "5" (exemplary) to "1" (inappropriate) level.

The body of the paper basically consisted of each of these areas discussed in terms of their importance when used with gifted children. She discussed the use of the checklist by the gifted students themselves to evaluate their reading material and later to allow the teacher to compare evaluations to get an idea of how the material was benefiting the students. By making such an evaluation criteria available to teachers, reading materials may be more directly improved in the classrooms and libraries that are intended for use by the gifted students.

Savage (1983) approaches the problem of the gifted child working in a basal reading program from a different angle. If a teacher is in the situation of trying to teach boring materials to gifted children and fighting the administration over the use of classroom materials, he/she may find a solution in this article. Savage approaches the use of basal stories by providing a reading guide to stimulate interest within the gifted child.

Savage discusses individually the three parts of a reading guide (before, during, and after) as well as their follow-up uses. He concludes by giving ideas for projects that would take two weeks or longer to accomplish.

Mangieri and Isaacs (1983) also found justification for a reading guide when they viewed various reading material available for gifted children. A quick survey of elementary school teachers and administrators (571) from Ohio, South Carolina and Pennsylvania indicated that they were not up on reading material available for gifted children in various specified areas of interest. The article, therefore, proceeded to list material published in the past seven years in the areas of fiction, biography, poetry, anthology, fantasy/science fiction, fiction books, and mystery/ adventure. Each selection listed the title, author(s), approximate grade level and publishing house. The authors of this article summarized with a quote from a pamphlet published by the International Reading Association (1980). "Reading is not only for instruction, it is also for entertainment, enrichment, satisfaction and fulfillment." A summary of the literature on achievemnt of goals is presented in Table IV.

Summary

This review of the literature has shown that there is interest in using a variety of criteria for identifying gifted students and that reading remains a recognized factor in that identification. The use of reading factors as a tool for placement into a gifted program is also recommended. A student's reading ability remains a strong indicator of potential academic success.

TABLE IV

ACHIEVEMENT OF GOAL

Author	Date	Discussion	Findings
International Reading Association Directory	1980-81	Various articles and studies investigating reading.	Current and information printed in book format following each annual meeting.
Durr	(1981)	Identification and selection of gifted students and the responsibilities of the classroom instructors	The educational system must challenge and provide the gifted with the best education possible. Acceleration can be beneficial but also contributes to difficulties.
Margieri and Isaacs	1983	A survey of 571 elementary teachers and administrators indicated the need for various specific areas of interest among gifted students regarding their selection of reading materials.	From the survey, the authors developed a through list of published materials available from the past seven years in six areas of literature.
Savage	1983	The effectiveness of children identified as gifted working in the basal reading program.	Provides the development and use of reading guides for basal readers to increase interest among gifted children in the regular classroom.

TABLE IV (continued)

Author	Date	Discussion	Findings
Brown	1984	The use of WISC-R in the identification and placement of gifted students.	Support the need for continued research in the area of identifying a clinically obsevable pattern for the selection of gifted students.
Pennington	1984	Four Areas of reading and their importance for use with gifted children.	Areas investigated were 1. Critical and developmental thinking skills, creativity, comprehension, and application. A checklist was developed to help teachers with selecting reading material appropriate for gifted children.

TABLE IV (Continued)

Author	Date	Discussion	Findings
Caldwell	1985	Comparison of 24 preschoolers in a summer program for highly gifted were screened for reading ability.	13 readers and 11 nonreaders were compared. Readers showed a wide range of abilities on individual subtests. Few generalizations were supported by the overall scores. Listening comprehension was superior to reading comprehension in every case.
Kress	1985	Indepth review of the Vanguard Program for gifted students.	2900 students being served. (60% black/hispanic, 6% Asian, 34% Anglo, Indian or other) Established to meet the needs of gifted students from a variety of ethnic and economic backgrounds, their broad goal is to help gifted students become independent learners.

Academic acceleration has long been a way to keep gifted students progressing and to prevent learning and attitudinal problems. Attitude toward reading is a key factor in school success. The achievement of goals literature pointed out in the findings that most of what has to be done for the gifted student is to guide them into the proper avenues. Gifted students can realize their potential when guided creatively.

CHAPTER III

METHOD AND PROCEDURE

Introduction

This study has been designed to test the relationship between reading achievement as measured by the CTBS and full scale IQ as measured by the WISC-R for third grade students identified. The following chapter shall define the subjects who participated in the study, the test instruments used, and the method selected to test the level of significance of the information obtained.

Sample and Population

The primary purpose of this study was to investigate the relationship between a gifted student's reading achievement and her/his obtained verbal comprehension, perceptual analysis and IQ as determined by selected test criteria. The subjects were chosen from a cross-section of third grade students who were identified as gifted by the enrolling school district.

Placement in the gifted program was determined by specific school district selected criteria (see Appendix A). This criteria consisted of performance on the Cognitive Skills Index, a group IQ indicator. Scores must

lie in the top three percent nationally for a student to be classified as academically gifted.

All the subjects were third grade students. The first 25 male, and the first 25 female students who returned signed parental consent slips were automatically chosen (see Appendix B).

The following criteria were met by all students included as subjects for the sample population of this study:

1. All students were currently participating in a structured program for the gifted student within the school system.

2. Each subject's primary home language was English.

3. Permission was obtained to conduct additional necessary testing.

4. All had participated in a locally administered achievement test conducted during the month of April, 1988.

Testing Procedure

The following tests were administered by qualified examiners. The tests were administered to the sample population during the Spring of 1988.

1. Wechsler Intelligence Scale for Children-Revised, (WISC-R) David Wechsler, 1974.

2. Comprehensive Tests of Basic Skills, (CTBS) CTB/McGraw-Hill, 1982.

Standardized directions for the administration and scoring of the tests were followed. The WISC-R was administered individually to the subjects. The CTBS is a group administered test.

Test Instruments

The Wechsler Intelligence Scale for Children-Revised (WISC-R) is an individually administered intelligence test developed for ages 6-0 to 16-11 years. It consists of 12 subtests which measure the areas of verbal and performance skills. When combined, these subtests provide three measures of intelligence: verbal, performance, and full scale. The WISC-R takes approximately 50 to 75 minutes to administer the regular battery of ten subtests. The testing site should have good ventilation, good lighting, free from noise and outside interruptions, and furniture of appropriate size for the child (Wechsler, 1984). The directions for administration and scoring have been standardized. Raw scores for each of the twelve subtests are converted to scaled scores. The scaled scores for ten of the subtests are used to obtain the standard scores or IQ scores. The verbal, performance, and full scale IQ distributions
have a mean of 100 and a standard deviation of 15.

The Comprehensive Tests of Basic Skills (CTBS) is a series of norm-referenced, objectives-based tests for kindergarten through twelfth grade. The series is designed

to measure achievement in the basic skills commonly found in state and district curricula. The subject areas measured are reading, spelling, language, mathematics, reference skills, science, and social studies. The objectives measured in each content area and the test levels at which they occur are shown in a chart following the content area description (CTBS Class Management Guide, 1982).

Statistical Analysis

The statistical analysis was performed using facilities at the Oklahoma County Regional Education Service Center, Oklahoma State Department of Education, Oklahoma City, Oklahoma. This study was conducted to investigate whether a significant relationship exists between reading achievement and IQ. The Pearson product-moment correlations were computed between CTBS reading scores and WISC-R full scale IQ. The Pearson correlation coefficient r measures the strength of relationship. The strength of the relationship indicates both the goodness of fit of a linear regression line to the data, and when r was squared, the proportion of variance in one variable was explained by the other.

The formula used is:

$$r = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[N\Sigma X^2 - (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2]}}$$

where
- r = correlation coefficient
- N = number of paired scores
- ΣXY = sum of the product of the paired X and Y scores
- ΣX = sum of the X scores
- ΣY = sum of the Y scores
- ΣX^2 = sum of the squared X scores
- $(\Sigma X)^2$ = square of the sum of the X scores
- ΣY^2 = sum of the squared Y scores
- $(\Sigma Y)^2$ = square of the sum of the Y scores

CHAPTER IV

INTRODUCTION

The purpose of this study was to investigate the relationship between gifted students' reading achievement scores obtained on the Comprehensive Test of Basic Skills (CTBS) and their obtained full scale IQ as measured by the Wechsler Intelligence Scale for Children-Revised (WISC-R). Analysis of the data was based on the degree of relationship between the score a child received on the dependent variable (CTBS) and individual scores obtained from the independent variable (WISC-R, IQ).

A scatter plot of the gifted students WISC-R full scale IQ and their CTBS reading achievement scores was drawn. Visual analysis appeared to indicate a possible positive line of regression (Figure 1). Bar graphs of the full scale IQ scores of the WISC-R (Figure 2) and reading achievement scores of the CTBS (Figure 3) reveal the frequency of occurence for this study.

Results Related to the Hypothesis

When the results from the Pearson product-moment correlation between the student's reading achievement scores on the CTBS and their IQ scores from the WISC-R were

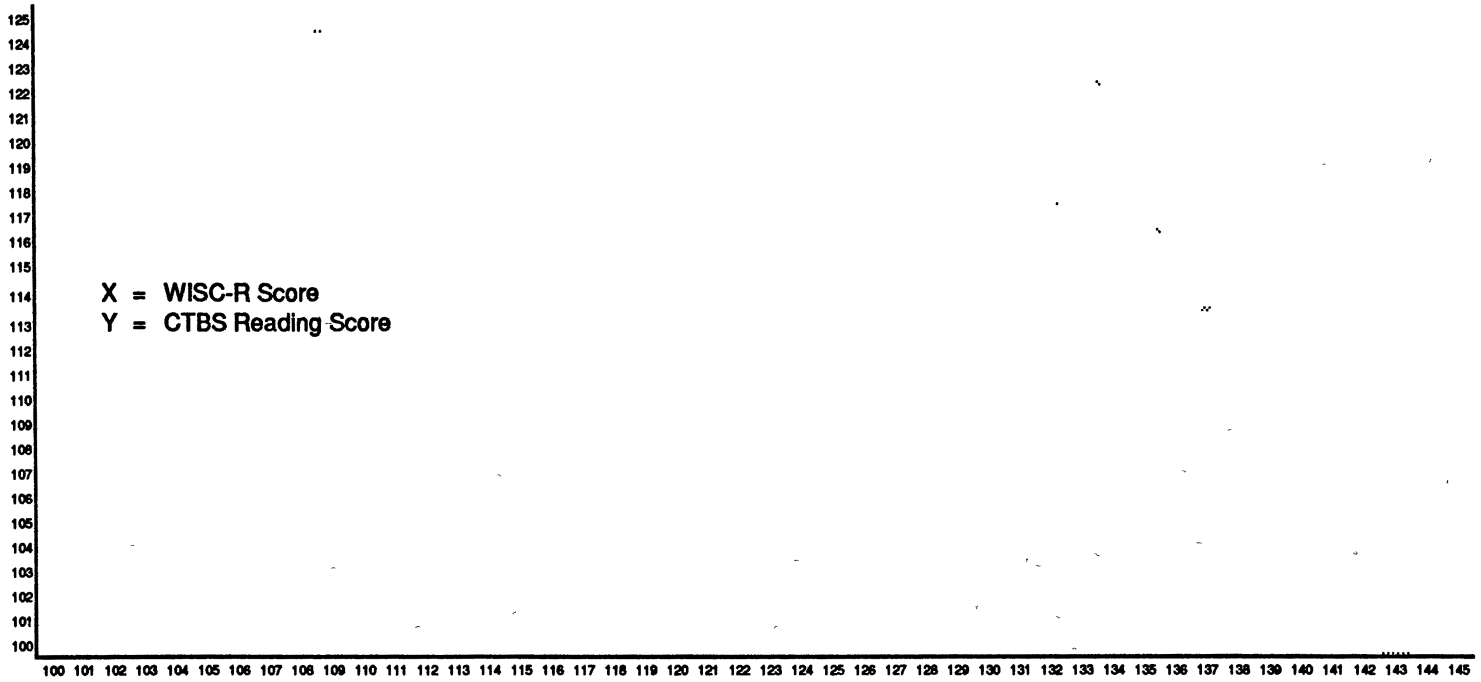

Figure 1. Standard Scores of Gifted Students

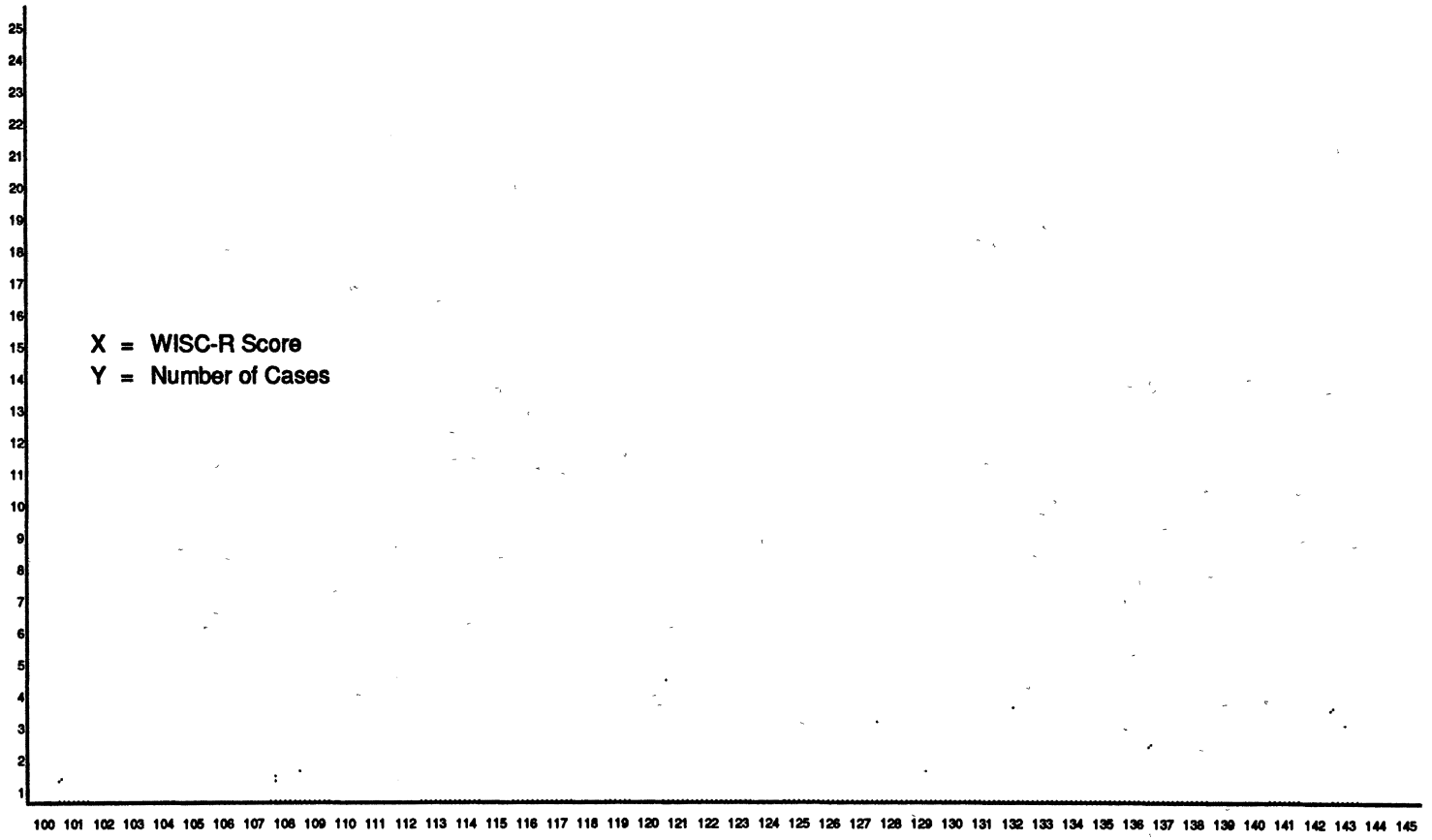

Figure 2. Frequency of WISC-R Full Scale IQ Scores

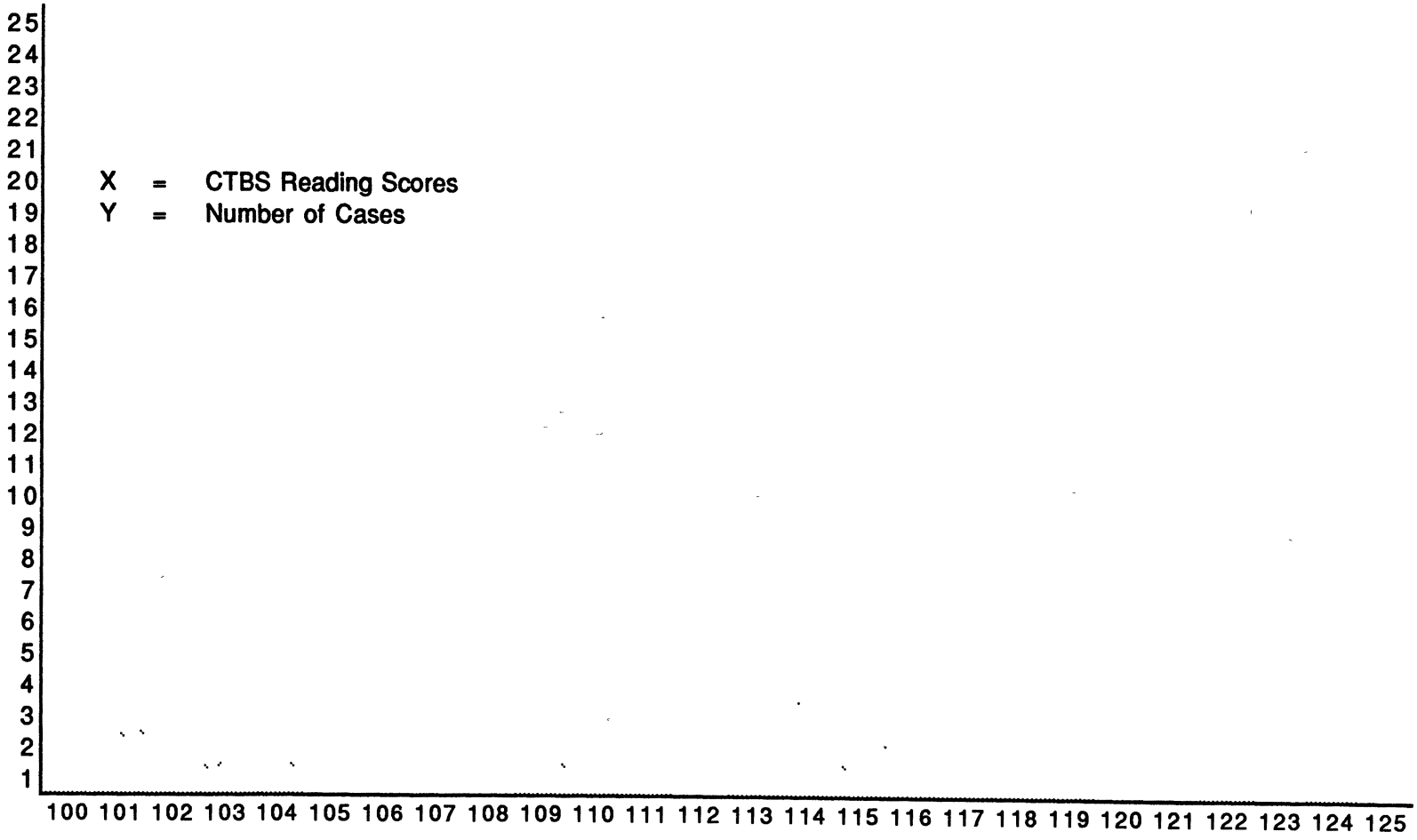

Figure 3. Frequency of CTBS Reading Standard Scores

computed, the mean score obtained of the CTBS reading achievement was 117.52, with a standard deviation of 7.37. the mean score obtained of the full scale IQ scores was 127.16, with a standard deviation of 9.21. The Pearson r obtained for this study was .17 (Raw data is found in Appendix C).

The correlations between the CTBS reading scores and the WISC-R full scale IQ scores indicated there was no significant relationship present in this study. An alpha level of .05 had been selected in the effort to minimize Type I error.

The full scale IQ scores did not show a significant correlation ($p<.05$). None of the levels of significance for individual items met the .05 criteria.

The low level of significance obtained was puzzling. A second examination of the test data was felt necessary to explain these results. A possible explanation was the ceiling level of 124 dictated by the CTBS. A second factor to be considered was the span of eight years between the norming of the two tests.

A second Pearson product-moment correlation was conducted on the data after removing the data of students scoring at the ceiling of 124. This was contaminating the selected data by eliminating the factor of stratified random selection of subjects.

The mean obtained of the full scale IQ scores from the WISC-R, excluding those who scored 124 on the CTBS, was

127.41, and a standard deviation of 10.17, which was similar to the original groups. The mean obtained of the CTBS reading achievement, excluding those scoring 124, was 112.83, with a standard deviation of 6.37. The Pearson product-moment obtained for this sample was .36. (Raw Data is found in Appendix C.)

These results indicate that the ceiling of the CTBS was a definite factor on the results obtained for this study. This did not rule out the possibility that the gap in the norming of the two test instruments could also possibly be a relevant factor.

Summary

This chapter has presented the statistical analysis of the data. The Pearson product-moment correlation was calculated to determine the relationship between reading achievement as measured by the CTBS and full scale IQ as measured by the WISC-R for gifted third grade students.

Two standardized tests, the CTBS and the WISC-R were correlated on specific scores. The Pearson product-moment formula used in the analysis of the data relied on the differences between sample means to determine the correlation. None of the levels of significance for individual items met the .05 criteria, indicating no significant correlation ($p<.05$).

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

This study was examined the relationship of the full scale IQ score and reading achievement of gifted third grade students. These scores were obtained from the results of an individual intelligence test, the WISC-R, and a group achievement test, the CTBS, which were administered to third grade students at the during April 1988.

The sample consisted of 50 third grade students (25 males and 25 females) who had been identified and were participating in the local gifted program. All subjects were administered individually the Wechsler Intelligence Scale for Children-Revised and had taken the Comprehensive Tests of Basic Skills.

The Pearson product-moment correlation was employed to test the hypothesis relating intellectual ability to reading achievement. The scores for each subject for each of the areas investigated were converted to standard scores for ease of comparison.

Conclusions

The results indicate there is no significant correlation between an obtained WISC-R full scale IQ score and the reading achievement score obtained from the CTBS ($P<.05$). Failure to establish a significant relationship between these measures indicate that no single measure of a child's intellectual abilities is any better at determining reading abilities than any other measure.

The findings of this study regarding IQ as a predictor of reading achievement are consistent with Feldhusen et. al. (1984) study. In Feldhusen's study the validity and reliability of instruments used to identify and select students for gifted programs were under investigation. He concluded that there was no one measure better than another at predicting success of students identified as intellectually and academically gifted. These results were supported in similar studies by More et. al. (1978) and Renzulli and Delcourt (1986).

Failure to establish a significant relationship between a gifted child's intellectual ability and his/her reading achievement indicates that no one measure is any better at determining reading abilities than any other . It had been hoped that this research would find an appropriate way to select and place young students in gifted programs. Many factors interrelate to determine an individuals reading abilities. The same combinations in different children do not yield the same results.

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APPENDIXES

APPENDIX A

PUTNAM CITY SCHOOLS POLICY STATEMENT

Putnam City Schools
OFFICE OF CURRICULUM AND INSTRUCTION
5401 N W 40TH STREET
OKLAHOMA CITY OKLAHOMA 73122

OFFICE OF COORDINATORS

405/495-5200

PUTNAM CITY POLICY STATEMENT, GIFTED/TALENTED PROGRAMMING

1987-1988

I. Placement:

Students at the first grade level are administered the Stanford Binet Intelligence Scale. These students come from a broad general referral checklist from teachers, parents, and previously attended schools. Students must score in the top three percent nationally.

Students at grade two to twelve are placed on the Cognitive Skill Index, a group I.Q. indicator. (McGraw-Hill) Students must score in the top three per cent nationally.

Further considerations for placement will include cumulative records, questionnaries, checklists, creative test (Frank Williams), teacher recommendations, motivation and individual intelligence tests (Binet,) (WISC). Talented tests include The Horn Art Aptitude Inventory and The Riverside Aptitude profile.

Final selection is made from a compilation of information profiles by the selection committee.

II. Students from grades one through twelve are served during the 1987-1988 year.

III. Program options will include:

A. Resource Center Enrichment Laboratories-Elementary including the arts

B. Enrichment of Classroom Content-Elementary including the arts

C. Individualized Instruction - All Levels

D. Acceleration - All Levels

E. Guided Research - All Levels

F. Seminars - Junior High Level/High School

G. Monthly Discussion Groups Involving Community Resources.

H. Elective PEAK Enrichment-self-directed study - High School

I. Guided Research - All Levels

J. Mentorships - High School/Junior High

K. After School PEAK Club activities

L. Career Counseling - High School

M. Performing Arts Summer Program. "Counterpoint."

IV. Procedural safeguard to insure due process.

A. Parents' signature is required for those students requiring individual evaluation.

B. Relevant records are confidential. Parents' signature is required for releasing confidential information.

C. Additional evaluation of students is accepted if the testing is done by a licensed psychometrist. The evaluation must be completed within a one year time period. Evaluation must not be made more than one time per year on an individual intelligence measure.

V. Students will be accepted from another school district if the criteria matches that of the Putnam City School District.

VI. A letter stating that a student qualifies for gifted/talented programming is sent to the parents. Attached to the letter is a permission form for participation or non-participation in the program.

VII. A student is removed from the gifted talented program by parent request/signature.

VIII. Re-evaluation is conducted at the request of student, parent or teacher when there is a question about the pupil's failure to benefit from the program.

GIFTED/TALENTED CHILD COUNT

December 15, 1987

Name of County OKLAHOMA County Number 56

District Name PUTNAM CITY SCHOOL DISTRICT District Number 1-1

Name of Superintendent MR. RALPH DOWNS Phone Number (405)495-52

Name of Person(s) Responsible for Gifted/Talented Programming:

Elementary: Dr. Shirley Vickers Position: Coordinator Gifted/Talented Phone Number (405)495-52 x2

Secondary: Dr. Shirley Vickers Position: Coordinator Gifted/Talented Phone Number (405)495-52 x2

1. Number of Gifted/Talented students served:

   a. 1703 Total Number

   b. 1498 Number of students scoring in the top 3% on nationally standardized tests

2. Number of identified, but not served, gifted/talented students:

   120

   Reason for not serving:

   Programs are voluntary

3. Grade steps involved in your Gifted/Talented Program:
   (Please list numbers in proper spaces)

   Elementary School

   A. 641 Number of gifted/talented students served at this level

   Middle or Junior High School

   B. 534 Number of gifted/talented students served at this level

   High School

   C. 528 Number of gifted/talented students served at this level

   Total: 1703 (Should match total given in 1,a.)

4.

a. 856 Number of girls in the Gifted/Talented Program

b. 847 Number of boys in the Gifted/Talented Program

c. 3 known Number of handicapped in the Gifted/Talented Program

d. 1650 Number of Caucasian students served

e. 14 known Number of Native American (American Indian) students served

f. 17 Number of Oriental students served

g. 8 Number of Black students served

h. 7 Number of Hispanic students served

i. 4 Others served

5. Multi-criteria Identification Procedures Utilized:
(Please check those that reflect your program)

A. X Nationally Standardized Achievement Test

1. X Group Test 2. ____ Indv. Test

B. X Nationally Standardized Intelligence Test

1. X Group Test 2. X Indv. Test

C. X Creativity Tests

1. ____ Group Test 2. X Indv. Test

D. X Visual and Performing Arts Test

1. X Group Test 2. X Indv. Test

E. X Leadership Tests (Scales)

1. X Group Test 2. ____ Indv. Test

F. X Referrals

1. X Parent 2. X Self

3. X Teacher 3. X Other

I certify that the data represented is an accurate and unduplicated count of gifted/talented children receiving gifted educational programs and related services.

(Authorized Signature)

Dr. Harold Greenwood

(Please type name above)

Please return this Child Count form by December 15 to:

Dorothy Dodd, Administrator
Gifted/Talented Section
State Department of Education
2500 N. Lincoln Blvd.
Oklahoma City, Oklahoma 73105

APPENDIX B

LETTER OF REQUEST

Putnam City Schools
OFFICE OF CURRICULUM AND INSTRUCTION
5401 N W 40TH STREET
OKLAHOMA CITY OKLAHOMA 73122

OFFICE OF COORDINATORS

February 18, 1988

Dear Third Grade P.E.A.K. Parents,

Enclosed is a request to involve your child in a study being conducted at Oklahoma State University.

I am interested in finding new data concerning our gifted students and would appreciate your participation.

Please call me at 495-5200 x222 if you have any questions.

Thank you.

Sincerely,

Dr. Shirley Vickers

Dr. Shirley Vickers
Coordinator Gifted/Talented

PARENT PERMISSION FOR TESTING

I give permission for my child, _____, to be administered the Wechsler Intelligence Scale for Children-Revised (WISC-R). The purpose of this testing will be to collect data necessary to answer questions about the gifted child and their reading levels.

Results shall remain confidential. A completed copy of the dissertation will be provided to the school district.

PARENT SIGNATURE:_____

ADDRESS:_____

PHONE NUMBER:_____

HOME BASE SHOOL:_____

Please return permission form to: Dr. Shirley Vickers.

February 18, 1988

Dear Parents:

I am currently enrolled at Oklahoma State University in Stillwater as a doctoral student in the area of Reading Education. I have chosen the topic of the gifted child and their reading levels as the area to investigate for my dissertation.

I have selected the third grade gifted students of the Putnam City school district as possible candidates to collect data to answer questions pertaining to my dissertation topic. Plans are to collect and complete research as soon as possible for a projected publication date of June 4.

I do appreciate your time and consideration of this opportunity for your child to participate in such a study. All results shall remain totally confidential. A completed copy of the report will be provided to the school district.

Please sign and return the enclosed permission form by March 1, 1988. Testing shall be scheduled at your discretion. Please call me collect between 6:30 p.m. and 7:00 a.m. if you have any questions.

Sincerely,

Clara Martin

Clara Martin
PHONE: (405) 743-3070

APPENDIX C

RAW DATA

	CORRELATION FOR ALL SUBJECTS			
X	Z FOR X	Y	Z FOR Y	ZX*ZY
134	0.742283653210244145	111	-0.885174587	-0.657050626192991254
123	-0.45144736803430053	113	-0.613648640	0.277030063467155786
143	1.71897267059214434	124	0.8797440680	1.51225601017230922
137	1.06784665900421088	124	0.8797440680	0.939431763894919366
141	1.50193066672949985	114	-0.477885666	-0.7177511378869945
129	0.199678643553632928	117	-0.070596746	-0.014096662521558812
109	-1.97074139507281194	124	0.8797440680	-1.7337480520662333
130	0.308199645484955171	124	0.8797440680	0.271136809904631199
114	-1.42813638541620072	104	-1.835515401	2.6213663306394365
135	0.850804655141566389	124	0.8797440680	0.748490348469122747
134	0.742283653210244145	122	0.6082181211	0.451470368917883562
138	1.17636766093553312	117	-0.070596746	-0.0830477292030964796
121	-0.66848937189694502	124	0.8797440680	-0.588099559511453587
128	0.091157641622310684	124	0.8797440680	0.0801953944788345797
127	-0.01736336030901155	124	0.8797440680	-0.0152753132340637299
133	0.633762651278921902	124	0.8797440680	0.557548933043326128
129	0.199678643553632928	124	0.8797440680	0.175666102191732889
128	0.091157641622310684	109	-1.156700534	-0.10544209274068991
125	-0.23440536417165604	119	0.2009292007	-0.0470988824716964996
130	0.308199645484955171	124	0.8797440680	0.271136809904631199
143	1.71897267059214434	119	0.2009292007	0.345391804792440996
125	-0.23440536417165604	103	-1.971278375	0.462078225330427819
132	0.525241649347599658	117	-0.070596746	-0.0370803514154047012
126	-0.12588436224033380	124	0.8797440680	-0.110746020946962039
132	0.525241649347599658	124	0.8797440680	0.462078225330427818
128	0.091157641622310684	124	0.8797440680	0.0801953944788345797
122	-0.55996836996562277	117	-0.070596746	0.0395319448974149295
127	-0.01736336030901155	114	-0.477885666	0.00829770101603461868
121	-0.66848937189694502	110	-1.020937561	0.682485908568847373
135	0.850804655141566389	116	-0.206359719	-0.175571810134732496
127	-0.01736336030901155	114	-0.477885666	0.00829770101603461868
128	0.091157641622310684	124	0.8797440680	0.0801953944788345797
126	-0.12588436224033380	116	-0.206359719	0.0259774617036083796
108	-2.07926239700413419	101	-2.242804322	4.6633786900542059
114	-1.42813638541620072	117	-0.070596746	0.100821781947670634
128	0.091157641622310684	117	-0.070596746	-0.0064354328902768495
143	1.71897267059214434	100	-2.378567295	-4.08869217565105827
137	1.06784665900421088	113	-0.613648640	-0.655282650124233878
133	0.633762651278921902	124	0.8797440680	0.557548933043326128
132	0.525241649347599658	117	-0.070596746	-0.0370803514154047012
117	-1.10257337962223399	124	0.8797440680	-0.969982390363046826
121	-0.66848937189694502	124	0.8797440680	-0.588099559511453587
121	-0.66848937189694502	124	0.8797440680	-0.588099559511453587
128	0.091157641622310684	102	-2.107041348	-0.192072920109801339
113	-1.53665738734752297	118	0.0651662272	-0.100138164534417783
136	0.959325657072888632	119	0.2009292007	0.192756537523054192
116	-1.21109438155355624	124	0.8797440680	-1.06545309807594514
131	0.416720647416277415	115	-0.342122693	-0.142569590184594809
119	-0.88553137575958950	124	0.8797440680	-0.779040974937250207
101	-2.83890941052338989	101	-2.242804322	6.367118294980064
mean of X, all subjects		mean of Y, all subjects		
127.16		117.52		r of XY, all subjects
				0.173141384257355009
SD of X, all subjects		SD of Y, all subjects		
9.214806187		7.3658		

	CORRELATION FOR SUBJECTS WITHOUT 124 Y SCORE			
X	Z FOR X	Y	Z FOR Y	ZX*ZY
134	0.647496690148426608	111	-0.286654945	-0.185608128356148193
123	-0.43392448345025448	113	0.0270429193	-0.011734548214891674
141	1.33567380062031457	114	0.1838918517	0.245619528544795138
129	0.155941611239935204	117	0.6544386489	0.102054217369388604
114	-1.31872362548553901	104	-1.384597472	1.825901398223714448
134	0.647496690148426608	122	1.4386833108	0.931542681938404137
138	1.04074075327521973	117	0.6544386489	0.681100972443528293
128	0.057630595458236923	109	-0.600352810	-0.034598689934609 4675
125	-0.23730245188685791	119	0.9681365136	-0.229741168458217609
143	1.53229583218371114	119	0.9681365136	1.4834715449016337
125	-0.23730245188685791	103	-1.541446404	0.365789011232357646
132	0.450874658585030047	117	0.6544386489	0.295069802394101834
122	-0.53223549923195276	117	0.6544386489	-0.348315481021608932
127	-0.04068042032346135	114	0.1838918517	-0.007480797823699344 33
121	-0.63054651501365104	110	-0.443503877	0.279649824527113725
135	0.745807705930124889	116	0.4975897165	0.371106244979594924
127	-0.04068042032346135	114	0.1838918517	-0.007480797823699344 33
126	-0.13899143610515963	116	0.4975897165	-0.069160709291651 7814
108	-1.90858972017572869	101	-1.855144269	3.54070928170773697
114	-1.31872362548553901	117	0.6544386489	-0.863023707754177544
128	0.057630595458236923	117	0.6544386489	0.037715689027817 5276
143	1.53229583218371114	100	-2.011993202	-3.08296879722574155
137	0.942429737493521451	113	0.0270429193	0.025486051409171 7855
132	0.450874658585030047	117	0.6544386489	0.295069802394101834
128	0.057630595458236923	102	-1.698295337	-0.097837715267330881
113	-1.41703464126723729	118	0.8112875812	-1.14962260673026689
136	0.844118721711823 17	119	0.9681365136	0.817222156372802637
131	0.352563642803331766	115	0.3407407841	0.120132812109995353
101	-2.59676683064761666	101	-1.855144269	4.81737710441940767
mean of X, Y<124		mean of Y, Y<124		
127.4137931		112.83		r for XY, Y<124
				0.362407460115272263
SD of X, Y<124		SD of Y, Y<124		
10.17180010		6.3756		

VITA

Clara Connell Martin

Candidate for the Degree of

Doctor of Education

Thesis: THE RELATIONSHIP BETWEEN INTELLECTUAL FACTORS AND READING ACHIEVEMENT IN THIRD GRADE GIFTED STUDENTS

Major Field: Curriculum and Instruction

Biographical:

Personal Data: Born at Grantie City, Illinois, October 26, 1953, the daughter of William A. and Martha A. Connell.

Education: Attended elementary and secondary schools in Licking, Missouri; graduated from Licking High School in 1972; received the Bachelor of Science degree from Southwest Missouri State University in 1976 with a double major in Elementary (K-8) and Special Education (Mental Retardation); received the Master of Education degree in 1981 with a major in Reading; received certification of Learning Disabilities in 1980 and School Psychological Examiner (Psychometrist) in 1982; completed requirements for the Doctor of Education degree in December, 1990.

Professional Experience: Taught special education (EMH) grades kindergarten through twelve in Spokane, Missouri, 1976-1977; taught Special Education (LD/EMH) grades seven through twelve in Clever, Missouri, 1977-1982; served as a Psychometrist for the Oklahoma State Department of Edcuation, 1982-1983, served as graduate assistant and reading clinician , Department of Curriculum and Instruction, Oklahoma State University, Stillwater, Oklahoma, 1983-1985; currently employed as a Psychomotrist for the Oklahoma State Department of Education, 1985 to present.