AN ABSTRACT OF THE DISSERTATION OF

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Abstract approved:

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There is little current research in reading instruction for gifted learners. Children who are identified as gifted in reading are often left to their own devices or provided inadequate reading/literacy instruction (Ries et al., 2004). The purpose of this project was to determine how parents of gifted children and gifted students perceived the children's learning-to-read process, their early school reading experiences, their current school reading experiences, and changes parents and children would like to made to current reading instruction methods. Participants were recruited from various programs including summer enrichment programs for gifted youth ages 8 to 14 years old. Two hundred twenty-two parent-child dyads responded to a mixed-methods internet survey. Results from the quantitative data showed that the children in this study were exhibiting pre-reading and reading skills much younger than previously reported in the literature. In this study, the mean age at which children were able to associate letter sound with letter shape was 23.8 months of age. This skill is not typically achieved until children are between 36 and 48 months of age. Additionally, although 63% of participants

responded their child was reading picture books independently between 24 and 60 months of age, 21.9 % of participants responded their child was reading picture books independently before the child was 24 months old and 7.8% of participants responded their child was reading picture books independently before the child's first birthday, a skill typical of late kindergarten or early first grade, between the ages of 66 and 72 months. Qualitative results revealed that many parent participants did not feel their children were getting challenged enough in reading at school. Some parents chose to remove their children from the formal school setting and home school as a result. Parents also advocated for their children, trying to ensure appropriate reading instruction, but not always successfully. Student participants indicated they prefer to be in classes with like-ability peers, choose their own books and projects, and have more time in school for reading books they select. Implications for future research indicate a need to examine university teacher preparation courses in reading methods, how to change current reading curriculum delivery to gifted learners, and improvement in parent/teacher relationships to create more collaborative partnerships in educating gifted learners.

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Giving Voice: A Mixed Methods Study of Gifted Students' and their Parents' Perceptions of Their Reading Experiences

by Kathy D. Austin

A DISSERTATION

Submitted to

Oregon State University

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Doctor of Philosophy

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Doctor of Philosophy dissertation of Kathy D. Austin presented on April 29, 2011		
APPROVED:		
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I understand that my dissertation will become part of the permanent collection of Oregon State University Libraries. My signature below authorizes release of my dissertation to any reader upon request.		
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DEDICATION

This project is dedicated to Treyvor Thomas Austin. His infinite patience, his quiet suffering, and his boundless love gave me the courage to attempt this work with the hope that it might someday benefit other brilliant learners like him.

Chapter I - Introduction

William Goldman's character, Billy, in *The Princess Bride*, demonstrated what typically happens to a talented or gifted (TAG) reader (Goldman, 2003). He describes Billy's reluctance to read until a spark ignites Billy's passion for adventure stories. Billy becomes a voracious reader who can't seem to get enough. Billy is 10 years old in the story, and the students in this study were reading fluently much earlier (Goldman, 2003), but the passion to read exemplifies a gifted reader (Gross, 1999).

One other commonality Billy had with the students in this study is caring adults who read to them, thus inspiring them to become readers themselves. Billy didn't want to read until he was stricken with pneumonia. His father came into his room each night while he was recuperating and read the good parts of S. Morgenstern's *The Princess Bride* (Goldman, 2003). That one experience with Billy's father gave Billy the passion for adventure stories. When Billy recovered, he pestered his teacher constantly for more books to read (Goldman, 2003). Parents and grandparents played an important role in the reading development of the students in this study as well. Some parents read to their children several times a day. Some children refused to admit they could read themselves for fear that their parents would stop. Eventually, all but a handful of students who participated in this study became voracious readers.

A more typical example of a gifted reader in this study might be Treyvor. At 20 months old, Treyvor was reading picture books with help, knew his letters by sight and sound, and could sound out a majority of the words in books he encountered by himself. By age three, he was reading picture books and easy chapter books independently with

fluency and comprehension. When Treyvor began Kindergarten, he was reading independently with fluency and comprehension far beyond his age mates. He was considerably bored and disgusted with the whole school experience and declared that he would have none of it!

Interest in a study on the reading process sprang out of the researcher's experiences as a reading specialist, and interest in how reading happens for gifted children had been percolating for many years. From the researcher's personal experience of watching her own son pick out word and sound patterns and begin to manipulate language with sophistication far beyond his peers, she began to understand the need for instruction designed for children like him. However, there is little support for TAG students in some districts or for the teachers who are responsible for their learning. It is from this experience that the research questions for this study sprang.

The purpose of this dissertation was to learn how gifted students perceive how they learned to read, their early school reading experiences, their current school reading experiences, and what they might recommend to classroom teachers. The researcher was also interested in parents' perceptions of how their gifted children learned to read and found very little written pertaining to their perspective.

Data collected from the Oregon Department of Education in 2008 shows that there are over 38,000 K-12 students identified as being gifted in reading (Annual Report Card, 2008). However there are few Oregon university classes that teach teachers how to address the unique academic, social and emotional needs of gifted students and only one class that addresses the specific issues of reading instruction for gifted learners

exclusively. Tragically, teachers receive almost no training in methods pertaining to teaching gifted children. It is frequently assumed that gifted students can get by on their own with little or no instruction. Like Miss Roginski in *The Princess Bride* who lamented she just didn't know how to harness Billy's vivid imagination (Goldman, 2003), some teachers are at a loss as to how to reach their gifted learners.

Research suggests that gifted readers do not make the same progress in reading as do their typically achieving students (Reis et al., 2004). Reis, et al. imply that if a TAG student is reading at a fourth grade level at the beginning of the first grade, it is expected that this same student should be reading at a fifth grade level at the beginning of the second grade. This was found not to be the case. They found TAG students tend to lag behind their typically achieving peers by as much as two years in reading growth.

Studies have also shown that gifted readers are often not taught specific reading skills (Reis, et al., 2004), nor are they offered instruction in further developing their reading skills (Wood, 2008).

Gifted students' voices have been absent from these concerns, with only a handful of researchers considering their attitudes toward reading (McKenna & Kear, 1990, Ries et al., 2007). It was the researcher's intention to understand what students' perceived experiences have been in acquiring reading skills and in their current reading contexts, as well as their recommendations for making reading instruction more meaningful for themselves in the classroom. Parents' perceptions of the same phenomena were also sought.

In another study, researchers sought to provide classroom teachers with practical methods for teaching reading skills and strategies to gifted learners by providing enrichment strategies to be used with the gifted students. They used a treatment group/control group model to study the effects of their enrichment strategies in the treatment group. They also sought to discover whether or not the gifted students in the enriched curriculum classrooms developed a better attitude toward reading (Reis et al., 2007). This study did not seek to utilize a treatment group/control group model and was interested primarily in perceptions of the students and their parents themselves rather than providing practical strategies for teachers at this time. This study focused on the voices of the students and parents which have been seriously under-represented.

While there have been a number of studies pertaining to gifted children, few have focused on gifted children as readers or teaching reading/literacy skills to gifted children (Reis, et al, 2004, Wood, 2008). There are few studies that address gifted children's perceptions pertaining to reading (Halsted, 2009, Piirto, 1999). There is room for research on attitudes and perceptions of gifted learners with respect to their own reading and learning development, and attitudes and perceptions of parents of gifted children with respect to their child's learning and school experiences.

There was only one course offered at any Oregon university that was specifically designed to address instruction for gifted readers. This course was developed and taught by the researcher winter term 2010. What happens to those 38,000 gifted readers whose school reading experiences have been described as "damaging to the point of abuse" (parent, this study, 2011)? Teachers cannot properly address the academic needs of

gifted learners unless they are trained to do so. This study was needed to show how gifted children and their parents perceive how the gifted students come into reading, thereby paving the way to develop strategies that will enable teachers to best meet their needs.

Gifted children are considered a vulnerable student population yet they receive almost no care (Gross, 1999). School districts are reluctant to spend the money necessary to provide services for these children even though research and laws in Oregon and other states suggest otherwise. It was the voices and experiences of the parents and students in this study who shaped the outcome, and whose voices inform the implications for further research and study.

The researcher has been an advocate for gifted children for many years, and it was from this desire to continue that advocacy on a different level doctoral studies were pursued. Never one to sit idly by and watch an injustice without taking some sort of action, the words of Eleanor Roosevelt guided this research. She was once quoted as saying, "I could not, at any age, be content to take my place by the fireside and simply look on. Life was meant to be lived. Curiosity must be kept alive. One must never, for whatever reason, turn his back on life" (Eleanor Roosevelt as cited in Partnow, 1978). This quote sums up the researcher's world view and perhaps explains why something must be done to ensure the voice of gifted children is heard.

This study was designed from a Social Constructivist perspective. It's important to construct meaning from prior knowledge and use that scaffolding to construct new meanings that are relevant to each individual in his or her own concept of truth. It was

from this perspective that the research instrument was designed and the data analyzed that emerged from the study.

Summary

This study sought to find answers to the questions: how do gifted children perceive how they come to the reading process; what were their early school reading experiences, what are their current school reading experiences; what would they like to see happen differently in terms of reading instruction for them in school. This study also sought to understand how the parents of gifted children perceived their child's early reading experiences; their child's early school reading experiences; their child's current school reading experiences; and their own perceptions of what might be done differently in school for their children. The intended audience for this study was researchers, teachers, reading instructors, and pre-service educators who may need to learn more about the education of talented and gifted (TAG) learners, particularly in reading development.

It was the researcher's intention to approach this study from a social constructivist perspective. Life experiences may influence how the researcher came to view the study methodology and data analysis, and she is aware of any personal bias that may color the results of this study. The researcher has endeavored to be an objective observer and let the participants' voices speak for themselves.

Chapter II - Literature Review

Introduction

In this chapter, discussion includes an overview of what giftedness is, the history of gifted education in the United States, and relevant reading theories. Topics also include the reading acquisition progression of typical readers as well as precocious readers, research on giftedness and reading, and perceptions parents of gifted children and gifted children have pertaining to how the gifted child came into the reading process.

Giftedness

One current myth pertaining to intellectually gifted students is that they can pick up what they need to learn on their own. This idea is particularly prevalent with respect to reading instruction. The connection between reading and giftedness is tentative and rarely researched. Only a few studies have been completed that address this connection. However, all children benefit from explicit reading instruction that is appropriate for their level and rate of learning (Wood, 2008).

Definitions of giftedness.

Experts in the field of gifted education have tried to identify what it means to be gifted, but the problem is few people can agree on a single definition (Cohen, in press; Gagne, 2004; Coleman, 2004; Gallagher & Gallagher, 1994). Giftedness may be defined as the result of a high score on a standardized achievement test or outstanding ability in a creative endeavor such as art, drama or dance or in a specific subject area such as science or mathematics. If a person possesses the former, then she is usually considered talented.

However if this same person were an outstanding achiever in academic pursuits or had intellectual brilliance, she would then be considered gifted in some circles (Piirto, 1999).

Another point of confusion comes when the terms talented and gifted are used interchangeably. Feldman (as cited in Gagne, 2004) "associated talent with potential and giftedness with achievement" (Gagne, 2004, p. 12). In an essay in the New South Wales Gifted and Talented newsletter, Gagne describes his model for giftedness and proposed that "giftedness designated the possession and use of untrained and spontaneously expressed natural abilities" (Gagne, 2007, p. 1) while "the term talent designated the superior mastery of systematically developed abilities and knowledge" (Gagne, 2007, p. 1).

Gallagher and Gallagher. Gallagher and Gallagher (1994) define giftedness as one of two paradigms, either involving a child's potential or a child's production of exceptional work, while Clark (1997) and Piirto (1999) include environmental factors that contribute to a genetic predisposition for giftedness.

Piirto. In Piirto's (1990) "Piirto Pyramid of Talent Development," she prefers to use the term talented rather than gifted (p. 30). According to Piirto's Pyramid, five aspects go into the development of a talented individual. The foundation on which talent development is built is genetics, with talented individuals given to certain built-in predispositions. The broad base or the second aspect of the pyramid is the emotional aspect. She ascribes certain personality traits that lend themselves to talent development such as creativity, curiosity, drive, intuition and a tolerance for ambiguity. The third level is the cognitive aspect. One must possess a minimum degree of intelligence. There

needs to be a minimum IQ threshold of about 120 in order for a gifted person to realize talents. The fourth level is the specific talent itself whether it is academics, art, dance, drama, peace-making, and so on. The fifth level is the environmental aspect. She calls the environmental factors "suns." The environmental suns are "chance, home, school, gender, community and culture" (Piirto, 1999, p. 30). Piirto says that the degree to which these environmental factors are allowed to shine or are occluded play into whether or not or how much an individual's talent is developed (Piirto, 1999).

Renzulli. Renzulli's (1978) graphic definition of giftedness involves three interconnecting rings. One ring represents above average ability, another represents creativity and the third ring represents task commitment. These traits are existent in everyone to a greater or lesser degree. Where these three rings overlap is what Renzulli defines as giftedness. According to Renzulli, giftedness occurs when there is a combination of all three traits (Renzulli, 1978), so giftedness is a behavior recognized at specific times.

Clark. Clark (1997) calls on the field of neuroscience to aid in her definition of giftedness. According to neuroscience research, "high levels of intelligence are the result of advanced and accelerated growth of major functions of the brain" (Clark, 1997, p. 27). How some people are able to develop their intelligence while others are not is a matter of appropriate environmental influences. All children are born with the same number of brain cells, and the exposure of a variety of stimuli, adequate love and care and allowing the child to not only develop interests but excel in what interests them interact as influences to giftedness. Clark also suggests if a child is not provided with opportunities

to develop and to expand those areas in which he shows giftedness, that ability will atrophy (Clark, 1997).

Federal definition. Can a gifted mathematician be considered talented? Can a talented artist be considered gifted? The terms talented and gifted are sometimes used interchangeably but they are different. In 1971, then commissioner of the U.S. Office of Education, Sidney Marland, delivered his report to Congress in which he defined talent and giftedness (Piirto, 1999). This report translated into PL 91-230 which states:

Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance.

These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order

Children capable of high performance include those with demonstrated achievement and/or potential ability in and of the following areas, singly or in combination:

- 1. general intellectual ability
- 2. specific academic aptitude
- 3. creative or productive thinking

to realize their contribution to self and society.

- 4. leadership ability
- 5. visual and performing arts ability
- 6. psychomotor ability (PL 91-230 in Piirto, 1999, p. 6)

This definition was revised in 1988 with the passage of the "Jacob K. Javits Gifted and Talented Students Education Act which was incorporated into the Elementary and Secondary Education Act, Title IV" (Piirto, 1999, p. 7). Under the Javits act, gifted and talented students were defined as:

Children or youth who give evidence of high performance capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who require services or activities not ordinarily provided by the school in order to fully develop such capabilities. (Piirto, 1999, p. 7)

The Federal definition was revised again in 1993 by an advisory panel to the Javits Act administrators. This new definition eliminated the word gifted and utilized the terms "outstanding talent" and "exceptional talent" (Piirto, 1999, p. 7). This definition "proposed that . . . talent . . . occurs in all groups across all cultures and is not necessarily seen in test scores, but in a person's 'high performance capability' in the intellectual, in the creative, and in the artistic realms." (Piirto, 1999, p. 7). Though experts in the field of gifted education have attempted to modify the definition of giftedness and talent to be more inclusive, "the majority of the states are using some form of the 1978 federal definition. Three states, (Colorado, Delaware, and Hawaii) are using a form of the 1972 Marland" (Stephens & Karnes, 2000, p. 236). These definitions are essentially measurement approaches that determine who is gifted or not gifted in a given state.

History of gifted education.

In the mid-1800's as Francis Galton began to look at the "mental peculiarities" of different races, he noticed that the trait of mental ability seemed to run in families

(Galton, 1869, p.v). Galton decided to look at the eminence of prominent men in England and Wales throughout history. He was interested in noting if these prominent men had risen to high places based on hard work and determination or by means of their intellectual ability. He drew the conclusion that a man will rise to the level of his natural ability, and no amount of hard work will alter that natural ability.

He used the analogy of the athlete to make his point. He stated that a weight lifter will be able to lift a certain amount of weight, and with training and conditioning can increase his powers of weightlifting. However, this can only be accomplished up to a certain point. The weightlifter will never be able to lift more weight than he was genetically engineered to lift. By the same token, a man of certain intellectual ability will only rise as far as his natural intellect dictates. Only those men of superior intellectual ability will rise to eminence. By virtue of the results of his study, he affirmed his theory that genius was indeed hereditary (Galton, 1869).

Efforts to educate gifted children in the United States began in St. Louis,
Missouri in 1868 when then superintendent of public schools, William Torrey Harris,
implemented the first systematic form of instruction for gifted students
(http://www.nagc.org). However, Lewis Terman is considered the father of gifted
education. Terman published the Stanford-Binet IQ test in 1916 which paved the way for
standardized testing to be used in identifying gifted learners (http://www.nagc.org). In
1921, he began the Terman Study which was the longest running longitudinal study of
gifted children and culminated in 1972. The original study began with 1500 young

California children to study the effects of high intelligence on academic success and future productivity (Schneider, 2000).

Terman may be considered the father of gifted education, but Leta Stetter Hollingworth is the mother of gifted education. In 1918, Hollingworth taught one of the first courses in gifted education at Teachers College, Columbia University (Klein, 2002). She went on to study gifted children in New York City, and her work informed gifted education for decades. She conducted a study of New York City gifted and highly gifted students over a three year period from 1922 to 1925. The students were segregated into two classes, one with 25 gifted children with median IQ's of 146 and one with 25 gifted children with median IQ's of 165 (Klein, 2002). The study was designed to study the effects of enrichment programs for gifted children on their academic achievement. The children were not accelerated, as Hollingworth considered the classes already accelerated (Klein, 2002).

The same teachers taught the students all three years. Students were taught the regular district prescribed curriculum with enrichment opportunities added to enhance the students' learning (Klein, 2002). She concluded there was remarkable achievement in her students (Klein, 2002).

Hollingworth was one of the first researchers in gifted education to recognize the difference between gifted and highly gifted children and that the regular classroom curriculum was insufficient for their academic success (Klein, 2002). She sought to find answers to the following questions:

- 1. Can American public schools identify and recognize gifted children and make provisions for their education?
- 2. Should the problem of appropriate work be solved by acceleration at a rapid rate through school grades?
- 3. Should the problem be solved by enrichment of the prescribed curriculum without acceleration and without segregation?
- 4. Should gifted children be segregated in special school or classes, and be educated by combining enrichment with a moderate degree of acceleration? (Klein, 2002, p. 120).

Her research questions for the New York Public Schools study remain relevant today (Klein, 2002).

Four paradigms in gifted education.

According to Cohen (1998), as the needs of the country changed, so did the efforts to adequately education gifted children. Beginning with Terman and others, giftedness was defined as having a high IQ. The launch of Sputnik in the 1950's spurred academia to find ways to provide opportunities for gifted students to excel.

In the mid-1970's the focus changed from measurement to needs assessment with the passage of PL 94-142. This law is currently known as Individuals with Disabilities Education Act or IDEA (www2.ed.gov/policy/speced/guid/idea/). This law originally included gifted learners who were viewed at that time as students with special needs.

The gifted education movement changed and so did the focus for providing services for gifted learners. By about 1990, the educational paradigm shifted again, and researchers became interested in the asynchronous development of Talented and Gifted (TAG) students. The Columbus group defined giftedness as

asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm. This asynchrony increases with higher intellectual capacity. The uniqueness of the gifted renders them particularly vulnerable and requires modifications in parenting, teaching and counseling in order for them to develop optimally (Columbus Group as cited in Kearney, 1996, p. 4)

The focus was on why a six year old first grader can read independently at a fifth grade level but couldn't draw a horse at that same level. A concurrent paradigm for TAG education now being espoused is talent development. This paradigm is focused on channeling a gifted student's natural abilities and talents toward areas of strength (Cohen, 1998).

Characteristics of gifted learners.

Characteristics of gifted learners can be divided into two categories; cognitive and affective. These are both important in the teaching of reading for gifted students.

Cognitive learning characteristics. Cognitive Learning Characteristics are the characteristics most associated with gifted learners and primarily deal with how a gifted student learns and processes information. Some of these include, having a sophisticated sense of humor, early verbal skills, advanced problem solving ability, unusually varied

interests, curiosity, accelerated pace of thought process and early reading skills (Clark, 1997; Renzulli, 1978; Gallagher & Gallagher, 1994; Seney, 2002; Winebrenner, 2000).

Again, it is appropriate to call upon Clark's work on brain research. She describes giftedness as a complex interweaving of the genetic make-up of an individual and the environment in which the individual is brought up and/or schooled. We know that gifted individuals process information more quickly than do their typically achieving peers (Clark, 1997; Gallagher & Gallagher; 1994, Piirto, 1999). "The process of learning can be enhanced by increasing the strength and the speed of transmission of impulses from one brain cell to another" (Clark, 1997, p.50). The speed and complexity with which neurological information is transmitted can be increased when students are placed in supportive school and home environments in which the adults understand the unique nature of giftedness (Clark, 1997). The environment, then, "changes these children at the cellular level, and they become biologically different from their typically achieving peers" (Clark, 1997, p. 51). The implication here is that if gifted children are not taught to their rate and levels of learning in supportive environments, they lose brain function and actually regress in ability (Clark, 1997).

Another explanation of cognitive characteristics of gifted children is Piaget's theory of equilibration. "Piaget's equilibration theory states that when individuals encounter something new or foreign to their structures for understanding, an imbalance is created that requires restoring the balance or re-equilibration" (Cohen & Kim, 1999, p. 202). This imbalance is disequilibrium, and learning takes place when we move from equilibrium to disequilibrium back to equilibrium. Individuals must assimilate new

information into their knowing schema and accommodate that new information in order to create new schemes of knowing (Cohen & Kim, 1999). An example of this might be when a very young child encounters a rubber ball for the first time. The child may already have the knowing scheme for throwing and assimilates the new object into her knowing structure and accommodates that new information to create a new knowing structure. The ball becomes one more object to be thrown! When the child is introduced to the ball again, she discovers that the ball will bounce. She must assimilate this new knowledge of balls into her knowing scheme of balls and accommodate the new information to create yet another new knowing scheme (Cohen & Kim, 1999).

There are three types of equilibration, simple equilibration, reciprocal equilibration and equilibration of the totalities (Cohen & Kim, 1999). In simple equilibration, a child learns to associate an object with its function, for example, balls are for throwing. Reciprocal equilibration happens when a child connects one scheme to another and relates new uses for a familiar object. For example, "when a child cuts out a snowflake from folded paper and invents the idea of using it like a stencil to color a design through the holes" (Cohen & Kim, 1999, p. 204). In equilibration of the totalities, children integrate their understandings at a broad structural level and create rules for how things work. For example, they learn that if nothing is added or taken away, an object, no matter how it is changed, is still that same. For example, if you show a child a ball of clay and roll it into a snake, the child comprehends that it is still the same amount of clay. A child who has fully reach this stage of development will also understand that if the ball of clay is broken up into several smaller balls of clay, it is still the same amount of clay.

Then, when all the smaller balls are molded back into the original ball, the child understands that it is still the same as it was to begin with (Cohen & Kim, 1999).

Piaget's theory of equilibration bears on gifted children in that they are more equilibrated and less equilibrated than their typically achieving peers at the same time (Cohen & Kim, 1999). They are able to move rapidly through the stages of equilibration in terms of problem solving and pattern seeking, yet they may lack basic skills. They can both anticipate more, but are simultaneously less equilibrated, especially when things do not fit their learning structures. A four-year old child may be able to verbally express himself in a linguistically sophisticated manor, but lack the fine motor skills to be able to write his thoughts on paper (Cohen & Kim, 1999).

Affective characteristics. These are the characteristics of gifted learners that deal primarily with the social and emotional parts of the gifted learner's personality, such as having a heightened sense of empathy for others.

In 1964, Kazameriz Dabrowski, a Polish child psychologist, identified five personality intensities within the scope of his theory of positive disintegration (TPD) pertaining to gifted learners (Ackerman, 2009). Dabrowski based his work on gifted individuals under extreme stress (Tieso, 2007). Having lived through two world wars, he was curious as why some people rise to great levels of compassion under times of extreme crisis while others do not (Ackerman, 2009). He postulated that people are endowed with genetic traits that determine the level of moral development an individual may achieve under ideal circumstances. He called this genetic predisposition a person's development potential or DP (Tieso, 2007).

The personality intensities that are the defining characteristics of DP are described as overexcitabilities (OE), or super sensitivities include psychomotor, sensual, intellectual, imaginational and emotional (Ackerman, 2009; Tieso, 2007). Gifted learners who exhibit overexcitabilities may demonstrate characteristics of one or all of them, and the tendencies for any of them overlap. This study will focus primarily on students who demonstrate intellectual and imaginational OE's because of their propensity to develop early verbal and literacy skills (Ackerman, 2009).

People who demonstrate a psychomotor OE tend to be full of pent up energy. This is manifested in classroom behavior by the child who speaks out impulsively, has trouble sitting still, has sudden, violent bursts of anger such as kicking a chair, and exhibits compulsive behaviors such as nail biting (Ackerman, 2009). These children often are incorrectly diagnosed with attention deficit hyperactivity disorder (ADHA). Although it is possible for both conditions to occur simultaneously, they don't always. There has been work that differentiates between psychological disorders and OEs but that is outside the scope of this paper (Ackerman, 2009).

People who demonstrate characteristics of sensual OE are those who tend toward a desire for pleasurable things that appeal to the senses. They might enjoy having their fingernails polished to match an article of clothing, enjoy fine foods, and be particularly moved by pieces of music or art they find beautiful. Overindulgence of food and alcohol tends to be another characteristic of sensual OE. While people with sensual OE tend toward a love of things pleasurable, they are also greatly disturbed by things they find annoying. This is demonstrated in children who need the tags taken off of their clothing,

who are irritated by the buzzing of fluorescent lights, who become physically ill from the smell of certain perfumes and have trouble concentrating in a classroom full of sniffling children (Ackerman, 2009).

People who demonstrate an intellectual OE are what we typically recognize as the gifted learner. These are the students who thirst for knowledge and are always asking probing questions. They are deeply intellectual, can focus for long periods of time, and are concerned with the deeper understanding of concepts and ideas rather than just brushing the surface of a topic of interest (Ackerman, 2009). For example, a four year old who is interested in NASCAR is not content to just watch the odd race on a Sunday afternoon. That child will want to know the sponsor and number of each car, the make and model of all the cars; who drives which car; how long the driver has been racing and at what level he has raced the longest; who the crew chief is for each driver and what each driver's standing is with respect to races won for each driver for each year they have been racing. This same child will then go on to learn the history of auto racing, the history of automobiles in general, who invented the automobile and the names and characteristics of all the automobiles ever made. These children can be, by turns, both delightful to have in class and exhausting. Teachers who don't understand the unique characteristics of gifted learners sometimes find these children to be disrespectful because they continually challenge the status quo, asking questions and probing for deeper answers (Ackerman, 2009).

The person who exhibits an imaginational OE will be the one who is frequently distracted and has a vivid imagination. They typically understand metaphor and are more

likely to have imaginary friends. These people are able to express themselves in writing using vivid imagery. They love music, drama and poetry and are capable of detailed visualization. They are also given to vivid dreams and nightmares (Ackerman, 2009). Ackerman noted that these children will be the avid readers who are able to escape into a story; the avid writers who will have a profound sense of metaphor and an advanced understanding of the complexities of language and the creative poets (Ackerman, 2009).

Persons who exhibit emotional OE will demonstrate the widest array of characteristics. "These people have the ability to form strong attachments to people, places and things, have deep relationships, are deeply concerned with the well being and feelings of others, are concerned with death and have a strong sense of compassion and responsibility" (Ackerman, 2009, p. 90). Emotional OE may show up in the classroom in children who are shy, have difficulty adjusting to new situations, form strong attachments to people, places or things and feel injustice keenly (Ackerman, 2009). For example, a child may feel a strong need to sit in the same seat on the school bus every day and feel extremely wronged if someone else gets to the seat before he does, use the same pencil every day in every class and share a locker with the same partner every year.

Learning preferences. Because gifted children learn differently from their typically achieving age mates, it is important to be mindful of the classroom environment in which gifted students are expected to thrive. There is no one-size-fits-all description for a gifted child as is the case in the general population. What drives and motivates one gifted child will turn off another. The optimum classroom environment will be one that is student centered allowing the learners to explore in depth areas of expertise and

interest, be flexible in terms of scheduling allowing the learner to work on a project as long as they need to without constant interruptions, be accepting of the students' quirks and idiosyncrasies, and allow students the opportunity to work collaboratively with their peers on projects of interest (Maker & Nelson, 1995). Gifted students tend to be more interested in the learning rather than an arbitrary grade assigned at the end of a unit, and an open, flexible learning environment is more conducive to the deep, intense learning that benefits gifted students. The teacher's role in such a classroom ought to be one of facilitator rather than supreme authority figure and a learning partner, a fellow explorer if you will, rather than the dispenser of all knowledge (Maker & Nelson, 1995).

The design and placement of furniture in the physical classroom will look different in a classroom for gifted students. Instead of ordered rows of desks with narrow aisles and very little opportunity for movement, desks might be arranged in clusters suitable for allowing collaborative learning. Learning centers might be placed around the room offering students the opportunity to get up and move from one center to the next as they find subjects of interest to them (Maker & Nelson, 1995).

Summary.

The idea of adequately educating gifted learners has been on the American conscience since 1868, and various movements in education informed the practice of providing services for TAG students. Lewis Terman is considered the father of gifted education in the United States, and Leta Hollingworth is considered the mother. It is difficult to identify TAG learners since researchers in the field disagree on any one definition. However, what is agreed upon is that TAG learners do exhibit specific

characteristics as evidenced in research by Dabrowski (as cited in Ackerman, 2009), Clark (1997), Renzulli (1978) and Gallagher and Gallagher (1994), among others.

Piaget's theory of equilibration might be used to explain a way in which gifted children develop cognitively more rapidly but also differently than their typically achieving peers and are both more equilibrated and less so (Cohen & Kim, 1999). Maker & Nelson's (1995) suggestions for positive learning environments for gifted children involved open, flexible classrooms that foster the gifted students' unique learning style and encourages deeper probing of subjects of interest to the child.

Reading

While most reading research does not speak specifically to gifted learners, some of it does inform the practice of teaching to them. It is necessary to understand the progression of literacy skills acquisition of the typical reader to be able to fully understand the reading behaviors of gifted learners. This section discusses current reading theories relevant to gifted readers, the progression of typical reading development, comprehension instruction, reading metacognition and precocious readers. With the exception of typical reading development, all topics are discussed with respect to gifted readers.

Relevance Theory.

Watson (2001) suggests that meta-language, knowing about language, does not cause literacy but may be enhanced by literacy. The implication is that meta-language is more highly developed "in a literate cultural tradition" (Watson, 2001, p. 45). A literate culture is one in which there is frequent, rich oral discourse accompanied by a variety of

interactions with written text. Literate cultural tradition may refer to a society as a whole or to particular individuals. Children who grow up in families with a rich literate cultural tradition will have been read to by their parents early and often; they will have been exposed to a wide variety of pictures books when they are very young; they will have been given the opportunity to experiment with spoken language; they will have had frequent exposure to spoken language from a variety of venues from their parents to television to children's books on CD and they will be more likely to make abstractions and paradigm shifts in their interactions with written texts when they are reading independently (Watson, 2001).

Watson's (2001) paper on early literacy acquisition talks about the transference of language understanding from oral transmission to written language. Because in written language one cannot see facial expressions or interpret body language to assist with understanding meaning, a reader of written text must make explicit inferences that are relevant to the reader. The context is then chosen by the reader rather than given by the speaker. This is Watson's relevance theory:

Thinking of what the writer could have meant by particular expressions would lead to an enumeration of all the possible meanings that might be encoded by that expression. This is a process of reflection on what the writer could possibly have meant, and a process of abstraction of possible meanings form a linguistic expression. The more complex and extended the text, the more reflection and abstraction would be necessary and the higher the abstract representational demand would be on the reader. (Watson, 2001, p.48).

Parents and teachers who provide ample opportunities for children to share in story reading and telling and show and tell are helping them to acquire the skills necessary to interpret written text so that they might be successful in a literate culture outside the confines of family. They are also helping them to learn to make the necessary abstractions of meaning applicable to a particular text within the rubric of relevancy to the children.

Lexical Restructuring Theory.

Another way to look at the progression of literacy skills acquisition and the transition from oral language transmission to written text decoding might be to examine epilinguistic processing versus metalinguistic processing. Epilinguistic processing is the automatic response one has to spoken language without any particular conscious awareness (Goswami, 2001). For example, when one speaks a language fluently and has a thorough understanding of the syntactical mechanisms of that language, one can respond to a spoken utterance without being consciously aware of the cogitation required to process the understanding of the utterance and formulate an appropriate reply. More to the point, when the researcher's son asks her to make him breakfast, she is fluent enough in English to know without consciously thinking about it that what he is asking her is not to work some magic hocus-pocus that will render him bacon, but he is asking her to prepare food he likes in such a way that will be appetizing to him and serve it to him.

Goswami suggests that for a child to be able to process on an epilinguistic level, she must have a thorough phonological awareness of the language in which she is being addressed. Phonology is defined in this paper as large sound segments such as syllables,

onsets (the first letter or sound in a word) and rimes (rhyming words such as cat, hat, sat, etc.) (Goswami, 2001). Types of phonological awareness tasks might involve tapping out syllables, finding the word in a group of words that doesn't rhyme and finding blends such as the "sl" in "slime."

Metalinguistic processing then can be defined as making epilinguistic knowledge explicit so that the reader can exhibit skills in phonological awareness (Goswami, 2001). Metalinguistics is knowing about language. Lexical restructuring occurs when a child begins to expand his vocabulary through written or spoken language creating a deeper phonological awareness. As the child is exposed to more lexical items or words and sounds, the child restructures her internal lexicon to accommodate the new knowledge. "The degree to which [vocabulary acquisition] takes place will determine how easily the child will become phonologically aware and will learn to read and write" (Goswami, 2001).

Goswami also points out that the rapidity with which a child gains phonological awareness and later phonemic awareness depends largely on the child's environment. If the child is exposed to an environment that is rich in spoken language as well as age appropriate books, the child will more rapidly and efficiently restructure his own lexicon to fit the new phonological patterns (Goswami, 2001). Additionally, Pearson and Duke (2002) agree that the more experiences children have with written text and are guided in their reading by experienced readers, the more likely their phonological awareness is to develop.

Typical reading development.

All babies are born with the remarkable ability to comprehend language, and the rapidity with which their brains build neurological pathways to further their success in language development is astonishing (Nevills & Wolfe, 2009). Studies show that the more young children are exposed to a language rich environment, the greater will be their vocabulary when they do being to vocalize using words, and the sooner they will be able to recognize and segment phonemes (Nevills & Wolfe, 2009; Pearson & Duke, 2002; Goswami, 2001; Bardige, 2009; Knopf & Brown, 2009; and Lundberg, 2006). The more babies are talked to and read to as infants, the greater their likelihood for early reading development (Lundberg, 2006).

Even though children can understand oral language in very sophisticated ways as young infants, there is a typical progression through which their reading skills develop (Nevills & Wolfe, 2009). "We now know that there is considerable activity relevant to language acquisition that takes place long before the child utters her/his first word" Lungberg, 2006, p. 68).

From birth to about two months old, typically babies are listening and learning about the world around them (Nevills & Wolfe, 2009). By about two to three months old they begin to vocalize or babble (Nevills & Wolfe, 2009; Bardige, 2009). Around 10 months, the typical baby understands about 40 words, and by about a year old, the typical child is speaking a few words, though about a quarter of them are difficult to understand (Nevills & Wolfe, 2009; Lundberg, 2006). They are also beginning to enjoy word play such as rhyming games, have favorite stories and like to sing songs (Nevills & Wolfe,

2009; Bardige, 2009). By 18 months old, the typical child is learning a new word about every two hours (Nevills & Wolfe, 2009; Bardige, 2009). By this time, the child is beginning to utter simple phrases and will play with language, trying out plurals and experimenting with past tense (Nevills & Wolfe, 2009).

By the time the child is between 2 and 3 years old, they have a vocabulary of about 100-200 words (Nevills & Wolfe, 2009). Nevills and Wolfe (2009) point out that children who grow up in environments that are rich in oral language experiences, such as parents reading to their children every day and talking to them frequently, have richer vocabularies and are better prepared to receive formal reading instruction than children who do not.

By age 3, a typical child has a 900 word vocabulary, by age 5 that vocabulary has expanded to between 3,000 and 8,000 words. The typical 6 year old has a vocabulary of about 13,000 words (Nevills & Wolfe, 2009). Preschool age children "enjoy listening to and talking about the stories that are read to them . . . and probably understand that print carries a message" (Nevills & Wolfe, 2009, p. 62). "The preschool years (between the ages of 3 years and 5 years) are a prime time for developing the emergent reader's literacy skills" (Nevills & Wolfe, 2009, p. 62) through play and every day activities such as going to the park or to the grocery store rather than through formal literacy instruction (Nevills & Wolfe, 2009).

Children at this age become relentless questioners and constant pretenders.

Children make predictions, construct explanations formulate hypotheses and try out words, ideas and roles. Pretending is more than just playing – it is an

essential way of making sense of the world, practicing new words and concepts, expressing ideas and feelings, dealing with emotional upsets, and making friends (Bardige, 2009, p. 122).

Phonemic and phonological awareness. Nevills and Wolfe (2009) define phonemic awareness as "the understanding that spoken language is made up of identifiable units of sounds" (p. 65). Phonemic awareness begins typically at the preschool stage. Phonological awareness also begins typically at this stage and includes "phonemic awareness, counting the number of phonemes in a word, blending phonemes, counting syllables and distinguishing parts of syllables called onsets and rimes" (Nevills & Wolfe, 2009, p. 65). The hierarchy of print awareness begins at this stage; print interest – stimulating and worthy of the child's attention, print function – printed words provide meaning, print conventions – how the printed words are organized, print form – "print units, letters, and words have names and are organized in specific ways" (Nevills & Wolfe, 2009, p. 68) and print part-to-whole relationships, "the child sees that letters can be combined to make words and words are grouped together to create larger meaningful units" (Nevills & Wolfe, 2009, p. 68). Typical 4 to 5 year olds can substitute words in rhyming patterns, pronounce simple words and have a rapidly developing vocabulary.

Beginning reading. Children typically begin to read between the ages of 5 and 6 years old. At this stage, the child's brain has developed to the point where s/he can be taught attention skills concentration skills, has a more developed long-tem memory which is necessary for reading comprehension and organization skills, such as keeping the

child's learning area organized. (Nevills & Wolfe, 2009). By mid-first grade, the typical child reads simple books and can read about 100 common words, understands the letter shape/sound connection and that letters can be combined to form words. They like all kinds of stories and enjoy talking about them. The typical second grader remembers the letter names and sounds and recognizes both upper and lower case letters. By third grade, the typical child is reading fluently and independently and is able to comprehend and attend for more complex story lines. They are also able to utilize decoding skills to sound out unfamiliar words (Nevills & Wolfe, 2009).

Liberman and Shankweiler (1976) found that almost one half of the children in their study could segment words by syllable at age four and one half, but none could segment by phoneme at age four and one half. At age five, one fifth of the children in the study could segment words by phoneme and one half could successfully segment words by syllable. By age six, 70% were successful at segmenting word by phoneme and 90% were successful at segmenting words by syllable. They found that there is a significant correlation between phoneme segmentation and early reading ability. Lundberg (2006) also found that there is a strong correlation between phonemic awareness and reading acquisition.

Table 2.1 describes the age of typical language development as derived from the literature.

Table 2.1

Age of Typical Language/Reading Development

Age of typical language/Reading skill development	Language/Reading Skill	Researcher
Birth to 2 months	Building neurological pathways in the brain to make way for oral language skills and later reading skills.	Nevills & Wolfe (2009)
2-3 months	Babbling/vocalizing begins.	Nevills & Wolfe (2009) Bardige (2009)
6 months – 1 year	First word utterances.	Nevills & Wolfe (2009) Bardige (2009)
18 months	Rapid vocabulary acquisition.	Nevills & Wolfe (2009) Bardige (2009)
2-3 years	Utter short phrases and plays with plurals and tenses.	Nevills & Wolfe (2009) Bardige (2009) Lundberg (2006)
4 years	Recognized letter shape and name. Can segment words by syllable.	Nevills & Wolfe (2009) Liberman & Shankweiler (1976) Lundberg (2006)
5 years	Recognizes letter shape/sound correlation. Begins to read simple words.	Nevills & Wolfe (2009) Liberman & Shankweiler (1976) Lundberg (2006) Knopf & Brown (2009)
6 years	Begins to read simple books with pictures.	Nevills & Wolfe (2009) Liberman & Shankweiler (1976) Lundberg (2006)

Comprehension instruction. As children become familiar with the phonological structures of written text, they must also be taught what those structures mean. Pearson and Duke (2002) looked at six treatment/control group studies to support their claim that reading comprehension improves with direct, intentional instruction. In each of the studies they examined, teachers in the treatment groups intentionally taught comprehension strategies and story elements such as predicting, making inferences, retelling, questioning and making associations. The children in the treatment groups consistently scored higher on standardized comprehension tests and made greater gains in comprehension than the control groups. This may not be remarkable in and of itself, and it seems reasonable that one would expect these results. What is remarkable about each of the six studies is that they were done with very young children. All of the children in the studies were between five to seven years old.

The implication from Pearson and Duke's (2002) research is that very young children can be taught to improve their comprehension skills through direct instruction. While the goal was to improve the comprehension skills of typically achieving and struggling readers, application of the strategies mentioned in the studies might be applicable to young gifted students with perhaps even greater results.

Reading metacognition. Metacognition means "awareness of knowing" (Cohen, 2004, p. 135).

It refers to the awareness of one's thinking processes. It includes the ability to discern what one knows and doesn't know, and to deal with the knowledge about one's cognitive processes and products. In short, metacognition is the state where

a person is conscious of his or her thinking and problem solving while thinking (Cohen, 2004, p. 135).

Reading metacognition, then, is knowing how to decipher the symbolic code that is written language and translate that code in such a way as to make it meaningful for the reader. Children come into this process by being able to understand the meaning of symbols and how they relate to one another. Whitehurst and Lonigan (2001) suggest that literacy skills happen within the context of two paradigms; outside-in and inside-out thinking. Outside-in thinking is those concepts that occur outside of the text that help a child build upon their understanding of the printed word. For example, vocabulary, word order and words themselves. Inside-out thinking is the student's ability to process the printed word in order to understand meaning (Whitehurst & Lonigan, 2001).

In order to gain a deeper understanding of how the reading process happens, one may look at metalinguistics. Whereas metacognition is knowing about knowing, metalinguistics is knowing about language. Metalinguistic ability is the ability to think about and to manipulate the structural components of language to make meaning for the reader (Nagy & Scott, 2000). In order to do so, a child must have a phonemic awareness – the ability to understand and manipulate individual sound components of language, and morphemic awareness – the ability to understand and make meaning of the various word parts of language (Nagy & Scott, 2000). Nagy and Scott suggest that it is more important for an emergent reader's vocabulary awareness to have a more competent morphemic awareness than a phonemic awareness. They also suggest that there is significant metalinguistic ability growth for children between the fourth and eighth grades (Nagy & Scott,

2000). While their research doesn't specifically speak to gifted learners, it does suggest that providing reading instruction with higher level thinking skills built into the curriculum for gifted learners in the middle school grades might benefit them.

Summary.

Literacy skills acquisition may develop along two processes, outside-in thinking and inside-out thinking. Some research suggests that it is more important for emergent readers to understand word forms rather than word sounds in the early stages of the reading process. Also, a great deal of metalinguistic growth occurs between the fourth and eighth grades. Relevance theory and lexical restructuring theory relate literacy skills acquisition and metalinguistic awareness to relevance to the reader's language and cultural experiences and the reader's phonological awareness in restructuring language segments to fit emerging language understanding. Phonological awareness is more likely to develop quickly in children who are exposed to a culturally literate environment. Comprehension improves with direct, explicit instruction.

Typically achieving children's brain development is such that they begin to acquire language skills long before they use words and understand print conventions before they learn to read. However, the typically achieving child learns to read between Kindergarten and first grade.

Giftedness and Reading

In general preparation of teachers, texts rarely discuss teaching reading for gifted students. Additionally, few researchers in the field of gifted education have pursued studies in reading and gifted learners. Dr. Sally Reis at the University of Connecticut is

currently the primary researcher in this area. As a product of her research, she designed the Schoolwide Enrichment Model for Reading (SEM-R). In this model, researchers trained treatment group teachers to use specific enrichment activities in their reading classes which are attended by mixed ability readers including some gifted learners in conjunction with a district wide adopted curriculum. The goal was to enhance the reading growth for all learners (Reis et al., 2007).

Van Tassle-Baska has done research in Language Arts curriculum for gifted learners, but she doesn't specifically provide research on gifted learners and their reading ability, though she does discuss some strategies for teaching literature (Van Tassle-Baska, 1992).

Reading and gifted learners.

The researcher spent the better part of two years searching for relevant research that spoke to the issue of reading instruction for gifted learners. Google Scholar was used for preliminary searches using the following descriptors: gifted and reading; talented and reading; gifted and talented and reading instruction; talented and reading instruction; gifted and talented and reading instruction; accelerated reading instruction; student perceptions and reading; parent perceptions and reading; research on reading and gifted; research on reading and talented; case study and reading and gifted and talented; case study and reading and; talented; qualitative study and reading and gifted and talented; qualitative study and reading and gifted; qualitative study and reading and gifted; quantitative study and reading and gifted and talented; quantitative study and reading and gifted and talented; quantitative study and reading and gifted and talented; quantitative study and reading and gifted; quantitative study and

reading and talented; reading instruction for gifted learners; research on gifted and perceptions of reading; research on teaching teachers to teach talented and gifted students; research on gifted and asynchronous development; research on reading and gifted, precocious readers, typically developing readers and asynchronous development. On a search using any of these descriptors, there were typically 65,000 hits. Out of all of those hits, 300 articles and books were found that were relevant to this study. Of those 300 articles and books, only about 73 of them turned out to be real, relevant research. The references listed in the bibliography were those I deemed useful. The EBSCOHost databases used included Education Research Complete, Education Resources Information Center (ERIC), Professional Development Collection and Psychology and Behavioral Sciences Collection to refine the literature search using those same descriptors once a more specific idea as to what was relevant to the study was determined. From the results of the literature search, such topics as practitionersuggested approaches to teaching reading to gifted learners; reading achievement and the gifted; and meta-cognition and gifted readers are discussed in the following sections.

Practitioner-suggested approaches.

This section begins with a discussion from experts in gifted education who provided classroom applications and other aspects for teaching of reading to this population. This will be followed with a discussion of authors whose work focuses on practical strategies for teaching reading and literature to gifted students.

Gifted readers typically have "acquired and exhibit an extensive vocabulary" and "use words easily and creatively" (Bonds & Bonds, 1983, p. 4). Gifted readers tend to

learn to read on their own having discovered phonics elements and are able to use context and picture cues to derive meaning from what is read (Witty, 1971). They do not need many repetitions to learn new words or word concepts, thus instruction for them can be accelerated (Bonds & Bonds, 1983; Brown & Rogan, 1983). They benefit from individualized, differentiated instruction (Bonds & Bonds, 1983; Brown & Rogan, 1983). They read widely from a variety of genres and should be taught to read creatively and critically (Brown & Rogan, 1983; Seney, 2002).

Requiring a gifted student who is already reading well above one's peers to submit to repetitious basal reading activities is not only boring for the student, but can be detrimental to the student's reading progress (Brown & Rogan, 1983; Levande, 1999; Mangieri & Isaacs, 1983; Reis, et al., 2004; Savage, 1983; Wood, 2008). Brown and Rogan (1983) go on to point out that gifted children need to be taught at their own rate and level of learning.

Reading programs for primary level gifted children must be designed to catch their interest early and to challenge their abilities. They must be different from that offered to average children. Their programs cannot be just extra amounts of the same work done by the rest of the class. Such practices only penalize the gifted for being different. If one dose of the regular curriculum is inappropriate for these unique learners, then extra doses are that much more inappropriate (Brown & Rogan, 1983, P. 6)

Clark (1997) advocates for student-centered activities in teaching beginning reading skills to pre-school readers and the use of reading guides to help focus creative

and in-depth reading activities for older students. Levande advocates that "reading programs for the gifted should take into account the individual characteristics of the children, capitalize on the gifts they possess and expand and challenge their abilities" (Levande, 1993, p. 148).

Gallagher and Gallagher (1994) also stress that involving gifted students in their own learning is key to their successful and effective reading. While Gallagher and Gallagher do not speak specifically to the teaching of reading to gifted students, they do discuss what an engaging language arts curriculum might look like. They suggest that for a language arts curriculum to be effective for gifted learners, there must be awareness that gifted students are sophisticated users of language and should be thought of as idea generators rather than having ideas thrust upon them (Gallagher & Gallagher, 1994). They advocate that many different types of stories be read such as short stories, fables, non-fiction works as well as various genres of fiction to discover the development of plot, point of view, character development and the richness of the language that can be found in excellent writing (Gallagher & Gallagher, 1994).

Many gifted readers are reading fluently before they start first grade, and some are reading fluently before they start Kindergarten (Witty, 1971). They are voracious readers who develop an emotional connection with the text. They aren't just reading words on a page; they are fully engaging in the ambiance of the story. They are flying over the mountains on a dragon, or submerged one thousand feet below the surface of the sea in a nuclear submarine (Wood, 2008). Gifted readers read differently for different purposes, they express keen insights and understanding, they are able to retain large quantities of

information, they use an extensive vocabulary, and they fully understand the complexities of language.

These students benefit from intentional, deliberate instruction as do their typically achieving peers. However it is necessary to understand what intentional, deliberate instruction is. "There is a difference between assigning challenging literature and teaching students to read challenging literature" (Wood, 2008, p. 20).

Students should be offered the option of flexible grouping that provides them with opportunities to be put in groups based on interests, genre, or author study (Wood, 2008, p. 21). Avoid a more-of-the-same mentality with gifted readers. Having gifted students zoom through the basal reader is not a good example of acceleration.

Wood suggests nine key components of a successful reading program for gifted students: assessment, grouping, acceleration, challenging literature, discussion, critical reading, creative reading, inquiry reading and enrichment (Wood, 2008).

Bibliotherapy can help gifted children through the difficult process of growing up. Halsted (2009) offers her suggestions of books for students to read when they are experiencing particular problems. For example, she has a list of books for children at various stages of development to read that deal with the death of a loved one or being bullied (Halsted, 2009).

Halsted talks about guiding readers through their reading journeys. She suggests that a caring adult monitor what a child reads. A child may read well beyond her chronological age but not be emotionally mature enough to cope with the material suited for much older readers. She also suggests that students be exposed to various types of

books such as biographies, nonfiction, classic literature and poetry and to move outside their comfort zones to read types of books they don't normally read (Halsted, 2009).

Parker (1989) suggested using criterion-referenced reading tests (CRT) for young readers to determine which skills might need reinforcement, using one-on-one instruction until mastery is achieved. Once children reach mastery level, move to the next level and repeat the above steps. She defined instructional level as 80% comprehension, a point where students should be placed with others who have reached a similar level, allowing students "to progress at their own rates and using the CRTs at the end of each level to assure mastery of each set of skills" (Parker, 1989, p. 184). Students should be deliberately taught the skills of recognizing the main idea, using context clues, inferential and literal comprehension, reading with speed, distinguishing fact from fiction, following directions, using a variety of resources, and using all parts of a book "to provide gifted readers with a sense of independence" (Parker, 1989, p. 184) and encourage reading independently outside of class.

One area of reading instruction Barbe and Williams (1961) feel is neglected in reading instructions for gifted readers is thinking and using ideas creatively. They suggest teachers must themselves be creative in order to teach creatively (Barbe & Williams, 1961). They offer three ways in which readers may be taught to think creatively:

1. Emphasis must be placed on the "child's feelings and interpretations, rather than on what is read" (Barbe & Williams, 1961, p. 201).

- 2. For children to be able to think creatively, enjoyment in the process of reading, writing and thinking must be developed.
- 3. Children must be taught in an atmosphere that allows free flowing of ideas to occur. The learning environment must be one in which the child isn't afraid to take risks or fear being ridiculed (Barbe & Williams, 1961).

Research on reading and gifted.

The late 1980's and into the 1990's seems to be a period in which a few studies pertaining to giftedness and reading were conducted. Villani (1998) conducted a study to determine if the language arts curriculum meet the needs of gifted learners and were gifted learners being challenged by the curriculum in a private school setting. The participants in this study were 75 children in grades four through eight who attended a private school in central Illinois and the five teachers who taught language arts. Data was gathered by means of interviews and classroom observation of language arts lessons in grades six through eight (Villani, 1998).

While her findings are not necessarily generalizable to a wider population, she does explain the types of curriculum that seem to benefit gifted learners. For example, the instruction model used in the language arts classes was the content mastery model. The goal of this model "is to have gifted students progress through a curriculum at an accelerated rate" (Villani, 1998, p. 20). The texts used for this model were at least one grade level above chronological grade level. "Teachers had the freedom to choose books rather than the entire school subscribing to a particular series" ((Villani, 1998, p. 21).

Allowing teachers the freedom to choose appropriate texts for their students made for a richer language arts program (Villani, 1998).

Teachers also employed literacy groups to have in depth book discussions, and they used the process-product model to develop research/inquiry skills of topics that were of interest to the students (Villani, 1998).

Studies have also been done to determine if early talkers become early readers (Crain-Thorenson & Dale, 1992). Twenty-five children who were determined to be linguistically precocious at 20 months of age were chosen to participate in Crain-Thorensen and Dale's study. The study participants were recruited by advertisement from Northwest Washington. The children were seen at 20 months, 24 months, 2½ years and 4½ years. The children in this study remained verbally precocious throughout the investigation period. However, "contrary to [the researchers'] expectation, mean performance on the literacy outcome measures was not markedly precocious" (Crain-Thorenson & Dale, 1992, p. 424). This outcome led Crain-Thorenson and Dale to determine from correlational evidence within the study that since verbally precocious children don't necessarily become early readers, "language and literacy are separable abilities at 4½ years of age in this group of children" (Crain-Thorenson & Dale, 1992, p. 424).

This study was relevant in that most gifted children do in fact demonstrate early verbal skills and advanced verbal ability at a young age.

Clark (1992) conducted a study with pre-school children, ages 2 to 4 years old, to attempt a better understand the effects of the LAD (Language Acquisition Device).

LAD is theorized to be "an innate ordering device for learning language" (Clark, 1992, p. 97) that occurs in the brains of young children. The optimal time window for this device to be utilized and languages learned is when the child is 18 months to 4 years old (Clark, 1992). Clark was interested in learning whether or not the children in her study could be taught to read during this optimal time window.

"For 15 minutes once a week for 16 weeks, 45 mothers brought their children to ... watch in small groups the televised antics of a feline puppet and me. Using songs, games and stories, we involved the children in basic reading experiences (Clark, 1992, p. 98).

All of the children in Clark's study mastered the skills she had targeted by the end of the test period. One of the study participants was accompanied by a younger sibling during the video watching sessions. The toddler was 1 year, 6 months old at the conclusion of the study. Clark was curious as to what, if anything, this youngster had picked up from his informal participation. He was given his own final assessment and could identify several letters, letter sounds and read a few vocabulary words (Clark, 1992).

Clark didn't find any significance with respect to IQ in terms of the children's ability to master pre-reading skills at the end of the study (Clark, 1992). There was a small advantage for children whose parents read to them. That all the children in her study reached mastery by the end of the study led her to suggest future study was needed to determine how capable very young children are at learning language skills (Clark,

1992). She concluded that "reading is a natural, happy event if introduced during this LAD period" (Clark, 1992, p. 99).

Reading achievement and the gifted. Reis et al. (2004) conducted a qualitative, comparative, cross-case study of 283 students in 12 different third and seventh grade classrooms. Data were collected from direct observations, teacher interviews and interviews with principals and librarians to determine the type of reading curriculum used for all students. They then looked for any differentiation of curriculum used with gifted readers (Reis et al., 2004). Reis et al. (2004) observed that gifted learners don't make the same gains in reading as do typically achieving learners and may even regress a year or two. For example, a child who enters the first grade reading with fluency and comprehension at a fourth grade level would be expected to be reading with the same fluency and comprehension at a fifth grade level at the beginning of second grade. However, Reis observed that when gifted readers are not supported in the classroom with opportunities to use higher level thinking strategies and read ever more challenging books, that first grader may only be reading at a third grade level at the beginning of second grade (Reis et al., 2004). This would suggest a need for providing specific reading instruction for gifted learners.

Reis et al. carried out a study in 2007 using her School-wide Enrichment Model for Reading (SEM-R). The SEM-R is a talent development model "that provides enriched learning experiences and higher learning standards for all children with follow-up advanced learning for academically talented children interested in further investigation" (Reis et al., 2007, p. 5). They implemented the SEM-R to find out whether

this approach would improve elementary students' reading fluency, comprehension and attitude as compared to the test preparation model and/or remediation. All students in the participating schools participated in the reading program, Success For All, for 90 minutes each morning. "The District mandated an extra hour long literacy block with remedial instruction and test preparation in place of science and social studies" (Reis et al., 2007 p. 4) in the afternoon. The study was conducted at two northeastern United States urban elementary schools, and the schools were chosen because few studies had been done to determine the effects of enriched reading instruction on urban students (Reis et al., 2007).

Students were divided into treatment and control groups. There was a treatment and a control group of third, fourth, fifth and sixth graders at one school and a treatment and control group of third, fourth and fifth graders at the other. There were 100 students and seven teachers in the treatment groups and 116 students and 7 teachers in the control groups (Reis et al, 2007).

There was no significant difference between treatment and control groups in reading fluency and attitude prior to intervention, suggesting that the randomized process resulted in groups of similar ability (Reis et al., 2007). In post intervention, they found that "after controlling for pretreatment fluency scores, the main effect of treatment was statistically significant, meaning that . . . treatment students out performed control students" (Reis et al., 2007, p.15) in reading fluency (Reis et al., 2007). The difference in model scores was .125 standard deviation units (Reis et al., 2007).

After controlling for pretest reading attitude, the researchers conducted a multilevel regression analysis. Though the results were not statistically significant, they

indicated "that treatment may have had a greater effect on the posttest attitudes of students in [one school] than in [the other], especially when treatment fidelity issues at [the second school] are considered" (Reis et al., 2007, p. 17).

The post intervention results for reading comprehension after controlling for pretest reading fluency were not found to be statistically significant. This may have been due to teacher effects. "Although the treatment groups generally outperformed the control groups on posttest fluency, attitude and comprehension measures, there was some variability among teachers" (Reis et al., 2007, p. 18). "After 12 weeks, the treatment group using the SEM-R scored significantly higher than the control group in reading fluency and attitude toward reading" (Reis et al., 2007, p. 18).

Reading strategies of gifted learners. Fehrenbach used "think-aloud protocols" (Fehrenbach, 1991, p.125) to try to understand the strategies gifted learners use when reading and to compare those strategies with those used by average readers. "Think-aloud protocols are subject verbalizations during reading which include reading aloud and verbalizing thoughts during reading" (Fehrenbach, 1991, p. 125). Fehrenbach identified 14 strategies utilized by both gifted and average readers; "rereading, summarizing accurately, using visual imagery, word pronouncing concern, analyzing structure identifying personally, watching or predicting, summarizing inaccurately, evaluating, relating to content area, failing to understand story, going to another source, and failing to understand a word" (Fehrenbach, 1991, p.126). She found that gifted readers used 6 strategies more often than average readers which could be described as "effective strategies" (Fehrenbach, 1991, p. 126). These include rereading, inferring,

summarizing accurately, using visual imagery, word pronouncing concern and analyzing structure (Fehrenbach, 1991).

Metacognition and gifted readers. Piirto, Gallagher & Gallagher and Van Tassel-Baska all refer to gifted learners as masters at symbol manipulation (Piirto, 1999; Gallagher & Gallagher, 1994; Van Tassel-Baska, 1992). Van Tassel-Baska suggests language is a complex symbol system, and a thorough understanding of this system is necessary for future learning. Gifted learners seem to be able to quickly learn to manipulate this symbol system mastering its complexity and nuances sooner than do typically achieving learners (Van Tassel-Baska, 1992).

Williams (2003) reported on a previous research project she had conducted to identify variables gifted children utilize as they develop literacy skills. She studied six gifted and talented children ages five and six years old from four different schools in the U.K. Data was collected through interviews with the children, their parents and their teachers. From these interviews, Williams found that "metacognitive awareness emerged as a significant factor in [the children's] literacy learning" (Williams, 2003, p. 252). The young children in her study revealed an awareness of word patterns, rhyming schemes and syllables and knew that this made words easier to read; why literacy is important; had a systematic approach to learning and planned out various reading and writing projects; and were aware that it was necessary to use different reading strategies for different types of reading (Williams, 2003). She concluded that "metacognitive awareness deepens the learning process" (Williams, 2003, p. 256).

It is important to understand how gifted readers process how they read in order to appropriately inform the practice of teaching them. In 1986, Anderson presented a paper on how gifted readers process information as they read. The studies she referenced used protocol analysis, which is a think-a-loud method to have students tell what they were thinking as they read a piece of text (Anderson, 1986). She discovered there are 10 strategies that good readers employ while they are reading, and these strategies fall into three categories; "word related strategies, clause-related strategies and story-related strategies" (Anderson, 1986, p. 31).

Word related strategies involve the ability for the child to use context cues to decipher meaning, "synonym substitution and failure to understand the word" (Anderson, 1986, p. 31). Clause-related strategies utilize such skills as rereading a passages to gain understanding, drawing inferences, getting additional information about the text, drawing personal connections to the text, forming hypothesis and inability to understand the clause (Anderson, 1986). Story-related strategies are those strategies in which a child makes use of information within the story to gain meaning (Anderson, 1986).

When comparing able readers and poor readers, the able readers use more and different types of strategies to decode text. "Gifted readers displayed a higher cognitive level in their use of strategies and demonstrated more successful application of reasoning strategies" (Anderson, 1986, p. 31).

Precocious readers. The literature on precocious readers contrasts them with gifted readers. A gifted reader is usually precocious, but the literature on precocious readers doesn't suggest that precocious readers are necessarily gifted. The characteristics

gifted and precocious readers do have in common is that they seem to have a sophisticated grasp of oral language before they begin to read in that they play with words, rhyming and experimenting with tenses (Jackson, 1988). Hollingworth found that precocious readers prefer non-fiction to fiction stories (Hollingworth, 1926).

In the literature on precocious readers, the term precocious reader is used interchangeably with early reader. Durkin defined an early reader as a "beginning first-grade child who was able to identify at least 18 words from a list of 37, and who had not received school instruction in reading" (Durkin, 1966, p. 15). Stainthorp and Hughes (2004) later defined precocious readers as "children who are able to read fluently with understanding at an unusually young age before attending school and without having received any direct instruction in reading" (Stainthorp and Hughes, 2004, zp. 107). Included in the defining characteristics of precocious readers are the presumptions that they do not necessarily possess a particularly high IQ, socio-economic background doesn't influence precocity, they are a heterogeneous group taken as a whole and they are typically just normal children (Durkin, 1966; Jackson & Cleland, 1982; Stainthorp & Hughes, 2004).

Precocious readers spontaneously learn to read on their own. Olson, Evans and Keckler (2006) found that precocious readers tend toward average or superior intelligence, but it doesn't "guarantee spontaneous reading skill" (Olson, Evans & Keckler, 2006, p. 208). "Because precocious readers learn to read without the imposed structure of formal schooling, they can be an important source of information about how reading skills are acquired" (Henderson, Jackson, & Mukamal, 1993, p. 78).

One of the earliest studies pertaining to precocious readers was a six-year longitudinal study conducted by Durkin from 1958 to 1964 involving school children in Oakland, California. She conducted a second longitudinal study from 1961 to 1964 in New York City. Durkin was curious as to the number of children who enter first grade already reading and did the ability to read early have any effect "on a child's future achievement in reading" (Durkin, 1966, p. 13).

The children in the first study were recruited from Oakland, California public schools. There were 5,103 children who qualified for the study. Her findings indicated that "the average achievement of early readers who had had either five or six years of school instruction in reading, was significantly higher than the average achievement of equally bright classmates who had had six years of school instruction but were not early readers" (Durkin, 1966, p. 41). The second study was conducted in New York City schools, and 4,465 first-grade children were selected from among the total population. In the second study, Durkin (1966) achieved similar results in that the early readers were higher achievers than the non early readers. However, the gap in achievement seemed to close over time. Durkin attributed this phenomenon to two probable causes. This first was that there was a natural regression toward the mean, and the second was that the children were already performing close to the ceiling on the standardized reading tests they were given. It was assumed that the tests weren't able to accurately measure the children's advanced reading level (Durkin, 1966). Hollingworth felt that a regression toward the mean in academic ability was erroneous. Her explanation was similar to Durkin's in that she assumed as gifted children progressed through the school system,

they were competing more and more with like ability children (Hollingworth, 1926).

This would have been a reasonable assumption in Hollingworth's day as children were not required to attend school beyond the eighth grade, and only the brightest tended to go on to high school (Hollingworth, 1926).

Subsequent researchers have sought to discover exactly how precocious readers learn to read. It is generally agreed that precocious readers are not formally taught to read but that they seem to learn spontaneously (Durkin, 1966; Jackson & Cleland, 1982; Jackson & Biemiller, 1985; Jackson, 1988; Jackson, Donaldson & Cleland, 1988; Stainthorp & Hughes, 2004; Olson, Evans & Keckler, 2006). There is disagreement as to whether or not precocious readers learn to read using top-down or bottom-up strategies.

Top-down strategies are those in which the precocious reader uses whole word recognition to learn to read. Bottom-up strategies are those in which the precocious readers use individual phoneme analysis to learn to read. For example, a bottom-up reader would learn letter shape-letter sound associations and learn to read phonetically (Jackson & Cleland, 1982). Stainthorp & Hughes (2004) looked at the association between phonological awareness and early reading. They found that the early readers in their study had alphabet awareness early but were unable to segment phonemes as was demonstrated earlier in this paper by typically achieving readers.

There was little agreement in the research as to exactly how a precocious reader learns how to read, but there was considerable agreement in that the exposure to a printrich environment, being read to frequently by an adult or older sibling and having an opportunity to be exposed to and practice a great deal of oral language all played a part in

shaping the precocious reader's literacy development (Durkin, 1966; Jackson & Cleland, 1982; Jackson & Biemiller, 1985; Jackson, 1988; Jackson, Donaldson & Cleland, 1988; Stainthorp & Hughes, 2004; Olson, Evans & Keckler, 2006).

Highly gifted readers. A highly gifted child is defined as one having an IQ of 145 or above (Gross, 1999). Highly gifted readers exhibit similar characteristics as precocious readers (Gross, 1999), and precocious readers may indeed be highly gifted. "The research literature on intellectual giftedness suggests that one of the most powerful indicators of exceptional giftedness is early reading" (Gross, 1999). Highly gifted children often exhibit complex speech patterns such as speaking in whole sentences months before their typically achieving age-mates (Gross, 1999). Winner (1997) pointed out that highly gifted children will often be reading several years ahead of age-mates before they start Kindergarten. Hollingworth (1926) suggested that highly gifted children prefer non-fiction books to fiction.

Feldman and Goldsmith (1990) studied six child prodigies who were ages 3.5 years to 9 years old. Within the context of their study, they uncovered the notion that although the child prodigy does possess a rare talent in one specific domain, that talent must be nurtured if it is to blossom to its full potential (Feldman & Goldsmith, 1990). To illustrate this point, William Sidis' early years were shaped by the devotion of his parents to help him reach his academic potential. William was reading by age 3 years and was able to write with a pencil at age 3 and a half years (Montour, 1977).

Home schooling gifted children. There is a great deal of information available for parents who choose to home school their child. Whole websites are devoted to gifted

homeschoolers with an abundance of resources and practical guides to help parents navigate their children's educational needs. However, there is little research available that examines the relationship between giftedness and home schooling. Nemer (2002) and Kearney (1992) explain the reason parents of highly gifted children choose to home school is because it is the best educational option for their child. There is little in the way of educational opportunities that would afford a highly gifted child the flexibility to learn a highly specialized subject to the degree in which these children are capable (Kearney, 1992).

Summary.

Gifted readers tend to be voracious readers with the ability to manipulate the language with sophistication far beyond their typically achieving peers. Studies have shown that gifted readers are not often taught specific, intentional reading skills in the regular classroom and that they may fall behind their typically achieving peers in reading growth as a result (Reis et al., 2007, Wood, 2008).

Experts in the field of gifted education tend to agree that strategies such as curriculum compacting, acceleration, content enrichment and student centered activities might be useful in teaching literacy skills to gifted learners. Van Tassel-Baska (1992) and Piirto (1999) point out that gifted learners are masters at symbol manipulation. Since language is a complex set of symbols, mastering it is necessary for future learning (Van Tassel-Baska, 1992). It is also important to understand the thought processes of gifted learners as they read in order to inform the practice of teaching to their specific needs and abilities (Anderson, 1986, Reis et al., 2007).

Precocious readers are a heterogeneous group of children who learn to read very young before they have any formal reading instruction. There is little agreement as to exactly when or how they learn to read, but there is considerable agreement that being exposed to a wide variety of oral and written language opportunities helped to develop the precocious readers' ability to read (Durkin, 1966; Jackson & Cleland, 1982; Jackson & Biemiller, 1985; Jackson, 1988; Jackson, Donaldson & Cleland, 1988; Stainthorp & Hughes, 2004; Olson, Evans & Keckler, 2006).

Perceptions of Gifted Readers

While there is a small amount of research about the ability of gifted readers, few people are asking them what they think about their reading experiences. What are their perceptions of how they learned to read? How do they look at reading at the current point in their lives? What is reading instruction like for them in school? How would they change it if given the opportunity?

Research on perceptions of gifted readers.

There is very little in terms of research pertaining to perceptions of gifted readers and their parents. Most of what the researcher has been able to discover is related to counseling and very little of it has to do with schooling or reading. There have been some perception and attitude studies of gifted students and most were conducted in the late 1970's to the mid-1990's. There have been more recent studies regarding parent perceptions, but there are few of these types of studies.

Parent perceptions.

There is little research pertaining to parents' perceptions of their children's reading abilities. What is available provides examples of the importance of a rich oral and written language culture in the development of literacy skills in young children. In a 2002 study conducted in Eastern Canada, Lynch investigated the correlation between parent's efficacy beliefs, which she defined as "belief in the parent's ability to help improve their child's reading ability" and reading achievement (Lynch, 2002, p. 55).

Parents who believed they had some influence over their child's accomplishments were more "proactive and successful in cultivating their child's competencies than parents who did not" (Lynch, 2002, p. 55).

Lynch's study involved 66 children ages 8 and 9 years old and 92 parents in rural Canada. She administered a survey to parents asking about their self-efficacy beliefs (Lynch, 2002). There was no significant correlation between the mother's self-efficacy beliefs and the child's reading achievement, but the "father's self-efficacy beliefs for children's achievement had a significant negative relationship with boys' reader self-perceptions" (Lynch, 2002, p. 63). She concluded that more research is needed in this area as her finding contradicted previous research (Lynch, 2002).

Another Canadian study conducted by Senechal and LeFevre was a five year longitudinal study that examined the relationship between" home literacy experiences, emergent literacy skills and reading achievement" (Senechal & LeFevre, 2002, p. 445). Senechal and LeFevre (2002) were interested in finding out if a child's early and frequent exposure to books had an effect on later reading achievement.

Two Kindergarten cohorts and one grade one cohort (168 children total) from middle and upper-middle class English speaking families were involved in this study (Senechal & LeFevre, 2002). Parents' home reading activities were assessed at the beginning of the study, early literacy skills were assessed at the beginning of Kindergarten and first grade, and reading achievement was assessed in first and third grades (Senechal & LeFevre, 2002).

Parents were asked to complete a checklist to measure their involvement with their child's early literacy skills. Senechal and LeFevre (2002) were interested in whether or not, and how often parents engaged in not only informal literacy skill practices with their children such as reading picture books together, but formal literacy skill instruction such as teaching letter names and sounds as well (Senechal & LeFevre, 2002). If parents did formally instruct their children, what if any, was the impact on future reading achievement?

Senechal and LeFevre concluded that storybook reading was a significant factor in oral language skills and vocabulary acquisition which is a predictor of reading success. However, storybook reading alone was not a good predictor of later reading achievement (Senechal and LeFevre, 2002). Children whose parents taught them specific word skills and writing entered school with better phonological awareness than their peers and were able to easily grasp reading skills taught in Kindergarten and first grade (Senechal and LeFevre, 2002). The children in this study who were reading fluently at the end of first grade were reading well at the end of third grade (Senechal and LeFevre, 2002). While

this study did not ask questions of perceptions, it did reinforce the importance of parent involvement in their child's early reading skills acquisition.

Burns and Collins (1987) conducted a study of parent perceptions relating to why some gifted children learn to read early and others do not. This study involved 30 children who attended a preschool for gifted children; 15 children who were accelerated readers and 15 children who were non-readers. The children who were identified as accelerated readers were able to read "13 words or more words on the Letter-Word Identification subtest of the *Woodcock-Johnson Psycho-Educational Battery*" (Burns & Collins, 1987, p. 240). The researchers determined that oral language exposure was not likely to be a contributing factor in early reading skills acquisition (Burns & Collins, 1987). Instead, they examined four aspects of written language, "awareness of letter/sound correspondences in words; awareness about concepts about print; awareness of print in the environment; and awareness during story reading episodes" (Burns & Collins, 1987, p. 240).

Parents were asked to complete a survey questionnaire that addressed the research questions. From the answers provided by the parents, Burns and Collins leaned that 10 of the 15 mothers of accelerated readers used some sort of formal reading instruction to teach their children how to read (Burns & Collins, 1987). This appeared to be the only significant difference between the two groups of children.

While accelerated readers and non-readers appeared to have been provided with many opportunities to interact with environmental print, accelerated readers

appeared to have been provided with more opportunities to interact with linguistic and relational principles than non-readers (Burns & Collins, 1987, p. 244)

This study didn't address how written language developed, nor did it provide answers as to whether the early reading advantage was maintained throughout the school years by the accelerated readers (Burns & Collins, 1987). This study did reinforce the importance of parent involvement in their child's early literacy skills acquisition (Burns & Collins, 1987).

Student perceptions.

To fully appreciate gifted students' perceptions of their reading process, it is helpful to understand the difference between attitude and perception. Attitude may be defined as views or behavior toward a thing, in this case, reading, (Collins English Dictionary, ND), and perception may be defined as one's understanding of or gathering meaning from a thing via one's various senses (Collins English Dictionary, ND). In this study, perceptions of reading would then mean, understanding how the student became a reader visually and cognitively. Attitude may be seen as the outgoing process, whereas perception is the incoming process.

McKenna, Kear and Ellsworth (1995) conducted a nationwide study of reading attitudes which involved 18,185 children from 38 states in grades 1 through 6. Their test instrument was the *Elementary Reading Attitude Survey* (McKenna & Kear, 1990) which is a four point, Likert-type scale with pictures of Garfield the cat depicted in various states of emotion. Four choice items were decided upon to eliminate a vague middle of

the road response (McKenna & Kear, 1990). The pictures range from a very happy, smiling Garfield to a grouchy Garfield.

In this particular study, McKenna, Kear and Ellsworth were interested in learning whether or not attitudes toward recreational reading and academic reading declined as children got older and other interests competed for reading as a leisure time activity, and whether or not reading attitude was contingent upon use of basal readers in the classroom (McKenna, Kear & Ellsworth, 1995). According to McKenna, Kear and Ellsworth (1995),

Understanding the role of attitude in developing readers is important for two principal reasons. First, attitude may affect the level of ability ultimately attained by a given student through its influence on such factors as engagement and practice. Second, even for the fluent reader, poor attitude may occasion a choice not to read when other options exist (McKenna, Kear & Ellsworth, 1995, p. 934). They found in this study that reading attitudes vary according to interest (McKenna, Kear & Ellsworth, 1995).

The test instrument was administered in group settings after the classroom teacher explained the instructions to eliminate possible decoding deficits, and the students agreed on the moods Garfield displayed in the pictures. There was no control for reading ability other than the classroom teachers' recommendations after having the students in class for five months. McKenna, Kear and Ellsworth found that reading attitude was increasingly negative as students progressed from 1st to 6th grade for all students, but the gap widened between poor ability and high ability readers as the students got older (1995). This

"suggests that a reader's history of success or frustration plays a central role in shaping attitude" (McKenna, Kear & Ellsworth, 1995, p. 945). This is also indicative of the Matthew Effect in reading where students who are poor readers tend to read less thereby exacerbating their poor reading ability by not practicing, while good readers tend to read more and get better at reading by frequent practice (Stanovich, K. E., 1986).

McKenna, Kear and Ellsworth noted that there was no significant difference in the decline in academic reading attitude whether basal readers were used exclusively or if enrichment material was provided by the classroom teacher. There was still a steady decline in academic reading attitude from 1st grade to 6th grade (McKenna, Kear & Ellsworth, 1995).

Cooter and Alexander (1984) looked specifically at attitudes and interest of gifted readers whom they termed "abled readers" (Cooter & Alexander, 1984, p. 97). They stated that interest plays a significant role in comprehension. If students are interested in what they read, they will use higher levels of comprehension to gain understanding of a topic (Cooter & Alexander, 1984).

They defined reading attitude as "feelings toward reading which causes the learner to either approach or avoid reading" (Cooter & Alexander, 1984, p. 100). Their investigation of the literature on reading attitudes of gifted learners suggested that gifted readers tended to have a more positive attitude toward reading than poor readers, and they prefer multi-age learning situations in which they can choose their own reading projects (Cooter & Alexander, 1984).

The few perceptions studies available focus on gifted readers' perceptions of their reading ability and their self-concept. In one study on perceptions of ability, Chapman and McAlpine conducted a two-year longitudinal study to determine whether "the academic self-concepts of gifted students who are mainstreamed increased or decreased over time, and how self-concepts of gifted students compared with average ability students" (Chapman & McAlpine, 1988, p. 222). Issues with mainstreaming gifted students include that because they are not often challenged in reading, they may experience "reduced feelings of satisfaction in school or even they may develop more negative attitudes" (Chapman & McAlpine, 1988, p. 222).

Chapman and McAlpine selected there "sample from a cohort of 1,220 students in grade 6 from five intermediate schools in New Zealand" (Chapman & McAlpine, 1988, p. 223). There were 29 gifted students and 71 average achieving students. The test instrument used was the *Perception of Ability Scale for Students* which contains "70 forced-choice yes-no items relating to feelings and attitudes about school performance" (Chapman & McAlpine, 1988, p. 223). The test was administered three times over the two year period, at the beginning and end of grade 6 and at the end of grade 7 (Chapman & McAlpine, 1988).

The results indicate a substantial difference in the academic self-concept of the two samples. The difference between the gifted and average students on the academic ability subscale clearly shows that gifted students have high overall perceptions of ability. . . . Although the gifted students have high academic self-

concepts, they are not necessarily any more satisfied with classroom-based learning experiences (Chapman & McAlpine, 1988, p. 224).

Johns (1972) conducted a study to determine whether or not a correlation existed between a student's perception of reading and reading achievement. The sample included 53 fourth graders from two different elementary schools in the mid-western United States. Each student was individually interviewed informally then was given the Gates-McGinitie Reading Test, Survey D (Johns, 1972). Johns found "a significant positive correlation existed between the children's perceptions of reading and their reading achievement" (Johns, 1972, p.20). The more successful a student was at reading, the more positive they felt toward reading.

Tovey's 1976 study involved 30 children in 1st through 6th grade; five children from each grade to study children's perceptions of reading. In order to determine if children perceived reading as a silent activity, the students were give three passages and asked to read them. "Only 20% of the students chose to read silently, suggesting that children perceive reading as an oral activity" (Tovey, 1976, p. 537).

To determine whether children perceive reading as a means to derive meaning, students were asked "what do you do when you read?" (Tovey, 1976, p. 537). Only 14 % of the children "indicated that reading had something to do with meaning. The largest percentage, 43%, expressed the idea that reading is looking at, pronouncing, learning, reading, or thinking about words" (Tovey, 1976, p. 537).

Students were asked questions to indicate whether they read every word when reading and if reading every word was important. The children felt that looking at every

word was important. "Most children seem to have been convinced that every word must be perceived if meaning is to be obtained" (Tovey, 1976, p. 538). Conversely, when students were asked if they look at every letter in every word, "24% of the students said that they did look at every letter but felt that they shouldn't, and 26% of the children indicated that they did not look at every letter but felt they should" (Tovey, 1976, p. 538).

The last thing students were asked to do was to read an unfamiliar passage and explain how to determine the meaning or pronunciation of difficult words. Only two children made use of syntactic or semantic information to help them understand difficult words (Tovey, 1976). Gathering syntactic information involves paying attention to word order to derive meaning, and gathering semantic information would be trying to determine the meaning of the word in question by looking at the words around it. The rest of the children in the study sounded out the words that caused them difficulty.

Tovey's study suggests that the children in his study had "been taught to think of reading as an oral activity which involves the pronunciation of words by carefully looking at every letter of each word. If a word is not recognized, they sound it out" (Tovey, 1976, p. 541). These findings correlated with John's study of the same year.

Levy conducted at study in the United Kingdom which sought to determine children's perceptions of reading and the use of what she called "reading scheme texts" (Levy, 2009, p. 361). A reading scheme text is called a basal reading text in the United States. She followed 12 children, 6 Nursery (preschool) and 6 Reception (Kindergarten), in a school in East Anglia for one academic school year. Data were collected in three

phases over the course of the year, and interviews were conducted in the children's homes with their parents present.

In her study, she found that children thought that they could only learn to read from the basal text. If they were given other fiction texts, to read, the children decided that wasn't really reading. If children were given non-fiction texts to read, that was considered reading because information could be gotten from them (Levy, 2009). When children graduated to chapter books, they felt they had achieved quite an accomplishment. They then felt they had learned how to read (Levy, 2009).

One implication to Levy's findings is that only teaching from a basal might be detrimental to children's understanding of what reading is and what might be experienced from a wide variety different types of texts. It also points out how concrete operational very young children are in terms of deciding what is a book for learning to read and what is not.

Lynch's (2002) study in rural Canada also looked at children's self perceptions as readers. Her study involved 66 children ages 8 and 9 and their parents, and she was interested in discovering if parent's self-efficacy beliefs affect student reading achievement. She found that girls had higher self concepts as readers overall than boys, and students' perceptions of themselves as readers impacted reading achievement. The higher the self concept, the more positive outcome in terms of reading achievement (Lynch, 2002).

Summary.

There have been few studies pertaining to parent perceptions of their gifted child's literacy skills acquisition. The researcher found few studies that deal with students' perceptions related to reading and none that addressed the students' experiences related to how they came into the reading process, their early school experiences or what they would like teachers to do differently in the classroom. Research is needed in this area to inform the practice of reading instruction for gifted learners to better understand their unique academic needs.

In the next chapter, research methodology will be discussed. There will also be a discussion of the research paradigm and how this type of study fits the paradigm.

Various sites catering to gifted learners were targeted to recruit participants in this study.

These sites and recruitment strategies will be detailed as well in the next chapter.

Chapter III - Methodology

This chapter describes the methods the researcher used to design the study. The research paradigm is described and since this is a mixed methods study, this chapter offers justification for using mixed methods from the research paradigm perspective. A detailed description of the research is provided and researcher bias and limitations to the study are described.

Research Paradigm

This study was approached from a social constructivist perspective. As such, it was necessary for the participants of this study to tell their own story, to construct the answers to questions from their own narratives and experiences, and to construct meaning for themselves. Understanding and meaning is shaped by participants through their own personal experiences, stories and narratives (Cresswell & Plano Clark, 2007). Denzin and Lincoln (2008) describe the inquiry aim of constructivism as one of understanding and reconstructing. In this approach, "research is shaped from the bottom up from individual perspectives to broad patterns and, ultimately, to theory" (Cresswell & Plano Clark, 2007, p. 22).

The term social constructivist was used to describe the research paradigm for this study as Cresswell and Plano Clark (2007) use this term throughout their book.

However, throughout the literature on study paradigms, it was noted that the terms social constructivist and constructivist seem to be used interchangeably, and Denzin and Lincoln only use the term constructivist.

In social constructivist research, the language is changed from the postpositivist terms of validity and reliability to trustworthiness and authenticity (Denzin & Lincoln, 2008). The researcher tends to become a participant within the study and acknowledges that personal bias may affect the outcome of the research findings (Cresswell & Plano Clark, 2007).

The researcher in this study is the parent of two gifted boys, and their giftedness has become a major focus in her life. They are the driving force behind this study, and it is for them this study sought to find answers to questions pertaining to giftedness and reading. She is also a reading teacher, with extensive background in this field. Though the researcher's own experience laid the groundwork for this study, it is the narratives and experiences of the participants that drove the data and defined the results.

Mixed Methods Research as It Relates to the Social Constructivist Paradigm

Social constructivist research tends to be informal and qualitative, relying heavily on the narratives of the participants. The methodology sometimes employed by constructivists is survey research, and although it is usually quantitative in nature, there is room for a qualitative approach as well (Creswell & Plano Clark, 2007). For this study, a survey was designed that asks both quantitative and qualitative questions to gather data on perceptions of gifted students' parents and the students themselves pertaining to how the child came to the reading process.

This is a mixed methods study, and mixed methods research can be defined as: a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analyzing, and mixing both qualitative and quantitative data in a single study or series of studies. Its central premise is that the use of qualitative and quantitative approaches in combination provides a better understanding of research problems than either approach alone (Creswell & Plano Clark, 2007, p. 5).

Description of Research

The intent of this mixed methods study was to learn how gifted students perceive how they learned to read, how their parents perceive how their children learned to read and the students' school reading experiences, and what students and parents would like teachers to do differently in the classroom.

Survey design.

The process of designing this research survey began in June of 2008. Since the researcher is a certified reading teacher, she started formulating questions based on an interest in discovering how gifted children learn to read. There has been very little research conducted on this topic. The researcher considered her own experiences in learning how to read, those of her own children, and those of family members and friends to understand how they learned to read, and she deliberated on questions to ask. Interest in the stories of friends and family members grew and further questions were added to the survey. The literature on the developmental aspects of reading was reviewed to establish traits of typical age development and phases in the reading process. Survey questions

were then formulated that focused on perceptions of parents of gifted children and gifted students concerning their experiences in learning to read and their current school experiences in reading. Attention to the beginnings, the first school experiences, the current school experiences, and what would benefit gifted readers were the main categories of questions.

Lundberg (2006) found that children who grew up in homes with parents who are well educated are exposed to three times more words than children whose parents are not. Parent participants in this study were asked their highest level of education to corroborate Lundberg's findings.

Research shows (Lundberg, 2006; Bardige, 2009; Durkin, 1966; Jackson, 1988; Nevills & Wolfe, 2009; Knopf & Brown, 2009) that children who are read to often and early develop a greater capacity for oral language and have larger more flexible vocabularies than children who are not read do. Items on this survey regarding reading time with children were asked to determine if the gifted readers were read to. The student participants were asked if they felt having an adult read to them helped them learn to read as is indicative of the research.

A variety of questions were asked regarding the precocity of the readers in this study. Based on studies by Jackson (1988), Durkin (1966) and Stainthorp and Hughes (1998), precocious readers develop reading skills without formal instruction, read early as compared with typically achieving readers, and possess a variety of phonological awareness skills. One aim of this study was to discover perceptions of early reading acquisition that might include the aforementioned skills.

Questions regarding the students' early and current school experiences were derived from the researcher's desire to understand how gifted readers and their parents perceive the school environment as meeting the academic needs of the students. It was the researches intent to offer implications for preservice and inservice teacher training based on the responses to the survey.

Validation of survey.

Prior to beginning the study with the approval of Oregon State University's Institutional Review Board (IRB), a draft of the research instrument was sent to Dr. Sally Ries, Dr. Patricia Wood, Dr. Joyce Van Tassel- Baska, and Dr. Robert Seney to obtain face validity. Each of the recipients was chosen to preview the survey based on their research expertise in the area of giftedness and reading and recommendations from the researcher's major professor. Dr. Patricia Wood and Dr. Robert Seney responded with feedback which was taken into consideration in the final design of the survey.

When the survey was finalized, a venue through which to distribute it was sought. SurveyMonkey was chosen as the software vehicle through which to design the online version and distribute the survey.

Subject population and recruitment.

Participants in this study included students who were identified as talented and gifted (TAG) by their state of residence's definition who were between the ages of 8 years and 14 years, and the parents of these students. Participants were chosen from a convenience sample of gifted students who participated in summer programs for gifted students, attended schools designed specifically for gifted students or whose parents

subscribed to websites catering to the needs of gifted students and their parents. Since this was a preliminary study, only English-speaking students and their parents or students and their parents who had access to a translator were included in the study. Students and parents who did not have access to a computer were excluded from the study.

Data were gathered via an internet survey distributed through various university summer talented and gifted (TAG) programs, two websites catering to the education of gifted children, publication for parents of gifted children, and various local school districts. Each venue was contacted via e-mail to gain approval for the research and a letter of support was solicited. The researcher had no interaction with the participants who were invited to take part in the study. The researcher's role was that of unobtrusive observer only. This is not a typical researcher role from the social constructivist perspective, but it was deemed necessary for this particular study due to strict time constraints.

Consent/assent process.

Adult participants gave consent by agreeing to take the survey, and their consent was explained to them in the directions at the beginning of the survey. Participants who agreed to consent stated so and continued with the survey. The survey was designed so that there was a link after the parent survey for the children's survey. Assent was confirmed by children completing the survey after they had obtained parental approval and expressing their own willingness to complete the survey.

Methods and procedures.

The survey was conducted through the online survey system SurveyMonkey. A recruitment letter for each research venue was developed and approvals were secured for using the venue. After receiving IRB approval to proceed with the study, the research sites were notified and given the link to the survey. That link was www.surveymonkey/s/oustagsurvey.com (see Appendix A). Most of the questions were quantitative; however there were some open ended questions that gave the participants an opportunity to share information in a narrative format. Participation was voluntary and anonymous, with access to the link via one of the previously mentioned venues to complete the survey online. The survey took approximately 15 minutes for parents and 15 minutes for students to complete.

Both quantitative and qualitative data were collected concurrently using the Validating Quantitative Data Model of the Triangulation Design (Creswell & Plano Clark, 2007). This design was chosen in order to gather a more complete picture than could be obtained by collecting only quantitative data alone and it more thoroughly explained the participants' responses. This is a one-phase concurrent design, meaning there was one opportunity to collect data for this study.

To analyze the quantitative data, descriptive statistics were employed (Creswell & Plano Clark 2007). Coding was used on the qualitative responses to supplement the descriptive statistics. Coding, in general, is applying a short word or phrase to participant responses in order to put those responses into categories that may be analyzed later.

Magnitude coding was used to quantify the qualitative data during the first phase of data

analysis. This method was appropriate because it adds an additional symbolic or numeric code to an already existing category . . . "to indicate its intensity, frequency, direction, presence, or evaluative content" (Saldaña, 2009, p. 58).

When coding the parents' responses, magnitude coding was used as the first layer in the qualitative data analysis. Pattern analysis coding was used as a second layer, and where appropriate, values coding was used as a third layer. When coding the students' responses, magnitude coding was used as the first layer in the qualitative data analysis. Values coding and emotions coding were used as a second layer, and pattern analysis coding was used as a third layer. Patterns were looked for in the student responses after the values coding and emotions coding because once responses were coded a second time, obvious patterns emerged. However, parent responses fell into obvious patterns first, and then the patterns were further analyzed.

Three types of coding were used in this study. Pattern coding, a method that explores over-arching themes, was used to analyze the emergent patterns participants expressed regarding their reading experiences (Saldaña, 2009, p. 152). "Values coding is the application of codes onto qualitative data that reflect a participant's values, attitudes and beliefs representing his/her perspectives" (Saldaña, 2009, p. 89). This method was particularly appropriate since my study involved understanding of perceptions.

Emotion coding was used to analyze the emotional responses participants expressed regarding their reading experiences. The researcher hoped to get a rich description of the participants' experiences as they came to the reading process or

watched their children learn to read, and she used emotion codes to bring out the feelings related to those experiences.

Trustworthiness and Validation of Study.

The triangulation design was used in this study because it allows the researcher to validate results within the study itself. Since this study was conducted in a single phase with no opportunity to go back and question participants further, it was necessary to design a study that had triangulation built into it. This means that qualitative data was collected concurrently with quantitative data, and the qualitative data was used to validate the quantitative data.

Researcher Bias

This study was entered into without any preconceived ideas as to what would be found. However, researcher bias toward a love for reading could cloud judgment in terms of looking for language that portrays reading in a favorable light, as well as the researcher's own experiences with her children and schools. As a constructivist, the researcher had to allow the process to build upon itself, to keep an open mind, to allow the participants the freedom to tell their own story, and to try to understand their stories without interpreting them through her own lens.

Part of the research process was to be ready for the unexpected. The researcher understood the value of the other and the other's story, and was willing to be guided by what the study revealed.

Limitations to Study

The study was conducted via the internet, so one limitation is that the study was limited to people who had access to a computer and the internet. The survey instrument that was used for this study was written and administered in English. Therefore, the study was limited to people who were proficient in English or who had access to someone who was able to translate the survey for them. Because a convenience sample from a variety of programs for gifted or highly able students was used, the population was most likely middle class and participants were less likely to be from economically disadvantaged families. In addition, since the survey focused on reading, those choosing to take the survey may have been exceptional readers. One must be careful in generalizing the results of this study to the general gifted student population since participants were not gathered from a random sample of gifted students and their parents and may have self-selected based on their reading strengths.

Another limitation to this study is that it did not take into account twice exceptional children, and neither learning disabilities nor physical disabilities were considered. This study also did not differentiate as to the environment in which the student was educated, as there were no questions specifically asking if students attended public school, private school or were home schooled.

Summary of Methodology

This study sought to address the following research questions:

1. What were parents of gifted children's perceptions and gifted children's perceptions of their beginning reading process?

- 2. What were parents of gifted children's perceptions and gifted children's perceptions of their Kindergarten and first grade experiences in reading?
- 3. What were parents of gifted children's perceptions and gifted children's perceptions of their current reading experiences in a school setting.
- 4. What would parents of gifted children and gifted children want teachers to know and change in reading approaches for gifted readers?

This mixed-methods study was written from a Social Constructivist paradigm. Survey research is a method typically used by Social Constructivists, and the open-ended response questions in the survey allowed participants to construct the stories of their own experiences and perceptions of the reading process. The study was designed using the Validating Quantitative Data Model of the Triangulation Design, because the study was conducted in a single phase with no opportunity to go back and question participants further. Therefore, it was necessary to design a study that had triangulation built into it. The qualitative data was used to further explain the quantitative data, collected via SurveyMonkey through multiple web sites on the gifted and school districts willing to participate.

Chapter 4 will discuss findings from the parent survey, and chapter 5 will focus on responses from the student survey. Chapter 6 will be a discussion of the results of the surveys, and chapter 7 will be a summation of the results and implications for further research and teacher training.

Chapter IV - Results: Parent Responses

Introduction

Research for this study took place during the summer of 2010. The research sites included various local school districts, two university summer programs for talented and gifted (TAG) students, two websites devoted to parents of TAG students, and a publication geared specifically toward parents of TAG students. Of the 336 sets of participants who took part in this study, 222 parent-child sets were within the demographic parameters of the study (children ages 8-14). Though 222 parents participated in the study, only 148 students participated. The explanation of the results is divided into demographic, quantitative, mixed quantitative and qualitative, and qualitative only responses from parent participants.

Demographics

One hundred eighty-nine participants answered the question, which parent is filling out the survey? Of the 189 participants who completed this question, 93% indicated they were the student's mother, 6% indicated they were the student's father, and the remaining 1% indicated grandparent or both parents.

Participants were asked to indicate their highest level of education and 188 participants chose to answer this question. Mothers indicated an overall higher level of education than fathers, but more fathers held terminal degrees than mothers. Also, all mothers indicated they had graduated from high school, but two participants indicated that the fathers in those households did not. Table 4.1 illustrates this information.

Participants other than the students' mothers and fathers were not asked for their level of education.

Table 4.1

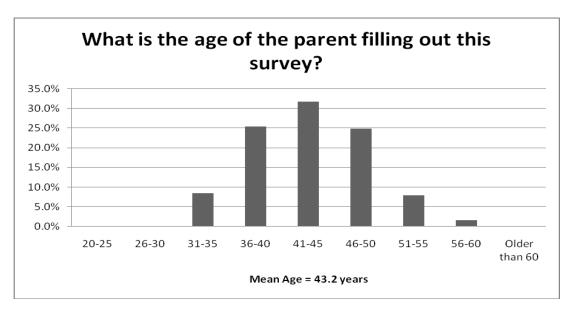
Parent Participants and Highest Educational Level (N=188)

Education Level of	Mother	Father
Parent		
Some High School	N = 0	N=2
High School	N = 3	N = 4
Some College	N = 14	N = 23
Two Year College Degree	N = 7	N = 13
Bachelor's Degree	N = 48	N = 49
Some Graduate Work	N = 29	N = 15
Master's Degree	N = 66	N = 53
Terminal Degree	N = 21	N = 29

The majority, 82%, of the parents participating in this survey were between 36 and 50 years of age. None of the parents participating in this survey responded that they were younger than 31 years of age or older than 60 years of age. The mean age of the parent filling out the survey was 43.2 years of age.

Figure 4.1

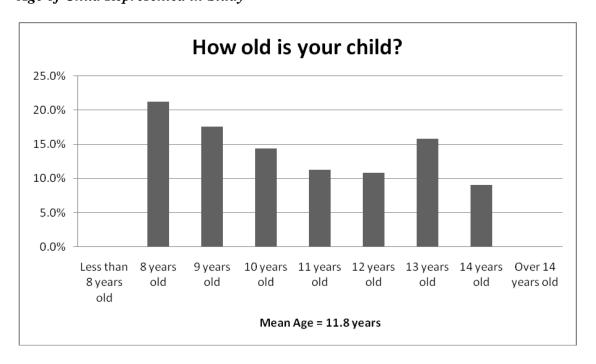
Age of Parental Participants



Parent participants were asked to indicate their child's age. The parameters for this survey included gifted children who were between the ages of 8 and 14 inclusive and their parents. Over 100 surveys fell outside these parameters and were excluded from the study. The highest percentage of participants indicated their child was 8 years of age. The lowest percentage of participants indicated their children were 14 years of age. The mean age of participants' children was 11.8 years of age.

Figure 4.2

Age of Child Represented in Study

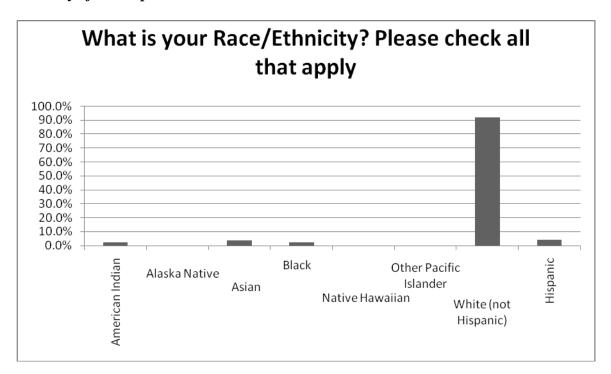


Of the parents participating in this survey, 91.8% indicated their ethnicity as White. The other 8.2% made up the rest of the ethnic groups represented in this study. Those ethnic groups identified themselves as Hispanic, Asian, American Indian and Black. The terminology to indicate ethnicity was taken from the APA guidelines for

determining ethnicity in survey studies (Publication Manual of the American Psychological Association, 2009).

Figure 4.3

Ethnicity of Participant



There were 21 questions in this study that pertained to parents' perceptions of how their children came into the reading process and how they saw their children's reading development evolve. The parents were asked at what age their children appeared to understand various concepts of language and reading throughout their early childhood development.

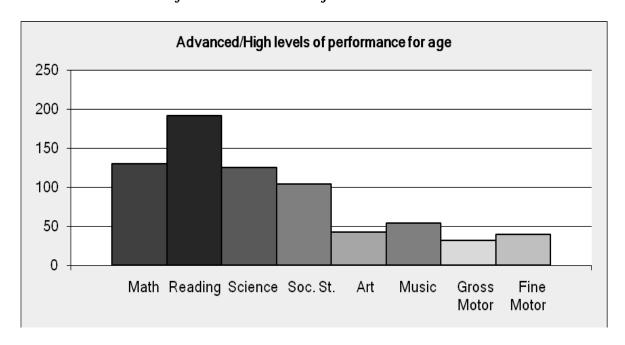
Quantitative Results

Parents were first asked to indicate their child's level of functioning in several skill areas including academics, music, art, gross and fine motor skills. Of the

participants who agreed to participate in this study, 222 participants responded to this question. Parents could indicate multiple areas where children were advanced. In response to this question, 192 participants indicated their students were at the advanced/high levels of performance for age in reading, 130 participants indicated their student was at the advanced/high levels of performance for age in math, 125 participants indicated their student was at the advanced/high levels of performance for age in science. The figure shows that parents who completed this survey considered their children to be most often advanced in reading

Figure 4.4

Indicate Child's Level of Advancement in Subject Area/Motor Skill



Parents were asked *How many grade levels advanced is your child in reading?*Of the 187 participants who responded to this question, 54 responded that they didn't know how advanced their child was in reading. The highest frequency of participants

responded that their child was reading five levels above grade level, and the next two most frequent responses were that the participants' children were reading three and four levels above grade level. The mean of participants responded was 3.5 grade levels above academic grade level advanced in reading. The following table shows the number of levels participants felt their child was advanced and the frequency of response.

Table 4.2

How Many Levels Above Grade Level is Your Child Reading?

Number of grade levels advanced in reading	Number of Responses N=187	
At or below grade level	2	
1	4	
2	14	
3	21	
4	21	
5	29	
6	14	
7	8	
8	11	
9	2	
10	3	
11	1	
12	3	
Don't Know	54	
Mean reading levels above academic grade level = 3.5		

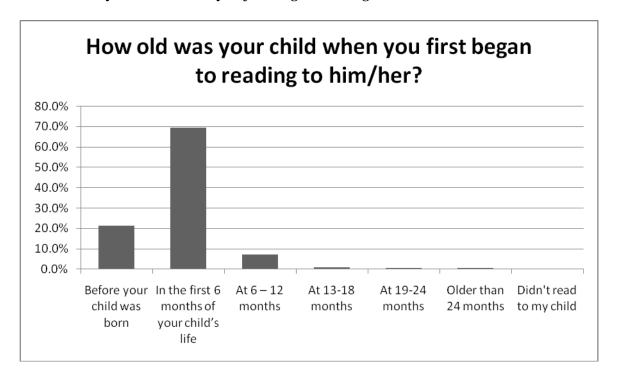
In response to the question, how old was your child when you first began reading to him/her? (206 participants responded) 69.4% of the participants indicated that they first began to read to their child when the child was within the first six months of life.

Over 20% of parents reported reading to their child before birth. Only 0.5% of the participants indicated that they first began to read to their child when the child was

between 19 months and 24 months old or older than 24 months old. No participant responded that they had never read to their child.

Figure 4.5

How old was your child when you first began reading to him/her?

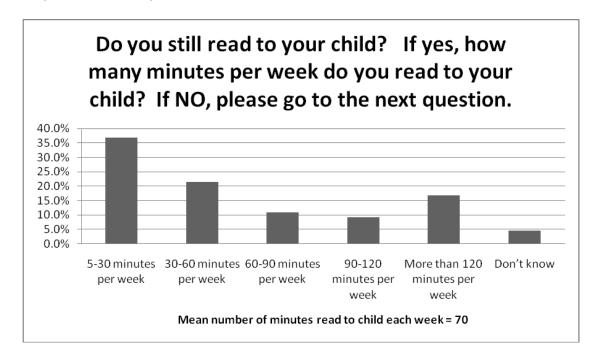


Participants were asked if they still read to their child, and if so, how many minutes per week did they engage in this activity. Of the 130 participants who responded to this question, 36.9% indicated that they read to their child 5-30 minutes per week, 21.5% indicated that they read to their child 30-60 minutes per week, 16.9% indicated that they read to their child more than 120 minutes per week, 10.8% indicated that they read to their child 60-90 minutes per week, 9.2% indicated that they read to their child 90-120 minutes per week, and 4.6% indicated that they didn't know how many minutes

per week they read to their child. The mean for minutes per week participants read to their children was 70 minutes.

Figure 4.6

Do you still read to your child?

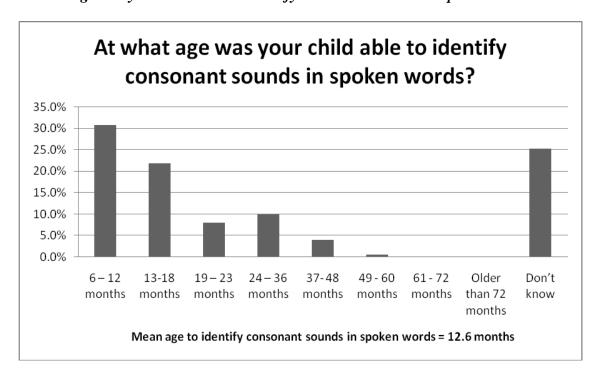


The following five questions pertained to parents perceptions of when their children began to understand the reading process, first through spoken words and then through the written word. Participants were asked to indicate when their children were first able to identify consonant sounds in spoken words, recognize written letters, associate letter shapes with letter sounds, when their child began to read whole words and when their child began to read picture books independently. Picture books are illustrated children's books that may or may not contain words, have one or two words per page or have one short sentence per page.

The results of the first question, *At what age was your child able to identify consonant sounds in spoken words?* are shown in the figure below. It is indeterminable whether the parents were responding that their child could indeed identify a consonant at the beginning of a word, or if their child began babbling consonant sounds as all babies do. The mean age for when the children in this study were able to identify consonant sounds in spoken words was 12.6 months.

Figure 4.7

At what age was your child able to identify consonant sounds in spoken words?

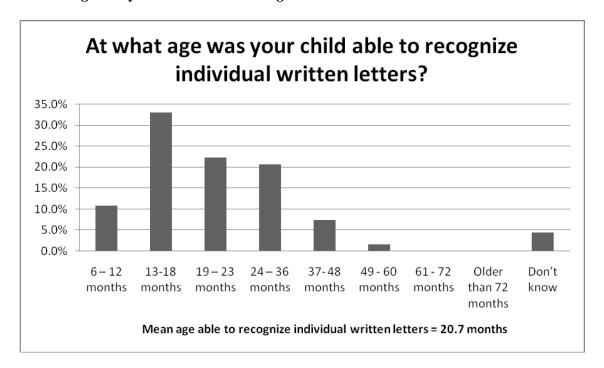


When asked *at what age was your child able to recognize individual written letters*, 33% of the participants responded that their child was between 13 and 18 months old, 22.2% responded that their child was between 19 and 23 months old, and 10.8% responded that their child was between 6 and 12 months old. Fully 86.7% of the

participants indicated that their child was able to recognize individual letters by the time the child was 36 months old, and 66% of the participants responded that their child was able to recognize individual letters before the child's second birthday. The mean age for when children in this study were reported to be able to recognize individual written letters was 20.7 months.

Figure 4.8

At what age was your child able to recognize individual written letters?

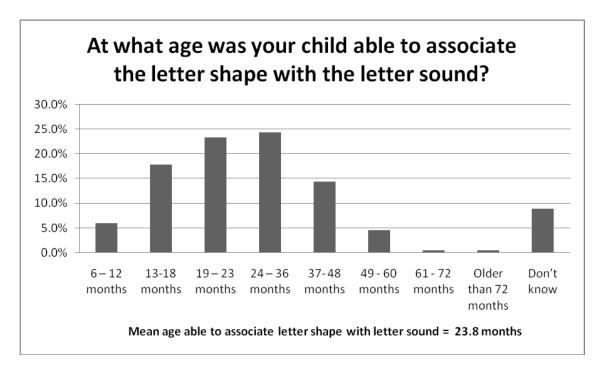


Participants were then asked at what age was your child able to associate the letter shape with the letter sound? The mean age at which participants in this study responded that their child was able to associate the letter shape with the letter sounds was 23.8 months old. Most parents felt their child was able to associate letter shape with letter sound by the time their child was 48 months old. The largest percentage of responses, 79.8%, indicated that the participants' children were associating letter shape

with letter sound between the ages of 13 and 48 months old. Some 24.3% of the participants responded that their child was able to associate letter shape with letter sound between the ages of 24 and 36 months, and 23.3% responded that their child was between the ages of 19 and 23 months. Also, 5.9% of participants responded that their child was able to associate letter shape with letter sound by the time their child was 12 months old.

Figure 4.9

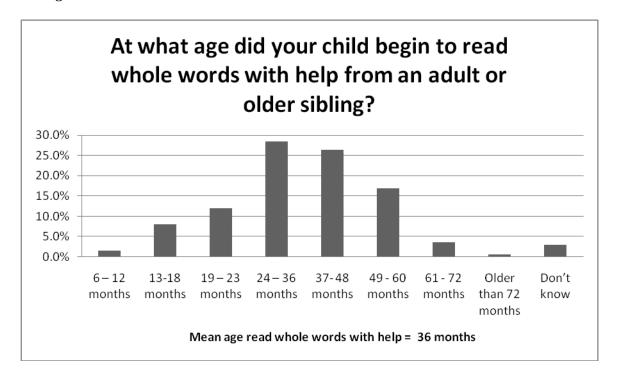
At what age was your child able to associate the letter shape with the letter sound?



The next question asked *at what age did your child begin to read whole words* with help from an adult or older sibling? Of the 201 participants who responded to this question, 28.4% felt their child began to read whole words with help between the ages of 24 and 36 months old. The next highest percentage of responses, 26.4%, fell into the 37-48 month category. However, 21.4% of participants responded that their children could read whole words with help before the children were 24 months old.

Figure 4.10

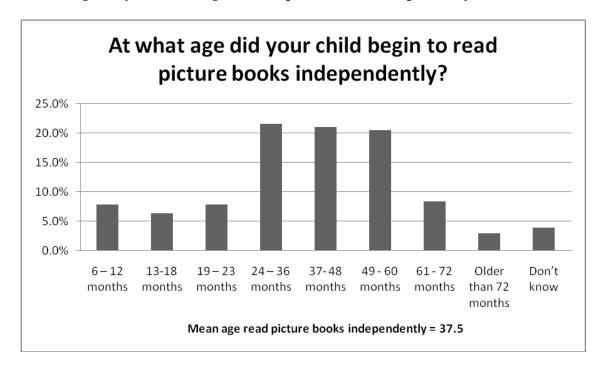
At what age did your child begin to read whole words with help from an adult or older sibling?



Of the 205 participants who responded to the question *at what age did your child begin to read picture books independently*, 63% indicated that their child was between the ages of 24 and 60 months when this phenomenon occurred. The most frequently reported response was 24 to 36 months old at 21.5%. In addition, 21.9% of the participants responded that their child was able to read picture books independently before their second birthday, and 7.8% of participants indicated their child had acquired this skill by the time the child was 12 months old. The mean age at which participants in this study responded their child was when the child began to read picture books independently was 37.5 months old.

Figure 4.11

At what age did your child begin to read picture books independently?



The next section of questions dealt with the students' reading experiences in the early elementary school years. Reading was defined as independently deriving meaning from written text. When asked at what reading level parents determined their child to be upon entering Kindergarten, 50% of the 194 participants who answered this question responded that their child was reading fluently. When asked the same question regarding the child's reading level upon entering first grade, 80% of the 195 participants who responded noted that their child was reading fluently.

Quantitative/Qualitative Results

The following questions were both quantitative and qualitative in nature. They were all clearly yes/no questions, but participants were given the opportunity to qualitatively explain their responses. These questions pertained to parent perception of their child's school reading experiences. After categorizing responses as to whether they were *Yes, No, Other* or *Don't Know*, the explanations were then coded into logical patterns or common themes. Occasionally, responses were split into several categories resulting in more responses than participants. For example, when asked if parents felt their child was being given challenging books to read in Kindergarten, one participant responded with "Yes, after I talked to the teacher, and my daughter was then allowed to bring books from home to read." This response was coded as *Yes*, then as *Brought Books from Home* and again as *Parent Intervention*. This is indicative of coded responses throughout the study.

One hundred ninety participants responded to the question, *Do you feel that your child was given books in Kindergarten to read that were challenging enough to develop further reading skills?* There were 103 *No* responses and 93 *Yes* responses. There were more responses coded than there were participants because some of the responses fit into more than one category. Parents' most frequent *No* responses were coded into four categories; *No Challenge, Other No Responses, Parent Intervention* and *Teacher Training*.

The most frequent *No* response was *No Challenge*. Responses were coded into this category when parents responded that their child was not given reading material or

instruction that met the child's academic needs. Examples of *No Challenge* responses included "They were learning to write and recognize the 'A' in Apple and he was reading at a sixth grade level." and "My child has been bored from the minute he started going to school."

The second most frequent *No* response was *Other No responses*. Responses were placed in this category when they didn't fit into any of the other categories, and the responses were quite varied. Examples of responses placed in this category include, "Kindergarten class did not teach reading skills" and "Our child began talking about wanting to be 'dead' because of school."

Parents indicated that they intervened in their child's Kindergarten with such comments as "We provided a variety of books at home for her to read," and "I asked the school librarian to find books for him." Examples of responses that were coded placed into the *Teacher Practice* category included "the teacher didn't want him to get too far ahead," and "teacher insisted he go through phonics 'because all the rest of the students have to."

Parents' most frequent *Yes* responses were coded into the following four categories; *Appropriate Level of Instruction*, *Parent Intervention*, *Home School*, and *Great Teacher*. Responses that were placed in the *Appropriate Level of Instruction* category included such comments as "He learned to read in Kindergarten." and "His reading ability progressed very quickly in Kindergarten and leveled readers were made available to him."

The second most frequent response category was *Parent Intervention*. The parents who responded that they intervened on their child's behalf made such comments as "We had to provide her with more interesting reading materials so she would be motivated to continue" and "family consultant helped the Kindergarten teacher with lesson ideas and resources." Participants who responded that they *Home School* their child answered simply "We home school."

Responses that were placed in the *Great Teacher* category included such responses as "teacher knew they could all read" and "kindergarten teacher would work with her individually."

Table 4.3

Challenging Books in Kindergarten

Challenging Books in Kindergarten	N = 217
No	125 (57.6%)
No Challenge	50
Other "No" Responses	27
Parent Intervention	21
Teacher Practice	21
Just Plain No	6
Yes	82 (37.7%)
Appropriate Level of Instruction	30
Parent Intervention	15
Home Schooled	14
Great Teacher	14
Progressed Quickly	9
Other	10 (4.7%)

One hundred eighty-eight participants responded to the question, *Do you feel that* your child's Kindergarten teacher made reading fun and interesting for your child?

Responses were coded 110 times into Yes responses (55% of total responses) and 66

times into *No* responses (33% of total responses). Participants responded 23 times with *Don't Know* responses (12 % of total responses).

There are more responses coded than there were participants because some of the responses fit into more than one category. The majority of the *Yes* responses were coded into the category of *Great Teacher*. Responses placed in this category included comments such as "Child had very good relationship with teacher who did treat him as special" and "Excellent teacher, made kids interested in learning." The next most frequent response to this question was simply "*yes*" with 22 participants responding this way.

The third most frequent *Yes* response to this question was coded as *Other*.

Responses were placed in the *Other* category when they didn't fit any particular pattern. *Other* responses included such comments as "He liked her and didn't act out" and "At that age he loved to read and couldn't get enough of books."

Participants also responded that they home schooled their children, they intervened on behalf of their children and their child was either whole grade or subject accelerated at school.

The most frequent *No* response was coded into the category called *Teacher Practice*. Responses were coded into this category when parents indicated they felt their child's teacher was not adequately prepared to teach TAG students. Examples of this type of response included "My son kept asking when he would get the opportunity to learn," "She was so unprepared for a child that could read she didn't know what to do with her" and "My son felt like a 'freak' because he was so different."

The *No* responses were the next most frequent with parents responding just "No." The third most frequent response category was *Parent Intervention*. Responses were placed in the *Parent Intervention* category when parents intervened in some way on behalf of their children. *Parent Intervention* responses included such comments as "... by the second half of the year, he started to refuse school with other anxiety about going to school. We removed him and put him in a Montessori program with older children which helped." and "... the school did not work at challenging my child, and when my child got severely depressed, a gifted specialist suggested that my child be taken out of school and homeschooled."

Table 4.4

Kindergarten Reading Fun and Interesting

Kindergarten Reading Fun and Interesting	N=199
Yes Responses	110 (55%)
Great Teacher	51
Yes	22
Other	16
Home School	13
Parent Intervention	5
Advanced Placement	3
No Responses	66 (33%)
Teacher Practice	39
No	9
Parent Intervention	7
Low Level Books	6
Other	5
Don't know	23 (12%)

One hundred eighty-nine participants responded to the question, *Do you feel that* your child was given books in first grade to read that were challenging enough to

develop further reading skills? Responses were coded 112 times into Yes responses, 67 times into No responses, and 13 times into Don't Know responses. There are more responses coded than there were participants because some of the responses fit into more than one category.

Yes responses were coded into several categories with the most frequently occurring being Appropriate Challenge, Yes and Home School. Comments were placed in the Appropriate Challenge category when participants clearly indicated that their child was provided with reading instruction that was appropriately challenging and taught to the child's reading level. These responses included such comments as "My child had access to books of all levels and was not limited to a curriculum that all students had to participate in" and "School had the 'accelerated reader' program and teacher encouraged reading at higher and higher levels."

The other two most frequent *Yes* responses were just plain "yes" and "We home school our child." Participants also indicated their children were exposed to a wide variety of books at home and/or at school, and some responded that their child was whole grade accelerated. Some parents, again, felt it necessary to intervene at school by bringing books to school for the child, discussing educational strategies with the teacher or pulling the child out and home schooling.

The No responses were coded into several categories with the most frequent being No Challenge, Parent Intervention and Teacher Practice. Responses were coded into the No Challenge category when participants clearly indicated their child was not being appropriately challenged at his/her rate and level of learning. Examples of No Challenge

responses are: "No, the children were not challenged" and "No, her teacher ignored my evidence of advanced work and pleas for greater challenge, and my daughter became clinically depressed."

Responses were placed in the *Parent Intervention* Category when participants responded that they intervened with either the teacher, the school or the administration to ensure their children were being given appropriately challenging books to read at school. Comments that were placed in this category included "Absolutely not. I had several conversations with her teacher about the fact that the books that were being sent home in my daughter's book bag each night were way too simple for her. I was given a lot of excuses as to why she needed to read these books. I would have her read them once, despite being told she was supposed to read them several times, and then let her read self chosen books." and "We had to supplement our child's reading in school with material from home."

Responses were placed in the *Teacher Practice* category when the participant indicated that the main reason for their child not being challenged in reading in first grade was due to the teacher's lack of understanding of the academic needs of gifted children. Typical responses for this category include: "No, not at all. Her teacher was so focused on building fluency that she required all students to read all assigned books 8-10 times before they could get another book. My daughter was miserable and hated reading by spring break, and began saying things like she was stupid and wished she'd never been born." "No. The teacher he had in first grade came from a remedial background, and she was not tuned into gifted kids at all."

The fourth most frequent response category to this question was *Don't Know*.

Responses were placed into this category when participants responded with just plain "Don't Know."

Table 4.5

Challenging Books in First Grade

Challenging Books in First Grade	N=192
Yes	112 (58%)
Appropriate Challenge	24
Yes	22
Home Schooled	19
Great Teacher	13
Wide Variety of Books	11
Whole Grade Acceleration	9
Parent Intervention	8
Other	6
No	67 (35%)
No Challenge	35
Parent Intervention	12
Teacher Practice	8
No	5
Other	4
Home School	3
Don't Know	13 (7%)

One hundred seventy-nine participants responded to the question, *Do you feel that* your child was given books in first grade to read that were challenging enough to develop further reading skills? Responses were coded 68 times into *Don't Know* responses, 57 times into *Yes* responses, and 54 times into *No* responses.

The most frequent response category to this question was *Don't Know*.

Responses were placed into this category when participants responded with just plain "Don't Know."

The Yes responses were coded most frequently into three subcategories, just plain Yes, Teacher Intervention and Other. Reponses were placed into the Teacher Intervention category when they responded with comments such as "She was a great teacher . . . She differentiated within the class and that made all the difference in the world" and "She was great at expanding their imaginations and telling stories."

Yes responses were placed into the Other category when they didn't fit any particular pattern. Examples of Other comments included "Yes, but my son was not progressing very quickly. I realize he had an eye convergence problem." "Yes, but the competitive aspect of AR got to be too much." The third most frequent response to this question was just plain "yes."

The *No* responses were coded most frequently into three subcategories *No*Challenge, No without comment and Home Environment. Reponses were placed into the No Challenge category when participants responded with comments such as "No, we really had to fight in first grade for my daughter to be allowed to read anything close to her level" and "No. Couldn't differentiate curriculum. Teacher was focused on sight words, etc." Participant responses of "no" were placed in the *No* category.

No responses were placed into the Other category when they didn't fit any particular pattern. Examples of Other comments included "I don't' think she made reading unfun, but I don't think she did anything particular to increase the fun factor" and "He doesn't like to read anything he's forced to read."

Table 4.6

First Grade Reading Fun and Interesting

First Grade Reading Fun and Interesting	N=179
Don't Know	68 (38%)
Yes	57 (32%)
Teacher Intervention	19
Other	13
Yes	9
Home School	6
Teacher Read to Students	5
Students' Choice	4
Parent Intervention	1
No	54 (30%)
No Challenge	43
No	9
Home Environment	3

One hundred eighty-eight participants responded to the question, *Does your child* enjoy reading at school? Responses were coded 136 times into *Yes* responses, 34 times into *Don't Know* responses and 18 times into *No* responses. The top *Yes* responses were coded into three subcategories, just plain *Yes*, *Home School* and *Reads Voraciously*.

The responses that were a simple "yes" answer were placed in the just plain *Yes* category. The responses placed into the *Home School* category were those in which the participants indicated they home schooled their children. Examples of responses that were placed in the *Reads Voraciously* category included "Yes, Reads as much as possible," and "He likes to read anywhere. He will often read on his lunch break too."

The most frequent *No* responses fell into three subcategories, just plain *No*, *Doesn't Like to be Forced* and *Poor Teaching*. Responses were placed in the just plain *No* category when the participant answered with a simple "No." Responses were placed

in the *Doesn't Like to be Forced* category when participants answered that their child didn't like to be forced to read assigned texts at school. Examples of *Doesn't Like to be Forced* included "He doesn't like reading anything he's forced to read" and "She does not like to be forced to read what a teacher wants her to. . . . The teacher was rather rigid in wanting them to do the same things."

Responses were placed in the *Poor Teaching* category when participants indicated they felt their child was not being taught to the child's rate and level of reading.

Examples included "The grade level of books being taught in my daughter's sixth grade honors reading class ranged from the third to fifth grade level." and "Levels are usually too low, class reading assignment takes too long (weeks to read a book he can read in a day)."

Table 4.7

Reading Enjoyment at School

Reading Enjoyment at School	N=188
Yes	136 (72%)
Yes	62
Home School	21
Reads Voraciously	20
Reads Books of Interest and Own Choice	12
Enjoys Reading if Student Get to Choose Books	9
Other	7
Appropriate Instruction	5
Don't Know	34 (18%)
No	18 (10%)
No	8
Doesn't Like to be Forced	4
Poor Teaching	2
Parent Intervention	2
Dislikes Writing About Books	1
Other	1

One hundred eighty-seven participants responded to the question, *Is your child* given the opportunity to read books at his/her reading level at school? Responses were coded 142 times into *Yes* responses, 20 times into *No* responses and 20 times into *Don't Know* responses which participants simply answered "don't know."

The most frequently coded *Yes* responses were place into three subcategories, just plain *Yes*, *Home School* and *Challenging Reading*. The responses were placed in the *Yes* and *Home School* categories when participants responded with simply "yes" or "we home school our child" answers respectively.

Responses were placed in the *Challenging Reading* category when participants indicated their child was being given the opportunity to read books at school that were at the child's rate and level of reading this past year in school. Comments that fit into this category included "Yes, he is assigned challenging reading for one hour every weekday" and "They are both given the opportunity to read books at their level, below their level but fun for them, and above their level but interesting to them."

Participants indicated their children were given opportunities to read books at the children's reading level if the student participated in a school or program designed specifically for gifted children. Participants also felt their children were given opportunities to read books at the children's reading level if they were allowed to choose their own books during reading time.

The most frequent *No* responses were coded into three categories, *No*, *Low Level Books* and *Brought Books From Home*. Responses were placed into the just plain *No* category when participants answered simply "no." Responses were placed into the *Low*

Level Books category when participants indicated they felt their child was being given books that were below the child's reading ability to read in school. Examples of responses that fit into this category included "I suspect it is still slightly below her level" and "Only low level books."

Responses were placed in the *Brought Books from Home* category when participants indicated that they had to send books to school for their children to read in order to provide the child with books at his/her reading ability. Comments that fit into this category included "No, but she is allowed to bring in books from home" and "Not really, other than books they get outside school and bring there [*sic*] themselves."

The least frequently coded responses for this question fell into the *Schools Could Have Done Better Category*. Responses were placed in this category when participants responded that they thought their children were given a few opportunities to read books at the children's reading level, but there could have been more, and the school could have been more diligent in making sure the children had such opportunities. Comments for this category included "Yes, for the most part. Much of the mandatory reading materials are beneath her level," and "yes, in general, although he would benefit from additional guidance in choosing appropriately challenging books, and he would benefit from more curriculum time devoted to free reading."

Table 4.8

Opportunity to Read Books at Student's Level

Opportunity to Read Books at Student's Level	N=187
Yes	142 (78%)
Yes	59
Challenging Reading	27
Home Schooled	20
Gifted Program	10
Students' Choice	10
School Could Have Done Better	7
Other	6
Parent Intervention	3
No	20 (11%)
No	8
Low Level Books	6
Books Brought From Home	2
Other	2
Parent Intervention	1
Didn't Read at School	1
Don't Know	20 (11%)

Parents were asked *Do you feel that your child was given appropriate instruction* in reading or literature that addresses her/his reading level during the past school year? There were 187 participants who answered this question. The responses were coded into *Yes* responses 99 times, *No* responses 49 times and *Don't Know* responses 39 times. Responses were coded into the *Schools Could Have Done Better* category for both *Yes* and *No* responses. This happened because of the way participants responded to this question. Examples included such comments as "Yes, she was challenged, but the school could have done a better job" and "No. They could have provided better instruction."

The most frequently coded *Yes* responses were place into three subcategories, just plain *Yes*, *Gifted Program* and *Good Teaching*. The responses were placed in the *Yes* category when participants responded with simple "yes" answer.

Responses were placed in the *Gifted Program* category when participants indicated their child was in a school or program specifically designed for gifted students this past school year. Comments that fit into this category included "Yes, finally she is being challenged in the third year of the Highly Gifted program" and "Yes, but only because he's in a gifted academy."

Responses were placed in the *Good Teaching* category when participants indicated their child's teacher had done a particularly good job of providing appropriate instruction for their child this past year in school. Comments that fit into this category included "Yes, excellent prompting from teacher to push herself in reading" and "Yes, I do think the school teachers are giving her the guidance she needs."

The most frequent *No* responses were coded into three categories, *No*, *Poor*Teaching and Parent Intervention. Responses were placed into the just plain No category when participants answered simply "no." Responses were placed into the Poor Teaching category when participants indicated they felt their child was not being given instruction in reading commensurate with the child's reading ability to read in school. Examples of responses that fit into this category included "I don't think they were given any instruction in reading this year" and "She is completely independent at this point and so far ahead of her grade level, her teacher just lets her choose whatever she wants to read and write book reports."

Responses were placed in the *Parent Intervention* category when participants indicated that they had to intervene with the teacher, the administration or the school district in order to get appropriate reading instruction for their child. Comments that fit into this category included "I had to talk to the teacher to get her to differentiate" and "We have asked the school for more teaching of literature but this has only happened once this past year."

Table 4.9

Appropriate Reading Instruction during Past School Year

Appropriate Reading Instruction During Past School Year	N=187
Yes Responses	99 (53%)
Yes	53
Gifted Program	17
Good Teaching	15
Advanced Placement	9
School Could Have Done Better	4
Students' Choice	1
No Responses	49 (26%)
Poor Teaching	18
No	16
Parent Intervention	5
School Could Have Done Better	3
No Intervention/Differentiation	2
Don't Know	39 (21%)

Qualitative Results

These questions were longer response items that did not provide *yes*, *no* options. The following questions pertained to the parent's perceptions of their child's current reading experiences at home and at school.

Participants were asked, What kinds of experiences led to your child enjoying reading? and 186 participants responded. The following are the most frequent response categories that emerged from this question: Read to/with child each day (N=87), Allowed to read books of interest (N=64), Variety of books available/Literacy rich environment (N=45), Parents showing interest in reading (N=34), and Curiosity/imagination/thirst for knowledge. (N=32)

Responses that were included in the *Read to/with child each day* category included such comments as "I would sit next to him each night and read a book while he read his book. I also read one page of his book and then had him read one page of his book," "Reading to her from the time she was born," and "I read to him almost every day. Read to him daily from 3 months to age 7. Then read to him 3-4 days per week until age 11."

Responses that were included in the *Allowed to read books of interest* category included such comments as "Allowed to read book of interest," "She is allowed to read almost anything she likes (we don't allow books with too sexual content) and stop if she dislikes the book," and "Choosing books he wanted to read."

Responses that were included in the *Variety of books available/Literacy rich environment* category included such comments as "large personal library of children's books at home, weekly trips to the library from the age of 3, no restrictions on types or quantity of books that can be checked out from the library," "wide range of reading materials at home," and "frequent exposure to a wide variety of good books."

Responses that were included in the *Parents showing interest in reading* category included such comments as "Making reading a family event, where everyone (including the cat) piles onto the bed to listen to one of us read out loud," "parents showing interest in books," "He saw his father and me reading all the time," and "Both my husband and I enjoy reading and set aside time where we both read."

Responses that were included in the *Curiosity/imagination/thirst for knowledge* category included such comments as "Insatiable need for independent research. How he taught himself to read," "She discovered the vast amount of information available on a variety of subjects that interested her," "Reading is fun! He got huge status points from the other first graders because he could read them the written introduction to the film Star Wars," "My child likes stories. She enjoys fiction and well written true stories or biographies. She is very curious," and "When he was 2 and 3, he was REALLY into dinosaurs. He learned to read by sounding out scientific names of dinosaurs. He had a baby brother and knew that he couldn't always wait for me to read to him anymore so he figured out how to figure out the information for himself."

Participants were asked, What kinds of experiences led to your child not liking to read? There were 149 participants who responded to this question. The following are the most frequent response categories that emerged from this question: Being forced to read books that were dull/boring/not interesting/not challenging (N = 38), Books with too many words/too challenging (N=12), Forced to read at grade level rather than reading level, (N=10), Forced to read teacher-selected books, (N=7), and Writing/talking about reading (N=7).

Responses that were included in the *Being forced to read books that were*dull/boring/not interesting/not challenging category included such comments as "Well, if
he were forced to read something that was dull or dumb, that would kill his passion,"

"Being forced to read for time," "Being forced to read the same books over and over to
gain fluency," "Books he considers boring," and "Reading 'baby books' that are much
too easy."

Responses that were included in the *Books with too many words/too challenging* category included such comments as "Being frustrated or feeling that he couldn't do it," "A book with too many words," "Difficulty with small fonts," and "If anything is even the tiniest bit challenging--she says it hurts her brain and she will not pursue it. Actually through public school, she became quite the underachiever."

Responses that were included in the *Forced to read at grade level rather than* reading level category included such comments as "Being forced to read books that didn't interest them because they were at their level (which usually meant their grade level and not their reading level)," "Being forced to read easy stuff in 1st grade, things she mastered long ago. [My daughter] felt they were purposely just trying to keep her busy and that it was a waste of her time," "Keeping her reading level at grade level and no challenges to a higher level," and "His 3rd grade teacher would not let him read to his level. When studying comparison, he asked to compare plate tectonic shifts on mars vs the earth but was told he had to compare spaghetti poems. He was also repeatedly told that his writing couldn't be understood by his classmates so he should write to their level. He stopped writing for over a year."

Responses that were included in the *Forced to read teacher-selected books* category included such comments as "He hated being teased, or forced into the role of student teacher. His second grade teacher constantly told students 'I'm busy. Ask him.' when they needed help," "She does not like to read books selected by the teacher, even ones that are non-academic," "Teacher-chosen books when she isn't allowed to read as fast/far as she is allowed to, or when the teaching methodology is only about reading comprehension rather than sharing ideas," "Teachers who do not choose subject matter that is of interest to little boys," and "Assigning particular texts rarely worked."

Responses that were included in the *Writing/talking about reading* category included such comments as "Reading and writing prompts that were required to show mastery in language arts," "He does not like to write about what he reads. Having to write about his thoughts on a book makes him not want to read," "Having to complete reading logs every night in school," and "Did not enjoy reading assigned books then doing a monthly book report."

Participants were asked, *Is there was anything else they would like to add about their child's reading experience at school that they hadn't already explained?* There were 137 participants who answered this question. The following response categories were what emerged from this question: *Wish teachers were properly trained to teach TAG students* (N=42), *Parent is afraid poor instruction is going to 'kill' their child's love of reading* (N=26), *School has been a great experience* (N=16), *Homeschooling saved the child* (N=14), *Not all TAG kids learn the same way* (N=8), *Parents need to know when to change child's learning environment* (N=8), *Give students choice* (N=7), *Need to*

address social and emotional needs of TAG students (N=6), Child was bored from day one (N=4), and School was miserable to the point of abusive (N=3).

Responses that were included in the *Wish teachers were properly trained to teach TAG students* category included such comments as "teachers didn't encourage additional development. Made her more self-conscious of her skills. As long as she was above grade level, they weren't interested in helping her make progress," "Some teachers just don't get it. What is the point of holding back readers?" "In the early years, he was not allowed to advance and was made to sit through boring, repetition. In the middle years, he was allowed to "skip" instruction and read on his own, but was never instructed at an advanced level. He has never been challenged to learn or advance," and "Teachers need to be ready to teach at all levels. Our school concentrates the great majority of resources on getting kids to read at grade level. Those that are above grade level are left to wait for the others to catch up!"

Responses that were included in the *Parent is afraid poor instruction is going to 'kill' their child's love of reading* category included such comments as "She would have been better off with no reading instruction and letting her learn on her own than the type of instruction she got in 1st grade. I feel fortunate that it didn't complete kill her love of learning long term," "The school seems to have taken all pleasure out of it for him," and "I just wish that the focus wouldn't only be on raising the lowest level reader up. How about challenging the high level readers? My son LOVES to read, but often, I'm afraid the 'instruction' is going to kill his love."

Responses that were included in the *School has been a great experience* category included such comments as "very good experience. It's been much easier to find appropriate level in reading than in math," "She has had really great teachers to help her along the way," and "Our school is not the norm. We live in a well-off district with teachers who are well-trained and who are encouraged (and funded) to keep abreast of what is happening. The LLC and librarians are AMAZING--they know the kids and what they like to read. They order books accordingly."

Responses that were included in the *Homeschooling saved the child* category included such comments as "I feel very confident that had we not homeschooled him beginning in first grade, he would not have been encouraged to develop his reading skills to the degree that he did working at home," "Homeschooling and finding a part-time school for homeschoolers with teachers who specialize in working with gifted kids has made a world of difference," and "Homeschooling makes ALL the difference in the world to a child like this."

Responses that were included in the *Not all TAG kids learn the same way* category included such comments as "I think teachers need to know that not all kids learn to read by phonics and if they can read and comprehend, does it really matter how they learn?" "I used to be very optimistic about schools being able to help him, but no longer! Teachers think they've 'seen it all' and that's a joke. They tend to assume parents of gifted kids are 'pushy' and only want their children to be praised when the truth is the parents want their child to feel good about themselves and learn to work hard toward

goals," and "Educators should not assume anything about children, including their abilities, interests and feelings."

Responses that were included in the *Parents need to know when to change child's learning environment* category included such comments as "I don't think any school experience is perfect . . . you have to try to find the best fit for your child, and supplement or give them the opportunity to delve deeper at home in any area they like. As parents, we need to realize that although schools should/try to teach our children, we are and always will be their first teachers . . . it's not up to schools to raise them. In today's society we have a lot of options, schools, home schooling...online etc...do what works...if it stops working be willing to change. There are no instruction manuals!" and "Our school systems are not prepared to handle highly gifted kids. Next year we will home school to try a different approach."

Responses that were included in the *Give students choice* category included such comments as "He does much better with nonfiction than fiction," "In elementary school, she had read virtually all the books in the library. She did express frustration that [there] was not more for her to read," and "Once he discovered the joy of books, he became addicted to the written word. He took Encyclopedias off the shelf at age 19 months and tried to read them and insisted on a reading course that came with the set of books."

Responses that were included in the *Need to address social and emotional needs* of *TAG students* category included such comments as 'Son often lacks peers --especially before total school clustering was started. Still does not have any kids with the level or obsession with reading," "It's hard to find peers for her who are her age and read as well

and as voraciously as she does. There have been kids who treated her as odd for reading so well," and "Schools need to ability group not only to have peers at the same level, but to have peers that may have other things in common and to form friendships."

Responses that were included in the *Child was bored from day one* category included such comments as "Our other daughter (13) got the highest reading test grade in her large middle school for 3 years running, yet is so bored with school that she totally doesn't live up to her potential, failing several core classes & having to repeat 7th grade. They took her out of honors level classes due to non-performance, so now she's even MORE bored," and "Since my child is laid back and doesn't like to make waves she ambled along, and I had to fight just to have her tested for the gifted program, because she was underachieving to conform. I get upset when I think about all of the wasted time that my child spent sitting in class with nothing to do. It wasn't until she reached 5th grade that she articulated to me that she was sitting for 3-4hrs/day with nothing to do, b/c [sic] her work was all completed---not completed well, she just raced through it to be done with the tedious exercises."

Responses that were included in the *School was miserable to the point of abusive* category included such comments as "It was miserable and should be considered educational abuse or neglect," and "It was non-existent. The school system was very damaging for my son."

Participants were asked, What would you like your child's teacher to know about or do differently in term of reading instruction for your child? One hundred fifty-six participants responded to this question. The following are the most frequent response

categories that emerged from this question: *Listen to me!* (N=126), *Teach/Challenge TAG students* (N=51), *Allow student to advance at student's own pace* (N=28), *Ability group TAG kids*, (N=21) and *Train Teachers to teach TAG students* (N=19).

Responses that were included in the *Listen to me!* category included such comments as "Ask me, as her parent, what should we do? We should be a team working collectively for our children," "Listen to parents and children when they say that the work is too easy. Comprehensively assess reading level early on, and repeat such assessment frequently, as the level can change rapidly. Don't expect bright children to quietly accept not being allowed to learn something new every day when the other children are getting the opportunity to learn something new every day," and "I would like them to listen to me. She is profoundly gifted and I have dealt with her needs for 10 years. They've probably never had a kid like her or very few. As her parents, we are the experts in terms of her educational needs. They need to included us in her planning and look at it as a team approach. Of course, they don't."

Responses that were included in the *Teach/Challenge TAG students* category included such comments as "More challenge in early grades and do more assessment in pre-K and Kindergarten," "please challenge the children instead of asking them to just help their friends who are behind," and "there needs to be differentiation in the classroom for high ability readers."

Responses that were included in the *Allow student to advance at student's own* pace category included such comments as "More independent reading of topics of interest to child. This would allow child to progress at child's pace, not the school's,"

"Allow my child to read at his level and challenge him at his level rather than trying to force him to slow down or diminish his abilities," and "Teachers need to allow children to read at their ability level, preferably books with content of their choosing (so they are interested in what they are reading plus appropriately challenged)."

Responses that were included in the *Ability group TAG kids* category included such comments as "K-3rd needs to test kids and put into ability groups," and "Group all the highly/profoundly gifted students together in the same class."

Responses that were included in the *Train Teachers* category included such comments as "I think that the entire public school system is not set up to meet the needs of gifted learners," "I think there needs to be some serious re-vamping of how we teach our brightest kids," and "At our regular neighborhood elementary school, I would have wanted his teachers to know that a child must be instructed at his correct rate and level. It is cruel to hold a child back and to ignore his needs just because he is more advanced than anyone else in the class. Highly gifted kids are just as entitled to a good education and should not be ignored or neglected as they currently are in regular neighborhood elementary schools."

Participants were asked; *Is there anything you would like to add regarding your child's reading development?* There were 130 participants who responded to this question. The following were the most frequent response patterns that emerged from this question: "Learning to read seemed to happen naturally, as a matter of course rather than through formal instruction" (N=48). "Parents need help finding appropriately challenging/content for children" (N=9). "Reading to child at night leads to love of

reading" (N=7). "Allow children to choose what they want/and when to read" (N=7). "Don't hold children back/provide appropriate instruction" (N=5).

Summary

Parent participants were asked a series of questions pertaining to their child's very early childhood reading experiences, their early school reading experiences and their current school reading experiences. The data was broken down in to demographic data, quantitative data, quantitative/qualitative data and qualitative data.

There were 222 participants in the study, but not all participants answered all the questions. The tables and figures illustrate the most frequent responses participants gave to the questions, and the tables were preceded by a brief explanation of the data, how the data was coded if applicable and the frequencies of the most frequently occurring responses. The most striking results from the data are the parents' responses to how young their children were when they acquired early pre-reading skills.

Participants answered with a variety of responses as to whether or not their child was receiving appropriate instruction in reading. Some participants responded they were home schooling and felt they were doing an adequate job of challenging their children in reading. Some participants indicated they had their children in either schools or programs designed specifically for gifted children. These participants responded that their children were being appropriately challenged and adequately taught higher level thinking skills in reading. There were some participants, though, who responded that school was a tragic experience for their children. One parent felt that school was abusive for the child. Other parents responded that their child was bored from day one in school.

Key findings in this chapter were:

- 1. The parents in this study reported that their children demonstrated emergent reading skills years before what is considered not only typical, but earlier than what was previously reported in research on gifted or precocious readers.
- 2. The early readers seemed to learn to read spontaneously.
- 3. The children who weren't early readers grasped the concepts quickly in either Kindergarten or first grade and were reading well above chronological grade level sometimes by November of that school year.
- 4. The early readers in this study appeared to maintain their early reading advantage.
- Parents would like teachers and administrators to listen to them and work collaboratively with them when designing a course of instruction for their children.

This chapter dealt with the parent participants in this study. The next chapter deals with the student participants and how they responded to the questions they were asked.

Chapter V - Results: Student Responses

Introduction

The student survey was conducted simultaneously with the parent survey. Students' responses were only considered if three criteria were met. First, the parent gave permission for the student to take the survey, and second, the student willingly wished to participate. Lastly, the students had to be between the ages of 8 and 14 inclusive. There were 148 student participants who met all criteria and whose data was considered.

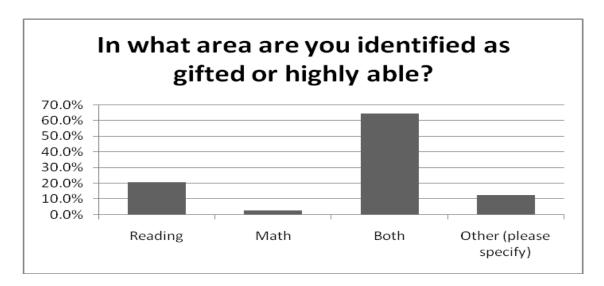
The explanation of the results is divided up into demographic, quantitative, mixed qualitative and quantitative, and qualitative responses from student participants.

Demographics

Once it was established that the student participant fit the demographic of being gifted or highly able, they were then asked *In what area are you identified as gifted or highly able?* The choice options were *Reading, Math, Both* and *Other*. Of the 146 participants who answered this question, 20.5% of the students responded they were identified as gifted in reading, and 64.4% of them responded that they were identified as gifted or highly able in both *reading* and *math*. There were 12.3% of the participants who indicated they were identified as gifted or highly able in something other than *reading* and *math*. Other subjects participants identified included music, art, science, social studied, general academic ability, English, technology and all subjects.

Figure 5.1

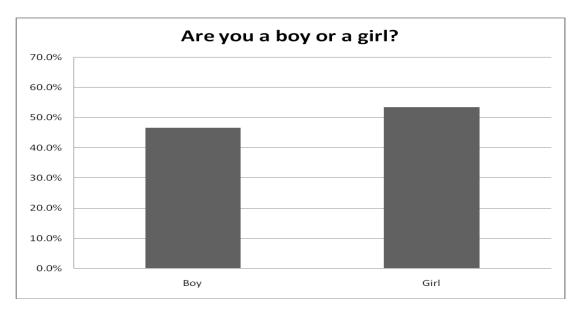
In What Area Are You Identified as Gifted or Highly Able?



Of the 148 students who answered the questions *Are you a boy or a girl*, 79 or 53.4% identified themselves as girls, and 69 or 46.6% of the participants identified themselves as boys.

Figure 5.2

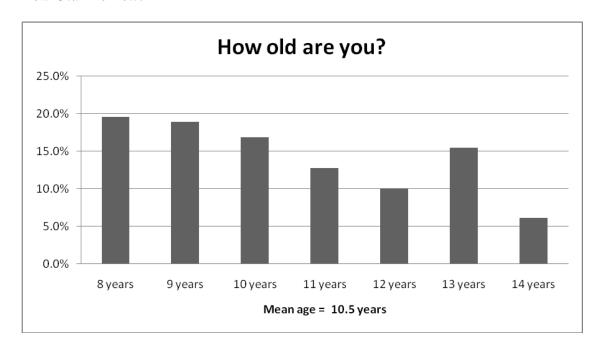
Are you a Boy or a Girl?



Students were asked to indicate their age. The demographic for this study was gifted or highly able students who were between the ages of 8 and 14 inclusive. The highest frequency response was that participants indicated they were eight years old. The figure below illustrates the age distribution of the participants. The mean age for student participants was 10.5 years old. The difference in mean ages between parent participants' responses (age 11.8 years old) and student participants' responses may be due to there being more parents who participated in this study than students. It may also be due to older children not being as willing to participate in the survey as younger children.

Figure 5.3

How Old Are You?

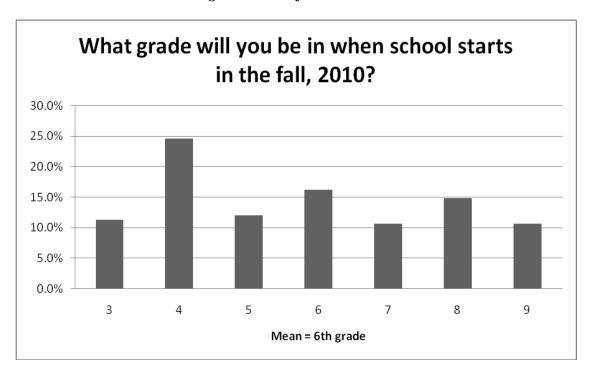


Participants were asked *What grade will you be in when school starts in the fall,* 2010? One hundred forty-two participants responded to this question. The largest

number of participants responded they would be in the 4th grade in the fall with 35 participants or 24.6% responding in this way. Participants entering the 6th grade gave the next most frequent response with 23 participants or 16.2% responding in this way. The remainder of the number of participants responding to this question were 21 participants or 14.8% indicated they were going into the 8th grade, 17 participants or 12% indicated they were going into the 5th grade, 16 participants or 11.3% indicated they were going into the 7th grade, and 15 participants or 10.6% indicated they were going into the 9th grade. The mean grade level was 6th grade.

Figure 5.4

Grade Level When School Begins in Fall of 2010



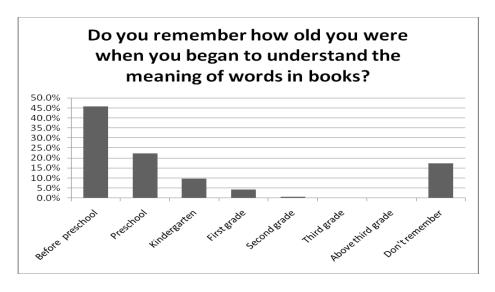
Quantitative Results

Eleven questions in this study pertained to students' perceptions of how they came into the reading process and how they saw their reading development evolve. The students were asked nine questions pertaining to their early childhood experiences in reading and two questions pertaining to their current reading experiences.

Students were first asked *Do you remember how old you were when you began to understand the meaning of words in books?* There were 144 participants who responded to this question. Of these participants, 66 indicated they began to understand the meaning of words in books before they started pre-school, 32 indicated they began to understand the meaning of words in books in pre-school, 14 indicated they began to understand the meaning of words in books in Kindergarten, 6 indicated they began to understand the meaning of words in books in 1st grade, and 1 participant indicated he/she began to understand the meaning of words in books in 2nd grade.

Figure 5.5

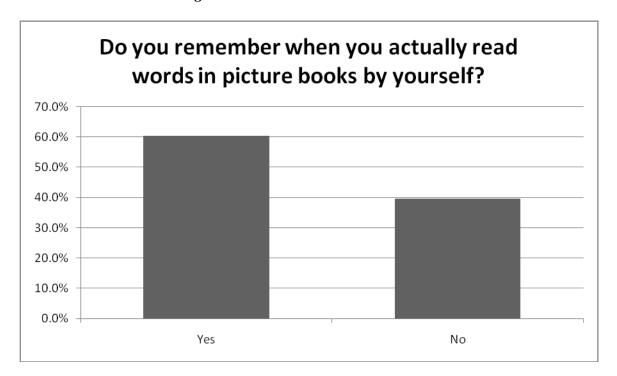
Age of Beginning Understanding of Word Meaning in Books



Student participants were asked *Do you remember when you actually read words in picture books by yourself?* Picture books are illustrated children's books that may or may contain words, have one or two words per page or have one short sentence per page. There were 144 participants who answered this question. Of the participants who answered this question, 87 responded with *yes*, and 57 responded with *no*.

Figure 5.6

Do You Remember Reading Words in Picture Books?

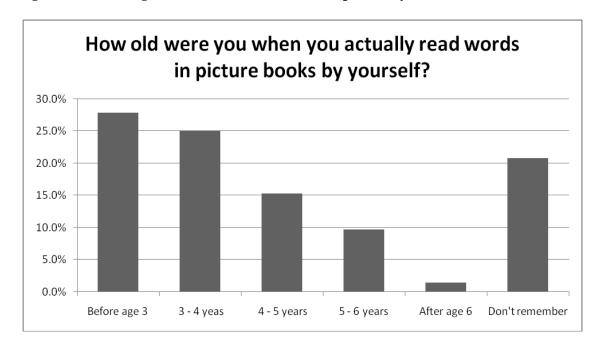


The participants were then asked *How old were you when you actually read* words in picture books by yourself? The response categories were before age 3, between 3 and 4, between 4 and 5, between 5 and 6, after age 6 and don't remember. The greatest number of participants, 40, responded that they were younger than 3 years old when they first began reading words in picture books by themselves. There were 36 participants

who responded that they were between the ages of 3 and 4 when they first began reading words in picture books by themselves. Twenty-two participants responded that they were between the ages of 4 and 5, 14 participants responded that they were between the ages of 5 and 6, and 2 participants responded that they were older than age 6 when they first began reading words in picture books by themselves.

Figure 5.7

Age When Reading Words in Picture Books Independently

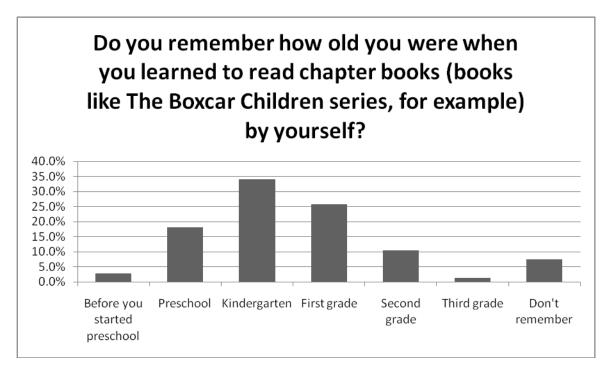


One hundred and forty-four participants responded to the question, *Do you* remember how old you were when you learned to read chapter books (The Boxcar Children, for example) by yourself? There were 49 participants who responded that they were in Kindergarten when they first learned to read chapter books by themselves. There were 37 participants who responded that they were in first grade, 26 participants who responded that they were in pre-school, 15 participants who responded that they were in

second grade, 4 participants who responded that they weren't yet in pre-school, and 2 participants who responded that they were in third grade when they first learned to read chapter books by themselves. There were 11 participants who responded that they didn't remember when they first learned to read chapter books by themselves.

Figure 5.8

Age When Learned to Read Chapter Books Independently



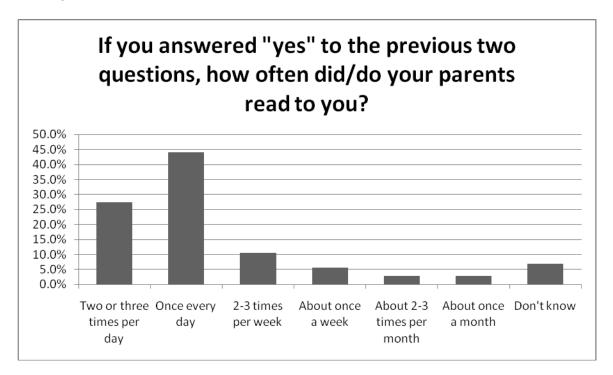
Students were asked *Did your parents read to you when you were little?* Of the 144 participants who responded to this question, 143 responded *Yes* and 1 responded *No*. Students were then asked *Do your parents read to you now?* Of the 144 participants who answered this question, 72 responded *Yes* and 72 responded *No*.

The next question was, If you answered "yes" to the question 'Did your parents read to you when you were little,' how often did/do your parents read to you? The

majority of participants, 63, responded that they were/are read to *once every day*. Thirty-nine participants responded that their parents read to them *two or three times per day*, 15 participants responded that their parents read to them *two or three times per week*, 8 participants responded that their parents read to them *about once a week*, 4 participants responded that their parents read to them *about two or three times a month*, and 4 participants responded that their parents read to them *about once month*. Ten participants responded that they *didn't know* how often their parents read to them.

Figure 5.9

How Often Do Parents Read To You?



There were 144 participants who responded to the question *Is there another adult* in your life such as a grandparent or neighbor who reads to you now or read to you when

you were younger? Eighty-two participants responded with a Yes answer, and 62 participants responded with No.

Students were asked *Did/do you enjoy having an adult read to you?* Of the 142 participants who answered this question, 137 responded with a *Yes* answer, and 5 responded with *No*.

The next two questions pertained to the students' current reading experience. The students were asked, *Was reading fun for you in school this past year?* One hundred and thirty-seven participants responded to this question, and of these, 120 responded with a *Yes* answer and 17 responded with *No*.

The final strictly quantitative question asked students *Do you like to read now?*Of the 138 participants who responded to this question, 131 responded with a *Yes* answer and 7 responded with *No*.

The next section of questions dealt with the students' reading experiences in the early elementary school years. Reading was defined as independently deriving meaning from written text.

Quantitative/Qualitative Results

The following questions were both quantitative and qualitative in nature. They were all clearly yes/no questions, but participants were given the opportunity to qualitatively explain their responses. After categorizing responses as to whether they were *yes, no, other* or *don't know*, the explanations were then coded into patterns that emerged from the participants' responses.

One hundred twenty-eight participants responded to the question, *Do you think* having an adult read to you helped you learn to read? Explain. There were 93 Yes responses, 22 Don't Know responses and 13 No responses. The responses weren't broken down into further code categories. The No and Don't Know responses were simply "No" and "I don't know." Examples of the Yes category included such comments as "Yes. I was interested in reading, and wanted to do so myself," "Yes helped me understand the words better and recognize them," and "It definitely helped me because it helped me understand the meanings of words at an early age."

Table 5.1

Did Having An Adult Read to You Help You Learn?

Did Having An Adult Read to You Help You Learn?	N= 128
Yes	93 (73%)
Don't Know	22 (17%)
No	13 (10%)

Students were asked *Did you get to read the kinds of books you like this past year at school? Explain why or why not.* There were 129 participants who chose to respond to this question. Responses were coded 92 times into *Yes* responses, 22 times into *No* responses, 13 times into *Sometimes* responses and two times into *Don't Know* responses. The most frequent *Yes* responses were coded into three categories; *Wide Variety of Books/Choose Own Books, Just Plain Yes* and *Favorite Genré*. Responses that were placed into this category included such comments as "Yes. Because I was able to choose from a wide variety of books," and "yes, because the projects we had to do we got to pick our own books for."

The second most frequent *Yes* responses were those that fell into the *Just Plain Yes* category. Participants responded with just a "yes" answer. Responses were coded into the *Favorite Genré* when students indicated that they were allowed to choose the books they enjoyed reading from the types of books they found most interesting.

The most frequent *No* responses were coded into three categories: *No Choice*, *Books Were Too Easy*, and *Books Not Interesting*. Responses that were placed into the *No Choice* category included such comments as "NO!!!!! We had to do this thing called READO which is reading bingo and it was horrible for me because I LOVE fiction and it was mostly non-fiction, so the whole year I had to read something I didn't like," and "No, not really, because we had just one big reading book that we had to read out of."

Responses that were placed into the *Books Were Too Easy* category included such comments as "No because they had really simple and dumb books not the ones I like," and "No, because I wanted thicker, more challenging books." The third most frequent *No* responses were coded into the *Books Not Interesting* category. Examples of responses that were placed into this category included "A lot of books they had were not the kind I like, they had a few, but mostly not," and "No, even in the more advanced reading group I always felt that the books were really boring. I also hated having to follow along while others read aloud because they read slowly, with no expression, and stumbled over what I consider easy words."

Table 5.2

Did You Read Books You Liked in School This Past Year?

Did You Read Books You Liked in School This Past Year?	N = 129
Yes	92 (71%)
Wide Variety/Choose Own Books	33
Just Plain Yes	14
Favorite Genre`	14
No	22 (17%)
No Choice	14
Books Were Too Easy	4
Books Not Interesting	2
Sometimes	13 (10%)
Don't Know	2 (2%)

One hundred twenty-nine participants responded to the question, *Did you get to* read books at school that were hard enough for you? Explain why or why not.

Responses were coded 75 times into *Yes* responses, 34 times into *No* responses, 14 times into *Sometimes* responses and 6 times into *Home School* responses. Examples of responses that were placed in the *Yes* category included such comments as "Yes, The Prince and the Pauper was hard. It had a lot of English terminology that I didn't know," "Yes I am in a GT class this year," "Yes- more than hard enough- such as A Tale Of Two Cities, which was way too long and hard for me to understand (especially reading my great-grandmother's version, the only one available to me). I wish that schools would pick books that kids today are reading (like Percy Jackson and the Olympians, for example) or at least something that they can relate to. Most good books today have the same morals, if not better, as classics," and "In more ways than one; the books were hard to read because of the traumatic content and the advanced writing skills/words used."

Responses that were coded into the *No* category included such comments as "NO. The books we read were probably considered to be on an eighth grade level, but nobody took into account that every kid in our class read on at least a tenth grade level. My school has advanced language arts classes which are supposed to be harder than the normal ones. I was in one such class. But guess what? We read the SAME books the normal classes read at the SAME pace! They tried to convince us that the activities we were doing to 'analyze' the books were very advanced and complicated; does crawling around on the floor barking like a wolf to act out a scene from Call of the Wild enhance higher thinking? I'm sorry, but we didn't even read the books. WE LISTENED TO THEM ON A TAPE! Whoever designed the eighth grade extended language arts curriculum for [my] County is an absolute idiot." "No. I already knew how to read so I basically got through about 100 page book in one day. I get harder books at the public library." "No, the books were too easy," and "I did not get a high enough book level, and I never learned any new vocabulary yet my group did."

Responses that were coded into the *Sometimes* category included such comments as "only when we got to pick our own books," "Not in the classroom but yes in the library," "Again, the books that I chose were hard enough, but the ones my teacher chose were not. Near the end of the year my mother pushed to get more challenging books, [sic] which was good, but it still wasn't completely at my reading level," and "Sometimes the stories were easy, and other times they were harder."

Responses that were coded into the *Home School* category included such comments as "Yes, while home schooled but NEVER in school," "Yes, because I am

homeschooled," and "Yes, because I home school and my mom lets me read the kinds of stories I love to read."

Table 5.3

Did You Get To Read Books That Were Hard Enough At School?

Did You Get To Read Books That Were Hard Enough At School?	N = 129
Yes	75 (58%)
No	34 (26%)
Sometimes	14 (11%)
Home School	6 (5%)

One hundred twenty-eight participants responded to the question, *Did your* teacher help you pick books to read that might be interesting to you? Explain why or why not.

Responses were coded 69 times into *No* responses, 33 times into *Yes* responses, 14 times into *Home School* responses and 12 times into *Other* responses. The *Yes* and *No* responses were coded a second time. *No* responses were coded into several categories, the most frequent being *Just Plain No* and *Student Choice*. Responses were coded into the *Just Plain No* category when participants responded with a simple "No" answer. Responses were coded into the *Student Choice* category when students indicated their teacher didn't help them choose books that might be of interest to them because they were free to choose their own books. Examples of responses that were placed in the *Student Choice* category included such comments as "No, I am pretty independent about which books i [*sic*] read and my teacher doesn't get involved (with me, at least) with my material," "Not really. I just picked out what I wanted," and "No, I was pretty good at finding my type of book myself."

Yes responses were coded into several categories, the most frequent being Teacher Was A Big Help and Just Plain Yes. Responses were coded into the Teacher Was A Big Help category when students indicated their teacher was very helpful in directing students toward books that might be of interest to them. Examples of responses that were placed in the Teacher Was A Big Help category included such comments as "When I ran out of books to read, my teacher suggested books that I might like," "I enjoyed the subject matter that my teacher recommended," and "Yes, my teacher was a BIG help." Responses were coded into the Just Plain Yes category when participants responded with a simple "Yes" answer.

Table 5.4

Did Teacher Help Find Books of Interest?

Did Teacher Help Find Books of Interest?	N = 128
No Responses	69 (54%)
Just Plain No	24
Student Choice	19
Teacher Choice	17
Other	9
Yes Responses	33 (26%)
Teacher was a Big Help	17
Just Plain Yes	13
Brought Books from the Library	2
Other	1
Home School	14 (11%)
Other	12 (9%)

One hundred twenty-seven participants responded to the question, *Did your* teacher help you pick books to read that were hard enough for you? Explain why or why not. Responses were coded 68 times into No responses, 37 times into Yes responses, 15 times into Other responses and 7 times into Home School responses. No responses were

coded into several categories, the most frequent being *Just Plain No, Poor Teaching* and *Other*. Responses were coded into the *Just Plain No* category when participants responded with a simple "No" answer. Responses were coded into the *Poor Teaching* category when students indicated their teacher didn't help them choose books that might be challenging enough for them. Typical responses that were placed into this category included such comments as "no, she needs to help the slow kids," "no, because the class didn't have as high of a READING level," "No. My teacher never helped me pick books at school," and "At the end of the year when my mom pushed for harder books he gave a few recommendations, but I had read most of them a long time ago. The book he chose wasn't even the most challenging book I could have read."

Responses were coded into the *Other No* responses when they didn't fit into any other category. Examples of responses that were coded into the *Other No* category included such comments as "No. There weren't any in her class room. My mom got the harder (better) books for me," "No. I chose comic books a lot, because they are fun," and "No. I haven't found a book that is hard enough for me."

Responses that were coded into the *Yes* category included such comments as "Yes, books such as Wuthering Heights are a good level of books for me," "Yes, I am encouraged and like to read middle and high school level books," "Yes, because of their length and intensity," and "Yes."

Responses were coded into the *Other* category when they didn't fit into any of the other categories. Examples of responses that were placed in this category included such comments as "More or less," "Sometimes," and "Those books are boring."

Table 5.5

Did Teacher Help Find Books That Were Hard Enough For You?

Did Teacher Help Find Books That Were Hard Enough For You?	N = 127
No Responses	68 (53%)
Just Plain No	29
Poor Teaching	18
Other	9
Student Choice	7
No Choice	5
Yes Responses	37 (29%)
Other	15 (12%)
Home School	7 (6%)

Qualitative Results

Seven questions provided participants with the opportunity to answer with longer responses and did not provide Yes, No options. The following questions pertained to the student's perceptions of their very early childhood reading experiences, early school reading experiences and how they felt about reading at the time they took the survey.

Students were prompted to *Tell us about how you felt when you first were able to read words*, and 117 participants responded. The responses to this question were most frequently coded as *Happy/Excited and Don't Remember*. There were only seven responses that didn't fall into either of these categories. These students remarked in such a manner as "I didn't think anything of it. I just like to read books," and "it felt weird because you could suddenly recognize all the letters and words and be able to read." The largest number of participants responded that they were happy or excited to be able to read. (N=77) Some of the comments in this category included "excited because I was finally able to read," "Excited, I was curious about the words and finally I was able to

actually read them," and "I felt powerful and smart. Unfortunately, I bragged about it way too much during elementary school."

The next largest response category to this question was *Don't Remember* (N = 33). Responses were placed in this category when students indicated they didn't remember much about how they felt when they learned to read. Comments in this category included "I don't really remember. I was only a baby," "I don't remember. I believe that I would have felt overjoyed and excited," and "How should I remember that? I was two and a half years old when I started to read words!"

Participants were asked, What do you remember about reading in kindergarten and/or first grade? There were 128 participants who responded to this question. The following are the most frequent responses that emerged from this question during first layer coding; Teacher Practice, Advanced and/or Voracious Readers, and Books Are Fun. Responses placed in these categories were then broken down further into second layer coding. The second layer categories included Emotive Responses, Values Responses and Reading Process Responses. Because the responses were broken down several times, there are more responses than respondents.

Examples of comments that fell into the Advanced and/or Voracious Readers category included "I remember that I was really good at it compared to the rest of my class. That made me feel good about myself." and "I remember I could read faster than most kids and was reading higher level books." (N = 59)

Responses were placed in the Teacher Practice category when students responded in some way as to indicate their teacher was not meeting their academic needs. For

example, responses included "teachers forced me to read books that I had read years ago," "In first grade, the books were boring because we had to read them over and over and they were about stupid topics," "I worked slowly and didn't get my work done because it was so boring. My teacher made me stay in for recess and lunch," "ridiculously easy. I had to speak SO slowly," and "The most annoying things were very basic sentences, considering I was reading chapter books. They really weren't challenging me, but they expected me to do a lot of extra busy work" (N = 53).

Responses were placed in the *Books Are Fun* category when participants indicated that books they read in Kindergarten or first grade or reading in general was fun for them at that time. Comments in this category included "In school she would read to us then sometimes in the middle of the story she would say the word incorrectly and we would need to correct her once or twice. That was fun" and "that it was really fun and exciting to read with the aide outside of class" (N = 23).

The previously mentioned responses were coded again into *Values Responses* (N = 55), *Emotive Responses* (N = 34) and Reading Process Responses (N = 16). "Values Coding is the application of codes onto qualitative data that reflect a participant's values, attitudes, and beliefs, representing his or her perspectives or worldview" (Saldaña, 2009, p. 89). Examples of *Values Responses* included such responses as "I was able to read much faster than the other kids in my class," "The other kids would ask me to read their papers for them," and "I remember reading things the other kids were not because I was reading 2nd grade books in kindergarten."

Examples of *Emotive Responses* included such comments as "I felt very bored," "I remember being placed in a special reading group with only a few people and was very proud of it," and "Once I started reading I felt really grown up."

Examples of *Reading Process Responses* included such comments as "I never sounded words out, I just thought about what would make sense and what sounded right to me," "But I got the hang of it really fast and started to read really well in a short period of time," and "I had to learn sounds for letters, but they don't usually make those sounds."

Participants were asked, What made you love reading? The following response categories are what emerged from this question, and one hundred twenty-two participants responded to this question; Immersion in Stories (N = 87), Other (N = 14), Parents (N = 11), Don't Know (N= 9), and Being Alone (N = 4).

Examples of responses that were placed in the *Immersion in Stories* category included such comments as "Well you really get to feel that you are the character. I mean you know, you can sit in your room and go on an adventure without ever leaving the building," "It is so interesting, if the book is well written you can really understand the people in them. You can feel why they do what they do and the situations that led them to doing these things. It is like another world which you would never be able to go to otherwise. Non-Fiction books are interesting too because you can learn a lot from them," and "All the amazing tales inspire me to read them and then I come into a whirlwind and see all the characters and the cool events and then when the story ends, I come back to the whirlwind and then end up in the same place I started reading with a new, happy feeling. I love to read!"

Responses were placed in the *Other* category when they didn't fit into any other category. Examples of responses that were placed in the *Other* category included such comments as "because it helps me write better," "It kills time and it's more interesting than anything else I have to do. Not that I have much else to do," and "It's like breathing. I just do it. Maybe too much. I read when I walk in parking lots and that isn't good."

Examples of responses that were placed in the *Parents* category included such comments as, "My mom, dad, grandparents & great aunt read to me all the time. It was fun," "I'm not sure... Probably that my parents always read to me and they picked great stories, so I assumed (correctly!) that books were good," and "watching my parents read. We also have tons of books at home."

Responses placed in the *Don't Know* category simply responded "I don't know." Examples of responses that were placed in the *Being Alone* category included such comments as "I like it because it is a good way to spend spare time (which I have a lot of) alone," "It gives me a chance to get away from things that are annoying me like my little sister," and "It allows me to relax and not have to worry about the world around me."

Participants were asked *What made you not like reading?* There were 23 participants who responded to this question. Of these, 13 responded that "Nothing" made them not like to read, six responded "It's boring," and four responded "They told us what to read."

One hundred nineteen participants responded to the question *If you could change* one thing about your reading class (or reading time), what would it be? The responses

fell into the following categories; *More Reading Time* (N = 43), *Choose Own Books* (N = 24), *More Challenging Books* (N = 22), *Nothing* (N = 18) and *Other* (N = 16).

Responses that were placed in the *More Reading Time* category included such comments as "it's good now - more time to read would always be good," "I would make it longer," and "I'd get more time to read."

Responses that were placed in the *Choose Own Books* category included such comments as "being able to choose the books we read," "I would choose the book we studied and we wouldn't have tests," and "Let me choose my own books please!"

Responses that were placed in the *More Challenging Books* category included such comments as "more challenging books," "There would be harder books in the classroom, they still put easy ones even at my school," and "I would choose to have harder books to read as a class."

Responses that were placed in the *Nothing* category were just simply "Nothing." Responses were placed in the *Other* category when they didn't fit into any other category. These responses included such comments as "I wouldn't get exhausted from staying up late reading," "NOT DOING READO!!! (reading bingo, forces you to read all sorts of things, I didn't enjoy it.)," and "We need couches at school for lounging. ha ha."

Summary

Participants were asked a series of questions pertaining to their very early childhood reading experiences, their early school reading experiences and their current interest in reading. The data were broken down into demographic data, quantitative data, quantitative/qualitative data and qualitative data.

There were 148 participants in this portion of the study, but not all participants answered all the questions. The tables and figures illustrate the most frequent responses participants gave to the questions, and the tables were preceded by a brief explanation of the quantitative and quantitative/qualitative data. Participants shared their perceptions of their own reading process as very early readers, early school reading experiences and current school reading experiences through short narratives provided in the open-ended questions on the survey.

Key findings in this chapter were:

- The students need to be specifically taught to their rate and level of learning as
 evidenced by their requests for hard books and being allowed to read at the speed
 at which they were comfortable.
- The students need deliberate reading instruction that teaches higher level thinking as evidenced by students who found their reading assignments "ridiculous" and lower level.
- 3. Students would like to have a choice in what they read for school.
- 4. Students would like more time to read in school.

The results of the data will be discussed in chapter 6. Implications for future research, modifications in classroom instruction for gifted readers and implications for future inservice and preservice teacher training will be discussed in chapter 7.

Chapter VI – Discussion

This chapter discusses the findings outlined in the previous two chapters and addresses how the results answered the research questions. Parents' perceptions will be discussed first, followed by the students' perceptions for each research question. The chapter is divided into four sections, demographics, the children's very early pre-reading and reading experiences, the children's early school reading experiences, the children's current reading experiences, and changes parents and students would like to see in reading instruction for gifted learners.

The students' questions weren't as detailed nor did they go into the same depth as the parents' questions, but the results were similar. Some students reported that they were quite young when their reading skills emerged and couldn't remember when or how they learned to read. However, other students responded they did remember learning to read and said they were around two years old at the time.

Demographics

Exposure to oral language is a necessary precursor to learning to read in terms of vocabulary building (Lundberg, 2006). Lundberg (2006) found that children who grew up in families in which the mothers were well educated were exposed to three times as many words as children who grew up in families in which the mother was less educated. The parents in this study responded that 87% of the mothers had a Bachelor's Degree or higher. The implication is that the mothers in this study gave their children a wide variety of opportunities to use words, listen to words and to see new words in print.

The mean age of women in the United States at the time of the birth of their first child was 25.1 year old in 2002 (Maternal Age – Childhood Health USA 2010http://www.mchb.hrsa.gov/chusa10/popchar/pages/109ma.html). However, the mean age of the parents who filled out this survey was 31.4 years old at the time of their child's birth, which is considerably older than the national average. There is research regarding education level of parents and literacy development. A topic of further research might be to look into age of parent at first birth and early literacy development to see if there is any correlation between older parents and early readers.

Research Questions

In the next section, findings for each research question will be discussed.

What were parents of gifted children's perceptions and gifted children's perceptions of the children's beginning reading process?

Parents were asked a series of questions aimed at discerning at what age their child achieved certain benchmark literacy skills. The first such question was *At what age was your child able to identify consonant sounds in spoken words?* The majority of parents (52.5%) responded that their child was able to identify consonant sounds in spoken words by the time the child was 18 months old. In addition, 30.7% of the parents responded that their child was between the ages of 6 and 12 months old when their child was able to identify consonant sounds in spoken words. At first, the researcher was concerned that parents were confusing this question with when their babies first began to make babbling noises. However, upon further investigation into parent comments regarding their children's reading progress, first impressions were misleading. Parents

did appear to understand the question and were reporting their child's pre-reading skills accurately.

That very young children are able to process and organize sounds into language is evidenced by children being able to communicate with pre-verbal sounds such as coos and babbles very early in their development and by their having a verbal vocabulary of about 200 words by the time they are two years old (Nevills & Wolfs, 2009). However, it was surprising that so many parents in this study reported that their children were able to identify specific sound representations by their first birthday. According to Lundberg (2006), successful phoneme segmentation doesn't typically occur in children younger than four years of age, and then, phoneme identification is typically divided into onsets and rimes rather than individual phonemic segments such as letters.

That the children were able to associate letter shape with letter name at very early ages was another surprising discovery in this study. Sixty-six percent of the parents responded that their child was able recognize individual written letters by the time the child was 24 months old, and 10.8% of the parents responded that their child was able to recognize individual written letters by the time their child was 12 months old. Research has shown (Nevills & Wolfe, 2009; Lundberg, 2006) that the typical child has entered Piaget's pre-operational stage, usually between the ages of 24 and 60 months old, before she or he is able to recognize letter shapes. Parent participants in this study reported their children as being well ahead of the typical child with this skill.

Parents responded to the question, *At what age was your child able to associate the letter shape with the letter sound?* This skill typically is demonstrated by children

who are between the ages of 4 and 5 years old (Lundberg, 2006), yet 71.3% of the parents who responded to this question reported that their child was able to associate letter shape with letter sound by the time their child was 36 months old. More surprising is that 23.7% of parents responded that their child was able to associate letter shape with letter sound by the time their child was 18 months old, and 5.9% said their child attained this skill by the time she or he was 12 months old. This is well before the typical age.

Parents responded that their children began reading whole words with help by the time they were between 24 and 48 months old 54.8% of the time. However, 21.4% of parents responded that their child could read whole words with help by the time the child was 23 months old, and 3 parents responded that their child could read whole words by the time the child was 12 months old. The typical child begins reading whole words with help by about four years old (Liberman & Shankweiler,1976; Lundberg, 2006; Nevills & Wolfe, 2009). The more complex the literacy skill, the fewer parents responded that their children had attained the skill by the time the children were 12 months old.

That the children in this study developed their reading skills well before what is considered typical was another surprising finding. The typical child begins to read picture books independently about the time he or she starts first grade (Liberman & Shankweiler,1976; Lundberg, 2006; Nevills & Wolfe, 2009). In this study, 84.9% of the parents reported that their children were beginning to read picture books independently by the time their children were 60 months old, and 41.5% responded that their child was between the ages of 37 and 60 months old. What is interesting is that 43.4% of the parents reported that their child was beginning to read picture books independently by the

time their children were 36 months old, and 7.8% said their child was beginning to read picture books independently by the time their child was 12 months old. In addition, 50% of the children in this study were reported by their parents as reading fluently and with comprehension by the time the children were entering Kindergarten. Some of the children were reading the Harry Potter series at this time.

Most of the students who took part in this study did remember their early childhood reading experiences. The student participants were asked more general questions concerning their early reading development with the understanding that children would not be able to recall what they may or may not have done when they were babies.

The students' responses coincided with parents in terms of when the students first began to understand the meaning of words in book. An astonishing 45.8 % of student participants said they understood the meaning of words in books before they were preschool age. This skill is not typically achieved until a child is Kindergarten age (Liberman & Shankweiler, 1976; Lundberg, 2006; Knopf & Brown, 2009; Nevills & Wolfe, 2009) Likewise, 52.8% of student participants responded that they could read words in picture books independently by the time they were four years old, and 27.8% said they could read words in picture books independently before they were three years old. According to Liberman and Shankweiler (1976), Lundberg (2006), and Nevills and Wolfe (2009), children don't typically begin to read picture books independently until the first grade when children are typically six years old.

Literature on precocious readers (Durkin, 1966; Jackson, 1988) doesn't specify types of books the children are reading. It's difficult to say if the children in other studies were reading picture books and/or chapter books before age three as was indicated by parents in this study. Durkin (1966), Jackson (1988), and Clark (1992) mention their studies were done with pre-school age children about ages 3-5 years old. The parents in this study report their children as demonstrating pre-reading and reading skills at a much younger age than has been previously documented, even in the gifted literature.

The majority of the students (80.6%) responded that they were reading chapter books by themselves by the time they were in first grade. Of these students, 34% responded that they were reading chapter books independently by the time they started Kindergarten. This supports the parent responses to questions about their children's early reading skills, but it was interesting to note that 2.8% of the students responded that they were reading chapter books independently before they started pre-school. Both parents and students in this study mentioned that the child was able to read the *Harry Potter Series* by the time the student started Kindergarten. The typical child does not usually begin to read chapter books independently until after she or he has mastered early reading skills in the first grade (Nevills & Wolfe, 2009).

All but one student who took part in this study responded that they were read to, and some were still being read to each day, by a parent or another adult. Both parents and students responded that they felt reading to the child each day made a difference in the child's learning to read. Research has shown that the more exposure very young children have to oral language, the greater their vocabulary will be (Bardige, 2009).

Knopf & Brown (2009) suggested that reading frequently to young children not only builds oral vocabulary, but helps to build sight word recognition. Stainthorp and Hughes (1998) and Durkin (1966) theorized that early readers had a more sophisticated short term memory ability to recall sight words than typical readers. They attributed sight word memory as one precursor to reading precocity.

What were parents' of gifted children perceptions and gifted children's perceptions of the children's early school reading experiences?

Parents and students were asked questions about the student's early school reading experiences. Fifty percent of the parents responded that their child was reading fluently with comprehension by the time their child entered Kindergarten, and 80% responded that their child was reading fluently with comprehension by the time their child entered first grade. The students, likewise, responded they were reading fluently and with comprehension in the early grades. The impact this had on the students' early school experience was such that some parents pulled their children out and homeschooled rather than subject their child to "boring repetitions of letter shape/sound drills that had been mastered years before".

The students who were reading by the time they entered Kindergarten felt their time was being wasted by "boring baby books" and "mind numbing repetitious phonic lessons". They felt they already had mastered the basic phonic skills and were ready for greater reading challenges.

A few of the parent/student dyads responded that they had quite positive public school experiences with wonderful teachers who adequately challenged their children in

Kindergarten and first grade. Of the 82 parents who responded that reading was challenging and interesting in Kindergarten for their child, 14 parents indicated that they homeschooled their child. The rest of the parents who responded positively intimated that their child was either in a private school, a school specifically for gifted children or in public school. It was not possible to know for sure what type of environment in which each of the students in this study was educated as this was not a question on the survey.

Since first grade is typically the time when formal reading instruction begins in the United States (Manning, 2004), it is not surprising that the students who responded they were reading fluently by the time they started Kindergarten did not feel challenged, felt frustrated and bored. The typical child that this stage, depending on the literacy culture in which they were raised, is just beginning to understand the association between letter shapes and letter sounds (Liberman & Shankweiler, 1976; Lundberg, 2006; and Nevills & Wolfe, 2009).

Children begin to discern the different phonemic representations of their native language very early in infancy and come to school with a very sophisticated ability to analyze and process what is spoken (Bardige, 2009 and Knopf & Brown, 2009). It appears that the children in this study were not only sophisticated analyzers of spoken language but were reading at an advanced level as well. Parent participants responded that the mean number of grade levels above chronological grade level their children were reading was 4.8. The gifted third grader in this study was reading at the same level as a typical seventh grader toward the end of seventh grade.

Parents indicated they were staunch advocates in terms of ensuring their children were given appropriately challenging books to read in their early school years. When parents learned that their children were being asked to read simple books read years before or to adhere to monotonous phonics drills of concepts their children had already mastered, they stepped in and intervened. Intervention strategies included having conversations with the teachers and/or administrators, sending books to school with the child, or removing their child from the school and home schooling.

What were parents' of gifted children perceptions and gifted children's perceptions of the children's current school reading experiences?

Parents, for the most part, felt that their children enjoyed the reading they did at school. However, parents reported the reading their children liked in school tended to be books the child chose to read for free reading time. Teacher chosen books, basal readers and books assigned for reading and book report/discussion assignments were not books the students particularly enjoyed. The majority of parents felt that their children were given opportunities to read books at their child's ability level and were given appropriate instruction in reading at their child's rate and level of learning. Most children whose parents who responded favorably about their child's reading instruction tended to participate in a viable program for gifted children or attend a school for gifted children. An important finding was that parents revealed that children were reading books at their ability level during free reading time, not necessarily during direct instruction time.

Most of the parents felt their child was being challenged appropriately in their current school experience. However, those parents who did not feel their child was being

appropriately challenged told very distressing stories about the treatment of their child at school. They related stories of their child having an insatiable thirst for knowledge and reading everything to learn about topics of interest yet feeling like they were "freaks because they could read before everyone else". They told stories of their child "wishing to be dead because school was so boring." Some of these parents eventually made the decision to home school their children.

Students responded that they were able to read the types of books they enjoyed reading more often than students who responded that they weren't. Students seemed to feel they were able to choose books of their particular interest during free reading time, frequently these were books they brought from home. However, reading books of interest was not usually part of the reading curriculum. There were several exceptions. Students who were home schooled, who attended a school for gifted children or who went to schools where there was a specific program for gifted children reported being allowed to read books of particular interest to them as part of the school curriculum. Even though these students were given the opportunity to read books that were challenging for them as part of their curriculum, these books weren't necessarily interesting to them. One 14 year old girl felt that the classic stories she had to read, *Romeo and Juliet* and *The Tell-Tale Heart*, were too traumatic for her.

Some students felt that their school curriculum, even though part of a gifted education program, fell short of its intended mark. One student in particular "didn't see how crawling around on the floor and howling like a wolf was going to inspire him to higher levels of thinking." The implication here is just because a child is in a

program/school for gifted students this doesn't necessarily translate into quality education for the student.

What would parents of gifted children and gifted children like teachers to know?

Parents would like teachers to know they should listen to parents and make them partners in their child's education rather than adversaries. They want their child to be challenged and taught the same as any other child. Some parents responded that their child learned to read almost spontaneously without formal instruction. However, they felt that just because their children came to school already reading, it shouldn't have excluded them from formal reading instruction that teaches higher level thinking processes.

Parents would like to see teachers trained to properly teach gifted children. Many of the parents who participated in this study felt that their child's teacher was not prepared to teach a child as bright as their child, nor did they get the impression the teacher was willing to even make the effort to try.

Parents would like to see curriculum designed to intentionally teach gifted students. They would like to see school programs structured so that their child's specific needs are being met and that their child is being put in situations with other gifted children so they might be provided with opportunities to learn with like ability children, to make friends and to learn at their own rate and level of learning. This is nothing new in terms of the educational needs of gifted children (Clark, 1997), but it does reinforce

the notion that for the students in this study at least, the academic needs of all children are not being met in the brick and mortar school environment.

Parents advocated for their children when they felt appropriate instruction wasn't being offered. However, they felt that they were treated as adversaries by the school system.

The students in this study wanted teachers to listen to them. They thought that their teachers needed to pay attention to them when they said they'd already read that book, already knew letter sounds, could already do that phonics skill rather than making them do repetitious activities they have known how to do since before they started Kindergarten. Students wanted the opportunity to learn just as their typically or lower achieving contemporaries are given opportunities. They wanted to be taught in communities of like minded learners who want to dig deeper, go faster, seek further than the average student has either the drive or the inclination to do.

The most often reported thing students would do to change in their reading classes or reading times at school was to allow more time to actually read. The students in this study expressed a great love for reading and are voracious in their attempts to get enough of it. They said they loved learning and were intensely curious about a wide variety of things. They wanted to be allowed to learn about interesting things of their choice and to be given enough time to learn it well and fully. The standard basal reader with accompanying worksheets wasn't sufficiently challenging for gifted children. Choice seemed to be paramount to the students in this study.

Summary

From the stories told by the participants in this study there was a greater insight into how gifted children began their journeys as readers, how they saw themselves as readers, how they saw themselves as members of their school communities and how their parents viewed these same concerns.

Children in this study acquired emergent literacy skills much earlier than the typically achieving child. The parents in this study report their children as demonstrating pre-reading and reading skills at a much younger age than has been previously documented by researchers of early readers as well.

Unlike precocious readers (Durkin, 1966; Jackson, 1988) the children in this study maintained their advanced reading advantage with a mean level above chronological grade level of 4.8. Half of the children in this study were reading fluently with comprehension by the time they started Kindergarten, and some of the children were reading young adult literature such as the Harry Potter novels. The typical child is only beginning to understand the letter shape/sound connection in Kindergarten.

Most parents and students in this study responded that the student was allowed to read books that were appropriately challenging and of particular interest to the student in school. However, these were usually books brought by the student from home and were read during free reading time rather than as part of formal reading instruction.

Parents in this study would like their children's teachers to listen to them with respect to their children's academic needs. They would like the education community to include them and work with them as a team when making decisions

regarding their children's education. Parents advocated for their children when they felt appropriate instruction wasn't being offered. However, they would have appreciated the opportunity to be treated as fellow educators of their children and not be seen as adversaries to the school system.

The students in this study would like more time to read at school. They would like to be allowed to choose their own reading material, and they would like to manage their own learning. Choice was a big issue for these students. Students would also like teachers to give them appropriate challenges that stretch their thinking and group them with like ability students who are equally interested in learning.

The key findings, conclusions and implications of these findings will be discussed in chapter VII. Limitations to the study and implications for further research will also be addressed.

Chapter VII – Conclusions and Implications

Key Findings

There were several key findings in this study that corroborated earlier research, but some of the data were quite different from what was previously reported. The key finding in this study were:

- 1) The parents in this study responded that their children demonstrated emergent reading skills years before what is considered typical. As in Durkin (1966) and Jackson (1988), the parents in this study responded that their children began pre-reading skills years before what is considered typical. What was different in this study is that while Durkin (1966) and Jackson (1988) reported precocious children learning to read early, they did not report that children were reading as early as 12 months of age. This study showed that some parents perceived their children reading picture books with help as early as 12 months of age. A large number of parents responded that their children were reading picture books independently before their children were 24 months old. This finding is considerably earlier than either of the previous studies.
- 2) The early readers seemed to learn to read spontaneously. Parents of early readers responded that their children learned to read spontaneously with little or no help from an adult. This is consistent with previous studies of precocious readers (Durkin, 1966, Jackson, 1988). What is remarkable about the children in this study is that they were reading years earlier than either Durkin (1966) or Jackson (1988) reported.
- 3) The children who weren't early readers grasped the concepts quickly in either Kindergarten or first grade and were reading well above chronological grade level

sometimes by November of that school year. Cohen and Kim (1999) suggested that when a gifted child learns a new concept, that child grasps it quickly and fully. Not all of the children in this study were early readers, but when they did begin to learn to read, they grasped the concepts of reading quickly. The children who began to learn to read in the first grade were reading fluently with comprehension several years above their chronological grade level by the middle of the school year.

- 4) The early readers in this study appeared to maintain their early reading advantage. Unlike some studies of precocious readers (Durkin, 1966), the gifted readers in this study seemed to maintain their early reading advantage. This group as a whole was reading 4.8 grade levels above chronological grade level. Since the survey did not ask for reading levels for all years of schooling, there is no way to determine if the children in this study continued to progress in reading skills.
- 5) The students need to be specifically taught to their rate and level of learning.

 Comments from both parents and students point to the necessity of teaching gifted children to their rate and level of learning. The students who had positive school experiences mentioned that they were enrolled in schools or programs at school designed specifically for gifted children. Conversely, students who did not attend schools designed for gifted children reported that teachers did not address their literary needs. The other group of children who reported positive school reading experiences appeared to have been home schooled.
- 6) The students need deliberate reading instruction that teaches higher level thinking processing. The predominately negative comments came from parents and students who

did not mention any participation in a program for gifted learners. One contributing factor to students' negative school experience was teachers who gave the student a book and left them to independently read on their own. Gifted learners need to be deliberately taught specific reading skills that encourage in-depth exploration of the text and focuses on higher level thinking skills.

- 7) Students would like to have a choice in what they read for school. They would like to have a voice in what texts they are required to read in school, and they want more time to read in class. The students reported they would like to be able to choose their own reading projects and research areas of interest to them. Cooter and Alexander (1984) drew conclusions from their study that comprehension is linked to interest. If students are allowed to read texts that interest them, they are likely to employ strategies to help them comprehend on a deeper level (Cooter & Alexander, 1984).
- 8) Students would like to be taught with like ability peers. The students in this study responded that they would like to be placed in learning environments with other like-ability students who are serious about learning.
- 9) Parents and students would like teachers to listen to what they have to say about the students' education and become partners rather than adversaries in planning instruction for gifted learners.

Conclusions

A significant key finding is the early age at which parents indicated their children were developing reading skills. More parents responded that their children were beginning to read picture books independently by the time the child was 12 months old

than reported their children could read whole words with help by the time the child was 12 months old. There are perhaps three alternative interpretations for this phenomenon. First, the children aren't reading the words in the picture books but instead are looking at the pictures and interpreting the story from the visual cues the pictures provide. Second, the children may not have learned to read word-by-word or word pattern sound by word pattern sound but by some other method of their own devising. And third, young gifted children have astonishing memory recall ability (Clark, 1997). They may be remembering verbatim the stories read to them frequently.

While it might be worth further investigation to look into exactly how these very young children are processing literacy skills, one foreseeable difficulty with such a study is that they might not be able to articulate their metalinguistic analysis at 12 months old. Also, if the typical 18 month old child learns a new word every two hours (Nevills & Wolfe, 2009), it might be interesting to investigate how many new words a gifted child acquired per hour at 18 months old. This early vocabulary building process is an important pre-reading skill.

None of the other studies on gifted readers or precocious readers examined by the researcher in preparation for this study identified children as beginning readers as young as 12 months of age. The youngest participant in a case study conducted by Henderson, Jackson & Mukamal (1993) was 31 months old, and he exhibited pre-reading skills the mean number of parent participants in this study indicated their children were exhibiting at 20.7 months old. Further research is needed to investigate how early precocious readers in this age of multi-media opportunities for language exposure are learning to

read. However, this study indicated that we must recognize and respond to the needs of early gifted readers at a much earlier age than had previously been assumed.

Parents in this study ask educators to listen to them so that the academic needs of their children might be more appropriately addressed. This is an important lesson for all parents, for all children, but it is particularly true for our gifted children. How heartbreaking it is to learn that teachers have destroyed a student's love for reading or facilitated an environment that made a child want to be dead rather than go back to a boring school (Parent comment, this study, 2010).

Parents might benefit from resources that help them be effective advocates for their children (Warren, 1999). Some parents in this study responded that they felt isolated. Establishing open communication links with other families of gifted children within the home school district might be advantageous to all concerned.

We know from Dabrowski's work that gifted children can be extremely sensitive (Dabrowski as cited in Ackerman, 2009). The lesson to consider here might be to learn to teach these children in such a manner as to facilitate their growth as individuals and to help them achieve their full potential as contributors to the greater society. If these gifted children will be our next world problem solvers, perhaps educators should take a more serious look at how we are preparing them to face the life challenges ahead of them. This would seem to be most important in the area of reading instruction.

Implications

In this section, implications for future research, for teachers, and for teacher preparation are discussed.

Implications for future research.

Since this study revealed how very early some of the children were exhibiting pre-reading and reading skills, further research is needed to examine the reading development of very young children. Longitudinal case studies following babies of highly literate parents from infancy through the third grade may give a reasonable indication of the processes young children go through when acquiring reading skills and how early they go through them.

A similar study to this one might be in order with some changes to the way the survey questions were asked. It would be helpful to have opportunities for participants to be interviewed personally and respond more specifically to the research questions. The survey might request that parents might use artifacts such as baby books or photographs to anchor memories to ensure accuracy. Questions about early spoken language should be asked, based on Crain-Thorenson and Dale's 1992 study. It would also be interesting to find out if the child had been taught sign language as a precursor to spoken language. A questions comes up whether an infant under a year is able to verbalize sufficiently to demonstrate reading skills. Another question that should be included in the survey is what type of schooling environment is provided for the child. For example, is the child being educated in a brick and mortar public school or home schooled or some other venue?

Deeper quantitative analysis is needed of the data that was obtained from this study. Results were reported only as descriptive statistics. More sophisticated statistical analyses are needed to study the correlation between some of the events reported by

students and their parents. For example, was there a relationship between maternal age and earliness of reading?

Research has been done on brain development of young children (Clark, 1997; Nevills & Wolfe, 2009). However, the findings in this study suggest that further research is needed in understanding how the brain of a gifted reader develops. What is it about a gifted child's brain that develops differently or more quickly than that of a typically achieving child?

Further studies are needed to determine when and how gifted children learn to read. How do they process language and in what order do they acquire metaliguistic skills on their journeys to becoming readers? While research in early language and literacy is indicated, there is no evidence in the literature that formal instruction should begin before a child enters first grade. Researchers seem to agree that the best language learning experience young children can have is a home environment rich in literacy cultural that offers multiple opportunities for the child to speak and be spoken to; to play with words; to hear and act out stories; and to have a print rich environment with ample opportunities to explore a variety of different kinds of texts.

An important question that might be asked in future research pertains to the students' current levels of advancement in reading. Were students reading at a more advanced level when they began Kindergarten and gradually lost ground as they progressed through school, and if so, how rapid was the regression, and what was the probable cause?

The mothers in this study were older at the births of their children than the national average. Research is needed to examine any correlation between mother's age at first birth and early reading ability. Research is also needed to determine if birth order plays a part in early reading development.

Since satisfaction and interest in reading have been linked to reading comprehension (Cooter & Alexander, 1984), studies are needed to look into school satisfaction of exceptionally gifted children (children with an IQ of 160+ as defined in Gross, 1999). One question that is impossible to answer from this study is whether or not the students who expressed a negative school experience were exceptionally gifted.

Gifted learners are not a homogenous group, and even a program for gifted children may fall short of the mark of meeting the academic needs of an exceptionally gifted child.

Programs for gifted learners need to be flexible enough to teach to students' strengths and interests, yet provide enough structure to help students learn to be creative and independent thinkers (Renzulli & Renzulli, 2010). Parents of gifted children expressed a desire to have open dialogue with teachers, schools and administrators with respect to the education of their children. Research is needed on the impact of creating an open community of parents and educators who work collaboratively to ensure the best educational experience for gifted learners.

Implications for teachers.

If students are already entering Kindergarten and first grade reading at the middle school level, what might teachers/schools do differently to challenge these students and give them opportunities for growth? Carr held that "one common belief is that gifted

children will learn to read on their own, and therefore need little or no instruction" (Carr, 1984, p. 144). Sending a gifted reader off to a corner to read independently is not sufficient instruction (Carr, 1984).

What would happen if teachers sat down with their gifted students and mapped out a course of study for them at the beginning of each grading period and let the students choose what they would study, how they would go about managing that study, what their learning objectives might be and how the teacher would assess their mastery of the subject the student was studying? In such a program, emphasis might be placed on allowing students to self select books and content studies while providing guidance to the students as necessary.

Studies "support the recommendation of an instructional program that has meaningful content, is faster paced, and focuses on critical and creative reading" (Carr, 1984, p. 146) for gifted learners.

Implications for inservice and university teacher preparation courses.

Further investigation into teacher preparation and training is indicated from this study. Some parents felt their child's teacher was not prepared to teach a gifted child. They felt that some teachers had neither the knowledge nor the inclination to teach to a gifted learner's unique academic needs. There are few university teacher preparation courses designed to train preservice teachers in researched-based, best practices methods for teaching gifted learners (Gross, 1999). There are few universities that offer any kind of course work related to teaching gifted readers. If new teachers are to be fully prepared to teach all students, including gifted students, then university teacher preparation

programs must be designed to offer instruction in gifted education in all of the methods courses.

Limitations to the Study

Care must be taken not to generalize the findings of this study to the gifted learner population as a whole since the participants were gathered from a convenience sample. It is unclear as to whether the advanced reading ability portrayed by the participants in this study is indicative of the gifted population at large. This study was advertised as a reading study and may have drawn a population of predominantly gifted readers to it inadvertently.

Another limitation to this study is that there was only one opportunity to gather data. It would be beneficial in future studies to build in one-on-one interviews with the parents and students to get a richer sense of their perceptions of the phenomena questioned here. It would also have been useful to have asked questions regarding the type of environment where the students were being educated. Since those questions weren't asked, it is unclear what impact the place of schooling may have had on the students' reading development.

Summary

Key findings from this study outlined were the young age at which the children in this study began to read; the children seemed to learn to read spontaneously and without any formal instruction; the early readers appeared to maintain their reading advantage throughout their school years to the point of the study; children who weren't early readers grasped reading concepts quickly one provided with formal instruction; the students need

to be specifically taught to their rate and level of learning; the students need deliberate reading instruction that teaches higher level thinking processing; students would like to have a choice in what they read for school; students would like to be taught with like ability peers; and parents and students would like teachers to listen to what they have to say about the students' education and become partners rather than adversaries in planning instruction for gifted learners.

Conclusions were drawn as to what types of educational environments might be best for gifted learners. These seem to be situations in which there is flexibility with the curriculum, and students are given a voice and choice as to what should be studied.

The most surprising finding in this study is how young the parents said their children were when the children began to exhibit pre-reading skills. The researcher was unable to locate other studies pertaining to gifted children or precocious readers who identified early readers at such a young age.

Implications for future research were identified and suggestions were made in terms for teaching practices for teachers of gifted readers. Leaving gifted learners to their own devices with respect to education not only wastes the student's time in school but wastes the potential to help that student rise to his or her full potential. This seems to be especially critical in the area of reading instruction.

Closing Thoughts

This is the first study to address the perceptions of the early and current reading experiences and the changes in reading instruction by both students and parents. The

findings indicate that in this population, reading began much earlier than any prior studies found, with tantalizing implications for future research, teaching, and teacher preparation.

The beginning of the title of this study is "Giving Voice." It was the purpose of this project to find the voices of gifted students and their parents and give them a place to be heard. Together with the researcher, they have built a foundation upon which further studies might be conducted and other voices might be heard. That is the goal of a Constructivist. To build upon what is known and grow understanding upon what is discovered. Like Miss Roginski discovered in *The Princess Bride*, perhaps the questions that need to be asked about gifted learners lie within the learners themselves (Goldman, 2003). Perhaps something of understanding was discovered from the voices of the participants, and it is left to those who hear them to listen and to act upon what they are saying.

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APPENDIX A - RESEARCH SURVEY

Dear Parent,

Dr. LeoNora Cohen and Kathy D. Austin, researchers at Oregon State University College of Education, are interested in your perceptions of how your gifted or highly able child learned to read. There is very little research on reading and the gifted and we are deeply interested in what you have to say.

We ask your help with this research project by completing this survey. You might want to look at pictures or scrapbooks to help you remember certain milestones in your child's development. Your experiences are valuable to us, and we greatly appreciate your input.

By completing this survey, you are giving your informed consent. There are 38 questions which should take about 15 minutes to complete. There are no foreseeable risks to participating in this study. You may skip questions you don't want to answer and stop when you want to. All surveys are anonymous and no information will be identifiable in the final study, which will be a dissertation and research articles.

We are also very much interested in knowing your child's perceptions of how she/he learned to read. With your permission, we would like you to invite your child between the ages of 8 and 14 to complete the children's portion of the survey. If you have more than one child identified as gifted in this age range, you can also invite him or her to participate.

Sincerely yours,

Dr. LeoNora M. Cohen and Kathy D. Austin

1. I agree to participate in the research study and take the survey

Yes	
No	

Very little is known about how gifted and highly able children perceive how they learn to read and even less is known about parent perceptions about their children's reading experiences. The following questions are designed to help determine how parents perceive how their children came to be readers.

2. How old is your Child? Younger than 8 years old

8 years old
9 years old
10 years old
11 years old
12 years old
13 years old
14 years old
Older than 14 years old

3. Please indicate your child's current level of functioning in each content and skill area.

Math Rea	adin	g Scie	ence						
Social									
Studies									
Art Musi	ıc								
Gross									
motor skills, ex									
sports or									
dance									
Fine mot	or								
skills, ex									
drawing,									
writing,									
cutting w	ith								
scissors									
Below av	verag	ge for	age						
Performi	ng a	t age							
level									
Above av	vera	ge for	age						
Advance	d/Hi	igh lev	vels						
of perfor									

The following questions pertain to your child's early development from infancy to early school age. Our purpose for asking these questions is to determine when you first noticed your child beginning to understand both spoken and written language.

4. How old was your child when you first began to reading to him/her?

Before your child was born
In the first 6 months of your child's life
At 6 – 12 months
At 13-18 months
10 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
At 19-24 months
Older than 24 months
Didn't read to my child
5. Do you still read to your child? If yes, how many minutes per
week do you read to your child? If NO, please go to the next question.
week do you read to your child?
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week 60-90 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week 60-90 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week 60-90 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week 60-90 minutes per week 90-120 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week 60-90 minutes per week 90-120 minutes per week □ □ More than 120 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week 60-90 minutes per week 90-120 minutes per week More than 120 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week 60-90 minutes per week 90-120 minutes per week □ □ More than 120 minutes per week
week do you read to your child? If NO, please go to the next question. 5-30 minutes per week 30-60 minutes per week 60-90 minutes per week 90-120 minutes per week Don't know

13-18 months
19 – 23 months
24 – 36 months old
37- 48 months old
49 - 60 months old
61 - 72 months old
Older than 72 months old
Don't know
7. At what age was your child able to recognize individual
written letters?
6 – 12 months old
13-18 months old
19 – 23 months old
24 – 36 months old
37- 48 months old
49 - 60 months old
61 - 72 months old
Older than 72 months old
Don't know
8. At what age was your child able to associate the letter shape with the letter sound?
6 – 12 months

13-18 months
19 – 23 months
24 – 36 months
27. 49 m and a
37- 48 months
□ □ □ 49 - 60 months
61 - 72 months
Older than 72 months
Don't know
9. At what age did your child begin to read whole words with
help from an adult or older sibling?
6 – 12 months
13-18 months
19 – 23 months
24 – 36 months
37- 48 months
49 - 60 months
61 - 72 months
Older than 72 months
Don't lyn avy
Don't know
10. At what age did your child begin to read picture books independently?
6 – 12 months

13-18 months
19 – 23 months
24 – 36 months
37- 48 months
49 - 60 months
61 - 72 months
Older than 72 months
Don't know
The following questions pertain to your child's early reading experiences at home and at
school. Very little research has been done on how parents perceive their children's early
school reading experiences. Our purpose for asking these questions is to understand
children's beginning of independent reading.
Some questions are open ended, and your extended comments are invited.
11. If we define reading as independently deriving meaning
from written text, what statement best describes your child's
reading level before s/he started Kindergarten?
My child was not even looking at books
My child was beginning to show an independent interest in books
My child was following the text from left to right and top to bottom
My child was recalling basic words from memory
My child was able to sound out words and understand their meaning
My child was reading fluently
Don't know

- 12. Do you feel that your child was given books in Kindergarten to read that were challenging enough to develop further reading skills? Explain
- 13. Do you feel that your child's Kindergarten teacher made reading fun and interesting for your child? Explain
- 14. If we define reading as independently deriving meaning from written text, what statement best describes your child's reading level before s/he started First Grade?

My child was not even looking at books
My child was beginning to show an independent interest in books
My child was following the text from left to right and top to bottom
My child was recalling basic words from memory
My child was able to sound out words and understand their meaning
My child was reading fluently with comprehension
□□□□ Don't know
Other
Offici
15. Do you feel that your child was given books in first grade to read that were challenging enough to develop further reading skills? Explain
read that were challenging enough to develop further reading
read that were challenging enough to develop further reading skills? Explain 16. Do you feel that your child's first grade teacher made
read that were challenging enough to develop further reading skills? Explain 16. Do you feel that your child's first grade teacher made reading fun and interesting for your child? Explain 17. At what age did your child begin to read chapter books
read that were challenging enough to develop further reading skills? Explain 16. Do you feel that your child's first grade teacher made reading fun and interesting for your child? Explain 17. At what age did your child begin to read chapter books independently?
read that were challenging enough to develop further reading skills? Explain 16. Do you feel that your child's first grade teacher made reading fun and interesting for your child? Explain 17. At what age did your child begin to read chapter books independently? 6-12 months
read that were challenging enough to develop further reading skills? Explain 16. Do you feel that your child's first grade teacher made reading fun and interesting for your child? Explain 17. At what age did your child begin to read chapter books independently? 6 – 12 months 13-18 months
read that were challenging enough to develop further reading skills? Explain 16. Do you feel that your child's first grade teacher made reading fun and interesting for your child? Explain 17. At what age did your child begin to read chapter books independently? 6-12 months 13-18 months

24 – 36 months
37- 48 months
49 - 60 months
61 - 72 months
Older than 72 months
Don't know

The following questions pertain to your child's current reading experiences at home and at school. Research has shown that gifted and highly able children who are not challenged in reading do not make the same gains in reading as their age mates. Studies also show that gifted and highly able students are often not taught specific reading skills that would enable them to read more challenging material. Our purpose for asking the following questions is to understand how parents perceive their child's current reading experiences at home and at school. These questions are open ended and your extended comments are invited.

- 18. Does your child read for pleasure?
- 19. What kinds of experiences led to your child enjoying reading?
- 20. What kinds of experiences led to your child not liking to read?
- 21. Does your child enjoy reading at school?
- 22. Is your child given the opportunity to read books at his/her reading level at school?
- 23. Do you feel that your child is being given appropriate instruction in reading or literature that addresses her/his reading level during this past school year?

Yes	
No	

Asynchrony occurs when a child is advanced in one area, for example reading, but lags behind in another. One example might be when a gifted student may be able to read four levels above grade but lack the small motor skills necessary to write words. Another example of asynchrony might be when a third grade boy is capable of reading sixth grade material but is not emotionally mature enough to deal with the content that higher reading level books often contain. The following questions pertain to asynchronous development. Our purpose in asking these questions is to understand how parents perceive where their child's development may be more advanced in one area and not in another. These questions are open ended and your extended comments are invited.

- 24. How many grade levels advanced is your child in reading? Please, explain
- 25. Did your child express frustration about reading in Kindergarten or first grade? If yes, describe the frustration.

 26. Have you noticed your child expressing frustration at not being able to perform a task as well as he/she reads? Please, explain
- 27. Have you noticed your child's emotional development not being as advanced as his/her reading skills? Please, explain
- 28. Is there anything else you would like to add about your child's reading experience at school? Please, explain.
 29. What would you like your child's teacher to know about or do differently in terms of reading instruction for your child? Please, explain.
- 30. Is there anything you would like to add regarding your child's reading development?
- 31. Which parent is filling out the survey?
- 32. How many children under age 18 live in your home?
- 33. Does your child live in the same home with both parents?
- 34. What is the age of the parent filling out this survey?

31-35
36-40
41-45
46-50
51-55
56-60
Older than 60
35. What is your Race/Ethnicity? Please check all that apply
American Indian
Alaska Native
Asian
DL-1-
Black
□□□□ Native Hawaiian
Other Pacific Islander
White (not Hispanic)
Hispanic
36. What is the highest education level of your child's mother?
Some high school
High school
Some college
Two year college degree

Bachelor's degree
Some graduate work
Master's degree
Doctoral degree
37. What is the highest education level of your child's father?
Some high school
High school
Some college
Two year college degree
Bachelor's degree
Some graduate work
Master's degree
Doctoral degree
Thank you for taking the time to complete this survey! Please invite your gifted or highly able child ages 8-14 to take the student portion of the survey.
38. My student has permission to take part in this research study by completeing this survey.
Yes
No
Dear Student.

Dr. LeoNora Cohen and Kathy D. Austin, researchers at Oregon State University, are interested in how you learned to read. There is very little information about reading and gifted students, so we are especially interested in what YOU have to say. Would you please help us with our research study by completing this survey?

You don't have to fill it out if you don't want to, and no one can make you. You can skip questions you don't want to answer, and you can write as much as you want on the opinion questions.

We do not think you will have any bad experiences doing this survey and you may be able to help teachers and other kids understand about reading for gifted students. We will write a report when the study is over, but we will not use your name in the report.

If you are willing to tell us about your beginning reading experiences, those in kindergarten and first grade, and reading experiences for you now, and frustrations with learning, please complete the survey.

So, what do you say? Are you in?

Sincerely,

Dr. LeoNora Cohen and Kathy D. Austin

39. Do you want to participate in our study?

Yeah,	I'm ın
No tha	nks!

Hi! Here at Oregon State University, we are trying to learn about how you learned to read. Some gifted and highly able kids learn to read all by themselves, while others learned when somebody taught them. We would really appreciate your help in understanding what you remember about how you learned to read. Okay! Let's start by telling us a little bit about yourself.

40. Are you a boy or a girl?

Boy
Girl

41. How old are you?

42. Are you a Gifted or Highly Able student?

Yes No
43. In what area are you identified as gifted or highly able? Reading Math
Both Other (please specify)
44. What grade will you be in when school starts in the fall, 2010?
3 4 5 7 8 9 9
The following questions will help us to understand your thoughts about when you were just beginning to learn to read. Some of these questions are multiple choice, some are yes/no questions and some are questions where we'd like you to tell us your answer in a sentence or two. You can write more if you want!
45. Do you remember how old you were when you began to understand the meaning of words in books? Before you started preschool Preschool

Kindergarten
First grade
Second grade
Third grade
Above third grade
Don't remember
46. Do you remember when you actually read words in picture
books by yourself?
Yes
No
47. How old were you when you actually read words in picture
books by yourself?
Before age 3
Between 3 and 4
Between 4 and 5
Between 5 and 6
After age 6
Don't remember
48. Tell us about how you felt when you first were able to read

words.

49. Do you remember how old you were when you learned to read chapter books (books like The Boxcar Children series, for example) by yourself?

Before you started preschool

Preschool
Kindergarten
First grade
Second grade
Third grade
Don't remember
50. Did your parents read to you when you were little?
Yes
No
51. Do your parents read to you now?
Yes
Yes
Yes
Yes
Yes No
Yes No No Solution 10 10 10 10 10 10 10 10 10 10 10 10 10 1
Yes No No Solution 50 and/or 51, how often did/do your parents read to you?
Yes No No The property of the street
Yes No No Three times per day Two or three times per day
Yes No No The proof of the state of the stat
Yes No No Solution 52. If you answered "yes" to question 50 and/or 51, how often did/do your parents read to you? Two or three times per day Once every day
Yes No No Diagram S2. If you answered "yes" to question 50 and/or 51, how often did/do your parents read to you? Two or three times per day Diagram Conce every day Diagram Co
Yes No No Solution 52. If you answered "yes" to question 50 and/or 51, how often did/do your parents read to you? Two or three times per day Once every day Conce every day
Yes No No Solution 52. If you answered "yes" to question 50 and/or 51, how often did/do your parents read to you? Two or three times per day Once every day About once a week
Yes No No Solution 52. If you answered "yes" to question 50 and/or 51, how often did/do your parents read to you? Two or three times per day Once every day Conce every day
Yes
Yes
Yes \Boxed Boxes Solution Solu
Yes

53. Is there another adult in your life such as a grandparent or neighbor who reads to you now or read to you when you were younger? Yes No
54. Did/do you enjoy having an adult read to you?
55. Do you think having an adult read to you helped you learn to read? Explain Yes No
The following questions will help us understand what your reading experiences were like when you first started school. The questions in this section are questions we'd like you to explain. We'd like a sentence or two at least, but you can write more than that if you want!
56. What do you remember about reading in kindergarten and/or first grade? Explain.
57. Did you enjoy reading in Kindergarten and/or first grade? Explain
58. What worked or did not work? Explain
The following questions will understand what's going on with reading for you right now. These questions will help us understand if you are getting to read books that are interesting for you, are challenging enough for you and whether or not you like to read. These are all questions in which we'd like you to explain your answers in at least a sentence or two. You can write more than that if you want!
59. Was reading fun for you in school this past year?
60. Did you get to read the KINDS OF BOOKS YOU LIKE this past year at school? Explain why or why not.

- 61. Did you get to read books at school that were HARD ENOUGH for you? Explain why or why not.
- 62. Did YOUR TEACHER help you pick books to read that might be INTERESTING to you? Explain why or why not.
- 63. Did YOUR TEACHER help you pick books to read that were HARD ENOUGH for you? Explain why or why not.

No	
64 D	o vou like te reed ne

64. Do you like to read now?

Yes - If you choose yes, go to question 65 next.
No - If you choose no, go to question 66 next.

- 65. What made you love reading?
- 66. What happened to make you not like to read?

Sometimes, gifted or highly able kids can do some things really well, but aren't good at others. For example, you might have read at a very advanced level but could not do math or draw. The following questions will help us understand how some things might be easy for you and other things might be more difficult or frustrate you. These are all questions in which we'd like you to explain your answers in at least a sentence or two. You can write more than that if you want!

- 67. If you started school already reading, did you feel like you were doing it wrong? Explain why or why not.
- 68. Do you remember being frustrated at being able to read well, but not able to use your hand to write or draw well?
- 69. When you learn new things, do you feel frustrated? Explain why or why not.
- 70. If you could change one thing about your reading class (or reading time), what would it be?

71. Is there a question I should have asked but didn't?

Thanks for helping us out!

APPENDIX B - IRB RESEARCH PROTOCOL



RESEARCH PROTOCOL

1. Protocol Title: Giving Voice: Gifted Students' and their Parents' Perception of Early and Current Reading Experiences

PERSONNEL

- 2. Principal Investigator: Dr. LeoNora M. Cohen, EdD, Associate Professor of Education, Oregon State University College of Education (Major Professor)
- 3. Student Researcher(s): Kathy D. Austin, Doctoral Student, Oregon State University College of Education
- 4. Co-investigator(s): NA
- 5. Study Staff: NA
- 6. Investigator Qualifications: Dr. LeoNora Cohen has a doctoral degree in education and is an expert in the field of Gifted Education. She has been on the faculty at OSU in the College of Education since 1994, and she has received IRB certification training. Kathy Austin has a Masters degree in education and a reading specialist endorsement. Her interests are the overlap between gifted students and reading.
- 7. Student Training and Oversight: Since fall of 2008, Kathy Austin has been working with Dr. LeoNora Cohen on developing the research plan described herein, based on mutual interest in reading and gifted students. Kathy has recently completed her internship in college teaching, developing and instructing a course (TCE 599 ST/Reading for Gifted Learners) under Dr. Cohen's supervision. Kathy Austin has completed an extensive literature review of the topic. There are no planned extended absences for Dr. LeoNora Cohen during the period in which the research will be conducted.

DESCRIPTION OF RESEARCH

8. Description of Research:

The intent of this mixed methods concurrent study is to learn how gifted students perceive how they learned how to read, how their parents perceive how their children learned to read and the students' school reading experiences. In this study, an internet survey will be used to assess the relationship between how gifted students perceive how they learned how to read and what their school reading experiences were and are like. In addition, questions about asynchrony, a gap or lag between what the child can read and the ability to use fine motor skills or have the emotional development to read the given content will be sought. At the same time, parents' perceptions of how their gifted child learned to read and their child's reading experiences at school will be explored using an internet survey with open ended questions to get a detailed account of the parents' perspective. The reason for combining both quantitative and qualitative data is to better understand both student and parent perceptions. As there is almost no research done in the area of perceptions of the reading process for gifted learners, this study aims to find out about these experiences.

9. Background Justification:

There is a widely accepted perception within the educational community that talented and gifted (TAG) children don't need targeted reading instruction (Halsted, 2001). In addition, surprisingly little research has been conducted on reading and the gifted; particularly, no study has been done that has addressed the student experience or that of their parents. This study aims to understand, through a mixed methods survey, the perceptions of the reading experiences by both these target groups.

10. Subject Population and Recruitment:

Participants in this study will include students who have been

identified as talented and gifted (TAG) or highly able by their state of residence definition who are between the ages of 8 years and 14 years and their parents. This is a study of reading process perceptions of TAG students and their parents' perceptions of how their children learned to read. Therefore, this is the population we will target. Students who are younger than 8 years of age or older than 14 years of age will be excluded from the study. Students who have not been identified as TAG or highly able by their state of residence will also be excluded from the study. Since this is a preliminary study, only English speaking students and their parents or students and their parents who have access to a translator will be included in the study. Students and parents who do not have access to a computer will be excluded from the study.

We will recruit participants via the following venues, should they agree. These include the National Association for Gifted Children Website (NAGC), the NAGC publication *Parenting for High Potential*, Hoagies Gifted website, Willamette Education Service District, various other state and district TAG organizations, classroom teachers who expressed interest, and university summer TAG programs. We anticipate that there will be up to 2000 student and 2000 parent participants in this study. Each venue will be contacted via e-mail to gain approval for the research and a letter of support will be solicited.

11.Consent Process:

Data will be gathered via an internet survey and explicit instructions will be given at the beginning of the survey as to what the survey is for, who is conducting the study and why the study is being conducted. Adult participants will give implied consent by completing the survey, and their implied consent will be explained to them in the directions at the beginning of the survey. As these are parents of gifted students, they are likely keenly intelligent and should be able to easily comprehend the planned study.

12. Assent Process:

The Internet survey will be designed so that there will be a link after the parent survey for the children's survey. Only those children who have been invited by their parents to participate in the study will be able to complete the survey. It will be up to the parents to explain the survey to their children and to provide access to it. Assent will be implied by children completing the survey after they have obtained parental approval and their own willingness to do so.

13. Eligibility Screening:

Eligibility screening will be done after informed consent/assent has been given. The first question on the survey for parents of TAG students is "has your child been identified as TAG or highly gifted?" The first question on the student TAG survey is "are you a TAG student?" If the answer to either of these questions is no, then those surveys will not be used.

14. Methods and Procedures:

We will use the following research methods while conducting this study:

- A. Develop recruitment letters for each venue and secure approvals for using the venue.
- B. Finalize consent and assent materials.
- C. An Internet Survey/Questionnaire has been developed and will be used to gather data pertaining to gifted students' and parents' perceptions regarding how the student came to the reading process.
- D. The survey will be conducted through the online survey system, Survey Monkey. Survey Monkey uses data processing software that

automatically analyses data and sends it to the researcher's personal computer for further analysis and storage. Data will be collected into an SSL(Secure Sockets Layer) security protected storage system until such time as the student researcher is ready to store it on a personal computer. Data will be stored in a password protected file on the student researcher's personal computer for three years.

- E. Most of the questions will be quantitative; however there will be some open ended questions that will give the participants an opportunity to share information in a narrative format.
- F. Participants will be recruited from the National Association for Gifted Children Website (NAGC), the NAGC publication *Parenting for High Potential*, Hoagies Gifted website, Willamette Education Service District, various other state and district TAG organizations, classroom teachers who expressed interest, and university summer TAG programs.via a letter with the URL included.
- G. Participation is voluntary and anonymous. Participants will be given a link via one of the previously mentioned venues and complete the survey online. The survey will take approximately 15 minutes for parents and 15 minutes for students to complete.
- H. Since this will be an online survey, there will be no interaction with the participants.

I. Research Time Line:

April 26 –

- Finalize IRB Protocol
- Finalize Survey
- Send list of prospective research sites to PI

April 28 –

• Put survey on the Internet

May 7 –

- Send survey to experts in gifted education who have done research in reading for gifted learners to preview for face validity
- Send request for support queries to research sites along with survey link.

May 14 –

• Submit IRB protocol no later than this date.

June 7 –

• Send link to survey to research sites

August 31 –

- Close survey
- Collect data

September 1-

• Analyze data

October 31 -

- Complete data analyses
- J. This is a single-phase mixed methods study, and we will use the Triangulation Design. We will collect both quantitative and qualitative data concurrently using the Validating Quantitative Data Model of the Triangulation Design. This design was chosen in order to gather a more complete picture of the nature of the research question than could be obtained by collecting only quantitative data.

We will use magnitude coding as a first layer coding method, values coding and emotional coding as second layer coding methods to analyze the qualitative data and descriptive statistics and correlation analyses to analyze the quantitative data. Since this study is being conducted in a single phase with no opportunity to go back and question participants further, the qualitative data we collect will be used to validate the quantitative data.

15. Compensation: NA

16.Cost:

These should be no cost to the participants involved in this study.

17. Drugs, Biologics, Supplements, or Devices:

NA

18. Biological Samples:

NA

19. Anonymity or Confidentiality:

Data will be stored digitally in an electronic database that will be password protected to insure anonymity. Data will be stored for three years past the completion of the study, and no one other that the research team will have access to the data. The means of gathering the data is an internet survey. There will be no identifiers that will link the information gathered in the survey back to the participant.

20. Risks:

There are no foreseeable risks to individuals who participate in this study.

21. Benefits:

Participants in this study will be contributing to the knowledge base of how gifted students learn in general and how gifted students perceive how they learned to read in particular. We have found no other studies that address this concern, and participants in this study may be the first to contribute data to an area where there has been little to no previous research.

22. Assessment of Risk: Benefit ratio:

We foresee no risks to individuals who take this survey. However, participants will be making a much needed contribution to the understanding of gifted learners' perceptions of their own reading experiences, in the very beginning, during the first years of school, and in the current school context.