### The University of Southern Mississippi

# The Aquila Digital Community

**Dissertations** 

Spring 5-2017

# **Educating Students with Visual Impairments in the General Education Setting**

Kerri Janae Johnson-Jones University of Southern Mississippi

Follow this and additional works at: https://aquila.usm.edu/dissertations



Part of the Accessibility Commons

#### **Recommended Citation**

Johnson-Jones, Kerri Janae, "Educating Students with Visual Impairments in the General Education Setting" (2017). Dissertations. 1337.

https://aquila.usm.edu/dissertations/1337

This Dissertation is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Dissertations by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu.

# EDUCATING STUDENTS WITH VISUAL IMPAIRMENTS IN THE GENERAL EDUCATION SETTING

by

### Kerri Janae Johnson-Jones

A Dissertation
Submitted to the Graduate School
and the Department of Curriculum, Instruction, and Special Education
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved:						
Or. Hollie Filce, Committee Chair						
Associate Professor, Curriculum, Instruction, and Special Education	n					
Or. John Bishop, Committee Member						
Assistant Professor, Curriculum, Instruction, and Special Education	1					
Or. David Daves, Committee Member Associate Professor, Curriculum, Instruction, and Special Education	n					
Or. Stacy Reeves, Committee Member Associate Professor, Curriculum, Instruction, and Special Education	n					
Or. Karen S. Coats Dean of the Graduate School						

## **COPYRIGHT BY**

Kerri Janae Johnson-Jones

2017

# Published by the Graduate School



#### **ABSTRACT**

# EDUCATING STUDENTS WITH VISUAL IMPAIRMENTS IN THE GENERAL EDUCATION SETTING

by Kerri Janae Johnson-Jones

#### May 2017

This research study was aimed at describing the experiences of visually impaired students and their teachers about their experiences within the general education setting. The purpose of this study was to collect and report interview data, corroborated with observational data in order to provide rich, descriptive data based on the participants' experiences. A case study approach was used to gather the data in a naturalistic setting. In this case study, all student participants were individuals with visual impairments along the spectrum of being legally blind.

Findings of this study revealed four emerging themes that produced evidence of the unique participant's experiences. These four themes were described as acknowledging sense of self, depending on structures of support, desiring a sense of normalcy, and responding to barriers. From the emergence of these, several implications related to the participant's experiences revealed a support in literature related to teacher training and support and providing appropriate services.

#### **ACKNOWLEDGMENTS**

I want to provide a special thanks to my dissertation chair, Dr. Hollie Filce, for her continuous guidance, patience, and feedback along the way. I appreciate you for not giving up on me. Also, thank you to the remaining members of my dissertation committee: Dr. John Bishop, Dr. Stacy Reeves, and Dr. David Daves. Thanks for your feedback and your willingness to serve on my committee. Thank you to two special supporters, Bridgette Taylor and Malonia Griffin, for providing constant support, prayers, and words of encouragement as I worked to complete this task. You were always there to lend a helping hand, I will forever be grateful.

I would like to thank all the participants for their willingness and patience to participate in the study. Without you, all this would have not been possible.

#### **DEDICATION**

I would like to give thanks and praise to God for allowing me the opportunity of life; which has allowed me a chance to work toward accomplishing this goal. Secondly, I would like to thank my husband for providing "tough love" which was my encouragement to complete the goals I started, and always being supportive of my aspirations. Thanks to my son for being understanding and patient with me, even when I know it was hard on him. Next, I want to acknowledge my parents, siblings, and other supporters who stood by my side providing love, encouragement, and assistance during this process.

To my sons, William and Chase, you are my motivation for every decision I make in life. I strive to learn more in each passing day, so I can touch lives; just as you have touched my life. I love you dearly.

To my grandmother, Cherry Hill, this process has been difficult to endure with having you just in my memories; but I dedicate this to you to preserve your legacy.

Thank you for being such a great example of a determined and hard-working woman. All your works have greatly been well-regarded.

# TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGMENTS	iii
DEDICATION	iv
LIST OF TABLES	ix
CHAPTER I – INTRODUCTION	1
Background	1
Statement of Problem	4
Purpose of the Study	5
Theoretical Framework	6
Research Questions	8
Limitations and Delimitations	9
Definition of Key Terms	10
Summary	13
CHAPTER II – REVIEW OF LITERATURE	14
Legislation Guiding Educational Services	15
Characteristics of Visual Impairments and Blindness	17
Visual Impairments Defined by IDEA	19
Educational Services for Children with Visual Impairments	20
Least Restrictive Environment	22

Advantages and Disadvantages of the General Education Settings	24
Understanding How Children with Visual Impairments Learn	28
Teaching Students with Visual Impairments	29
Challenges of Teaching Students with Visual Impairments	30
Preparations for Teachers of Students with Visual Impairments	33
Expanded Core Curriculum	35
Summary	36
CHAPTER III - METHODOLOGY	38
Researcher's Role	39
Setting of Study	40
Sample of Study	42
The "Case"	42
Participants	43
Data Collection Plan	44
Instruments	45
Validity and Reliability	46
Measures of Ethical Protection of Participants	48
Data Analysis	50
Research Questions	51
Criteria for Interpreting Findings	52

Summary	52
CHAPTER IV – FINDINGS	53
Research Questions	53
Emergent Themes and Subthemes	54
Theme I: Acknowledging Sense of Self.	55
Awareness of Established Relationships.	58
Theme II: Depending on Structures of Support	63
The Usage of Assistive Technology in the Classroom.	64
Family as a Support System for Children with Visual Impairments	66
Teachers as a Support System for Student with Visual Impairments	68
Peers as a Support System to Students with Visual Impairments	73
Theme III: Desiring a Sense of Normalcy.	74
Theme IV: Responding to Barriers.	79
Accessibility of Curriculum and Resources in the Classroom	80
Physical and Emotional Barriers	84
Summary	88
CHAPTER V – SUMMARY, DISCUSSION, AND IMPLICATIONS	91
Methods and Procedures	91
Summary of Findings	92
Interpretation of Findings	94

Theme I: Acknowledging Sense of Self
Theme II: Depending on Structures of Support
Theme III: Desiring a Sense of Normalcy
Theme IV: Response to Barriers
Limitations of Study
Discussion for Future Direction of Research
Conclusion
APPENDIX A – IRB APPROVAL LETTER118
APPENDIX B – IRB REVISION AND RENEWAL MEMO119
APPENDIX C -APPROVED IRB RENEWAL LETTER120
APPENDIX D -LETTER OF REQUEST TO SCHOOL DISTRICT 121
APPENDIX E -INTERVIEW QUESTIONS FOR STUDENT PARTICIPANTS 122
APPENDIX F -INTERVIEW QUESTIONS FOR TEACHER PARTICIPANTS 123
APPENDIX G -CLASSROOM OBSERVATION FORM
REFERENCES 127

# LIST OF TABLES

Table 1 Partici	ipant Demogra	phics4	_

#### CHAPTER I – INTRODUCTION

It is estimated that there are approximately 28,000 students in America's public schools with visual impairments (Snyder & Dillow, 2013). These students are being provided instruction in a variety of educational settings such as regular classes (including resource room and itinerant supplementary instruction), special classes, special schools, home-based education, and in hospitals and residential institutions (American Foundation of the Blind, [AFB] 2005). Researchers suggest that students with visual impairments are likely to prosper in educational settings offering appropriate instruction and services within a full array of program options (AFB, 2011). The literature analyzing the benefits and restrictions of various educational settings for students with visual impairments is scarce and fairly outdated, especially in the United States (National Dissemination Center or Children with Disabilities, 2011). Educators of students who are blind and/or have visual impairments have also recognized the need for instruction in traditional academic areas and instruction in Common Core State Standards (Hatlen, 2005; National Governors Association Center for Best Practices, 2010). Full participation in general education settings has been the goal throughout the history of educating students with visual impairments (National Dissemination Center for Children with Disabilities [NICHCY], 2011).

#### Background

The first school for the blind was founded specifically for students with blindness and visual impairments in 1829 in Massachusetts. This school was founded on the premise that individuals with visual impairments have the potential to be capable and contributing members of society. Individuals with blindness were among the first people

with disabilities to be recognized as being able to benefit from education. Schools for the blind were formed in the United States during the early 19<sup>th</sup> century on principles of promise and potential, not as symbols of oppression or charity. As mandatory education was not paramount at the time, many individuals with and without disabilities were not attending school. Thus, schools for the blind affirmed the belief in the potential of individuals with visual impairments in society. During this time, public schools were illequipped to meet the needs of students with disabilities, including those with visual impairments (Ferrell, 2007). The United States used examples of European boarding schools as blueprints for their residential and specialized schools for individuals with blindness. These schools have historically been centers of knowledge with specific expertise in teaching methodologies related to visual processes. Schools for the blind were some of the first teacher training institutions that used an apprenticeship model. This model allowed skilled teachers opportunities to train others how to appropriately interact with and educate individuals with visual disabilities. The importance of understanding the historical relevance of residential schools is important as they formed the foundation for the principles and potential of the individuals with visual impairments being orientated into society.

During the 1960's there was the movement of students with disabilities from segregated, specialized settings back to their home schools and the general education classroom to the greatest extent possible (Perkins, 2011). Today the majority of students with visual impairments are served in their home school by itinerant personnel. Yet there is increasing concern that students are still at risk of not receiving the intensity of services needed in order to be successful (AFB, 2011).

Visual impairment is a low incidence disability, and often research pertaining to this population is not often collected from the point of view of the person with the disability (AFB, 2011). Current trends in research for this population focus on educating individuals with visual impairments in general education settings (Avramidis, Bayliss, & Burden, 2000; Buultjeans, Stead, & Dallas, 2002; Rae, Murray, & McKenzie, 2010; Simon, Echeita, Scandoval, & Lopez, 2010); teachers' perceptions toward services to students with visual impairments in general education settings (Al-Ayoudi, 2006; Ali, Mustabpha, & Jelas, 2006; Wungu & Han, 2008); and competencies for teachers of students with visual impairments (Smith, Kelley, Maushak, Griffin-Shirley, & Lan, 2009). These research efforts have yielded some insight, but also reveal areas in need of further study in order to better provide services and outcomes for individuals who are blind or have visual impairments.

It is estimated the rate of children with visual impairments under the age of 18 in the United States is 12.2 per 1,000; with legal or total blindness occurring at a rate of 0.06 per 1,000 (NICHCY, 2012). States report demographics to U.S. Department of Education (USDOE, 2012) regarding students who are visual impaired or blind who receive special education and related services under Public Law, 101-476, The Individuals with Disabilities Education Act (IDEA). The American Printing House for the Blind (APH) collects data each year from states on the number of students that are legally blind through age 21 in U.S. public schools (pre-K through high school).

Both the IDEA and American Printing House for the Blind collect data upon which they base decisions and recommendations regarding provision of services to students with visual impairments or blindness. However, there are discrepancies between

the data reported by these two entities, primarily in prevalence rates reported. These differences are thought to be attributed to IDEA's count method which does not include children with visual impairments who are also counted in another disability category. Congress requires the USDOE to annually report the number of children ages 3-21 receiving special education by disability category. Reporting must not be duplicated, regardless of the number of disabilities they experience. This has led to an underestimation of the number of children with visual impairments in this country (NICHCY, 2012). APH federal registry requires a diagnosis of legal blindness and also includes students with other disabilities. These individuals are eligible to receive free accessibility materials (reading matter, Braille, large print or audio format) under quota funds. Quota funds are federal funds that states receive to provide adapted education materials to eligible students who meet the definition of blindness (American Foundation for the Blind [AFB], 2012). This variation in identification has caused the number of students with visual impairments that are served under IDEA to seemingly decline, while individuals receiving services from APH has progressively increased (NICHCY, 2012).

#### Statement of Problem

This study analyzed the experiences of educating children with visual impairments in the general education setting from the perspectives of the students as well as the teachers who provide their instruction. A qualitative research approach was used so that the real-life events could be captured in a holistic and meaningful manner explaining the issues or concerns of the participants (Yin, 2009). The study focused on the experiences of the participants with visual impairments who are taught in general education settings, along with commonalities that emerged from the participants'

realities. More specifically, this case study described the experiences of students with visual impairments in rural Mississippi, who were being educated in the general education setting. This study also explored the experiences of the teachers who serve these students in the general education setting.

Previous studies conducted with the visual impaired school-aged population have identified barriers to educating students with visual impairments in the general education setting (Bardin & Lewis, 2008; Chien-Huey Chang & Schaller, 2002; Davis & Hopwood, 2002; Dimigen, Roy, Horn, & Swan, 2001; Gray, 2005, 2009; Smith, Geruschat, & Huebner, 2004). Some of the barriers identified were a lack of specialized services; books and materials in appropriate media, such as Braille; and specialized equipment and technology to ensure equal access to specialized curricula (AFB, 2005). Other studies pointed to insufficient the training of the teachers of visually impaired (Porter & Lacey, 2008; Smith et al., 2009). This study sought to determine if those barriers were also identified by the students with visual impairments being educated in the public schools in rural Mississippi. According to American Foundation for the Blind (2012), students with visual impairments are often under-identified and under-served. Therefore, this study is necessary in order to provide evidence of how visual impaired students are being educated in rural, Mississippi.

#### Purpose of the Study

The purpose of the study was to gain insight from students with visual impairments and their teachers regarding their lived experiences in the general education setting in a single, rural Mississippi school district with a significant percentage of students with visual impairments identified by IDEA guidelines. The participants of this

study were students who were identified as legally blind and who received at least 80% of instruction in the general education setting. Additionally, the student's teachers and one paraprofessional also participated in the study.

#### Theoretical Framework

This study describes the experiences of students with visual impairments in general education settings; more specifically how their experiences are impacted by teachers and/or related services. This framework suggests reality as we know it is constructed through meanings and understanding of realities in order to develop social and experiential knowledge. Interpretivist theory assumes that beliefs are changeable and not absolute. A constructivist paradigm assumes relativist ontology (multiple realities), subjective epistemology (researcher and respondent co-create understandings), and naturalistic (in natural setting) methodological procedures in order frame the research. Constructivism brackets objective reality and seeks to show how disparities in human meanings generate and reflect differences in objective realities (Guba & Lincoln, 1994; Yin, 2009). Terms such as trustworthiness, credibility, transferability, and confirmability are the criteria that establish internal and external validity, reliability, and objectivity (Denzin & Lincoln, 2000).

Qualitative research is highly aligned with this theoretical framework, as qualitative researchers seek to understand participants in natural settings and employ various approaches to interpreting meanings that participants share (Guba & Lincoln, 1994). The naturalistic approach of interviewing and observation may be used to attain information that supports the underlying principles of interpretivism theory. Qualitative research is a field of inquiry that has many theoretical paradigms and perspectives in

which researchers employ to gain knowledge. Qualitative research consists of interpretive practices that make the world visible by transforming the practices into series of representations, including field notes, interviews, conversations, photographs, recordings and memos (Denzin & Lincoln, 2000).

Qualitative researchers have a full array of paradigms, methods, and strategies to employ in their research. Theories range from symbolic interactionism to constructivism naturalist inquiry, positivism and post-positivist, phenomenology, ethnomethodology, critical theory, neo-Marxist theory, semiotics, structuralism, feminism, and other various racial/ethnic paradigms (Denzin & Lincoln, 2000).

All qualitative research is established by an underlying philosophy that is based on the beliefs of how the researcher sees the word and acts in it. These principles are guided by beliefs of ontology (What is the nature or reality?) epistemology (What is the relationship between the inquirer and the known?), and methodology (How do we know the world of gain knowledge of it?). (Guba, 1990, p. 18)

The ultimate premise that contains the researchers' principles is its interpretive framework, which is a collection of beliefs that guides action (Guba, 1990). According to Denzin and Lincoln (2000), all research is interpretive, hence guided by the researcher's beliefs and feelings about the world and the perspective of how it should be understood and studied.

When investigating the experiences of students with visual impairments in general education settings, this study constructed meaning by assuming that the investigator and the object of investigation were linked through personal interpretation of knowledge.

The experimental knowledge of the investigator is constructed from the experience of

being a special education teacher, specifically a teacher of the visually impaired. The values of the researcher were inherent in all phases of the research process and truth were negotiated through dialogue between the researcher and participants. Findings from this study emerged through dialogue of observation and interviews with the students with visual impairments and their teachers (Yin 2009). This perspective assisted in constructing validity by using multiple sources or evidence including review of related literature, conducting in-class observations, and interviewing students with visual impairment and also their teachers (Guba & Lincoln, 1994; Yin, 2009). Terms such as trustworthiness, credibility, transferability, and confirmability are the criteria that establish internal and external validity, reliability, and objectivity (Denzin & Lincoln, 2000).

#### **Research Questions**

The central research question for this study is: How do students with visual impairments (grades 3<sup>rd</sup>-7<sup>th</sup>), and their teachers in a single, rural, Mississippi school district describe their educational experiences in the general education settings?

This study also addressed the following research sub-questions:

- 1. What do students with visual impairments report about their experiences in the general education setting in rural Mississippi?
- 2. How are teachers educating students with visual impairments in rural Mississippi?
- 3. How are students with visual impairments in rural Mississippi navigating daily routines in the general education setting?

This study sought to promote understanding for various stakeholders (administrators, teachers, paraprofessionals, related service providers, and parents) by reporting the experiences of individuals with visual impairments, and their teachers, within the context of the general education settings. This will allow stakeholders to examine the access, equity, and quality of services provided to individuals with visual impairments in the State of Mississippi.

#### Limitations and Delimitations

The study followed a qualitative research approach. Semi-structured interviewing was the primary method, with classroom observation supplementing. It involved preliminary examination of experiences of students with visual impairments in the general education setting. The study was limited and delimited in several ways. One limitation of the case study of visually impaired students in the general education setting was the time of year in which data was collected. Data was collected in late spring, but an earlier time frame would have possibly allowed more access to participants. Another limitation of the case study is generalization of the findings. The case study approach examined the experiences from a few individuals with a visual impairment, therefore, each participant shared a different outlook based on their experiences. According to Yin (2011), this could yield results that might be biased in disclosing some of the research concerns and key facts. However, with the limited identification of this population, the qualitative case study format was the most appropriate in order to collect in-depth data.

Participation in this study was delimited to students who are (a) diagnosed with a primary disability of visual impairment as indicated by their current Individualized Education Plan (IEP), (b) attending a Mississippi Public School (K-12), and (c) are

included in the general education setting at least 80% of the school day. The study was delimited to interviewing students with primary disabilities of visual impairment and the teachers that provide instruction to these students in the general education setting. There were three student participants and three teacher participants. The age range of the students varied from 9-13, and the age range of the teachers was not collected.

The case study format of the study was another delimitation. This format was used in order to collect and report interview and observational data related to how students with visual impairments are educated in general education settings. All student participants were legally blind.

#### **Definition of Key Terms**

To clarify the central phenomenon of this, study the following terms were used. Student with blindness. An individual who is eligible to receive special education services or 504 services due to an impairment in vision in which, even with corrections, adversely affects the student's educational performance. This includes a student who:

- Has a visual acuity of 20/200 or less in the better eye with correcting lenses or
  has a limited field or vision such that the widest diameter subtends an angular
  distance of less that twenty-one degrees;
- Has medically identified expectations of deteriorating vision;
- Is functionally blind due to visual problems affecting reading and writing skills. (MDE, 2009)

Common Core State Standards. The real-world application that holds expectations for all students (those with and without disabilities) to master college and career readiness knowledge and skills. Generally, these consists of knowledge

and skills related to academic subjects. Common Core State Standards consists of the following skills:

- English language arts
- Mathematics
- Science
- Health and physical education
- Fine arts
- Social studies
- Economics
- Business education
- Vocational education
- History (National Governors Association Center for Best Practices, 2010)

Expanded Core Curriculum (ECC). The Expanded Core Curriculum (ECC) is the framework of knowledge and skills that are needed by students with visual impairments due to their unique disability-specific needs. This curriculum is necessary for students with visual impairments in addition to the core academic curriculum of general education. The ECC should be used as a framework for assessing students, planning individual goals and providing instruction. ECC consist of the following skills:

- compensatory or functional academic skills, including communication modes
- orientation and mobility
- social interaction skills
- independent living skills
- recreation and leisure skills

- career education
- use of assistive technology
- sensory efficiency skills
- self-determination (AFB, 2012)

Inclusion. Placement in which children with disabilities are supported in chronologically age-appropriate general education classes in their home schools, and receive specialized instruction as outlined in their individualized education programs (IEP's) within the context of the core curriculum and general class activities (Halvorsen & Neary, 2001).

Legally blind. Children who have a visual acuity of 20/200 or less in the better eye after correction and/or a peripheral field so contracted that the widest diameter subtends an arc no greater than 20 degrees.

Partially sighted. Children who have a significant loss of vision but are able to use regular or large print as preferred reading medium. Visual acuity of 20/10 to 20/200 in the better eye after correction.

Totally blind. Children with complete loss of vision who use tactual and auditory learning characterized as the lack of light perception or total blindness (AFB, 2012; Gabbert, 2012)

Visual impairment. Includes blindness, and is an impairment in vision that, even with correction adversely affects a child's education performance. This includes both partial sight and blindness

#### Summary

The primary purpose of this study was to describe the experiences of students with visual impairments in the general education settings; as well as to examine if and how these experiences were impacted by teachers and/or related services. This dissertation is organized into five chapters. Chapter I introduces the theoretical framework of the study and its relevance to the problem investigated. The chapter continues with a rationale for completing this type of study, limitations, and delimitations of the research, and definitions of terms. Chapter II provides an analysis of the literature relating to individuals with visual impairments, specifically synthesizing the findings of other research reported on provision of educational services to students with visual impairments. Chapter II also discusses identified gaps in the literature, which provide the basis for the study. Chapter III describes the methodology used in this study, including a description of the participants, how participants were selected, the researcher's role, and ethical issues. Chapter III also includes an explanation of the data collection tools, how data were collected and analyzed, and possible threats to data quality. Chapters IV provides the findings of the study as emergent themes resulting from analysis of the research data. Chapter V provides the analysis, interpretation, and synthesis of findings, based on the findings presented in Chapter IV. Chapter V provides a discussion of the findings and makes interpretations based on the initial research question. Chapter V concludes with implications for future practice and research.

#### CHAPTER II – REVIEW OF LITERATURE

The United States has a long history of providing and promoting educational opportunities for all of its children. All students have the right to a free, appropriate public education (USDOE, 2012). However, as public education in the U.S. has evolved and grown, it has become apparent that education is not a one size fits all model. There are many diverse individuals with many different ways of learning and different learning needs. Individuals with disabilities as a group have gone through many years of hardships in order to become a part of society as a whole (NIHCHY, 2011). Legislation throughout the years has ensured educational opportunities for individuals with disabilities, and those individual rights are still being protected today.

The purpose of this chapter is to provide background information related to the education of individuals with disabilities, particularly those with visual impairments, in the general education setting. The legal requirements to provide education to students with visual impairments, as well as the criteria one must meet to be eligible for protections and services are discussed. Next, the characteristics of individuals with visual impairments are provided, along with information on how students with visually impairments best learn, reviewing instructional strategies and exploring the Expanded Core Curriculum. This chapter includes a discussion about various types of visual impairments, as well as literature discussing both historical practices as well as currently valued practices for determining educational settings and placements for students with visual impairments. This chapter concludes with literature that discusses limited available research in this topic and the need for continued research

#### Legislation Guiding Educational Services

In the United States, all students are entitled to a free appropriate public education (FAPE) under federal laws including the Rehabilitation Act of 1973 (Section 504) and the Individuals with Disabilities Education Act (NICHCY, 2012). Both comprehensive laws require services designed to meet the individual needs of students with disabilities within local educational agencies (LEAs). The needs of students with disabilities must be met to the same extent that the needs of their peers without disabilities are met.

Furthermore, students with disabilities should be included with nondisabled peers to the maximum extent appropriate, with more restrictive educational environments only being used when evidence of the necessity of such placements is provided (Individuals with Disabilities Education Act, 20 U.S.C. 1412 [a][5]). The evaluation and placement procedures are important to guard against inappropriate placement or inaccurate classification and establish due process procedures that provide rights to parents and guardians (Hatlen, 2000).

Section 504 protects the rights of individuals with disabilities regardless of the nature of or severity of their disability, mandating equal opportunity to receive program benefits and services. LEAs that are recipients of federal funds must provide a free appropriate public education for qualifying individuals living in their jurisdiction. The U.S. Department of Education, Section 504 [29 U.S.C. § 794] (2010) defines a qualifying person with a disability as "any person who has a physical or mental impairment which substantially limits one or more major life activities." Individuals with a history or regarded as having a physical or mental impairment that substantially limits one or more major life activities are also protected under Section 504

Like Section 504, the Individuals with Disabilities Education Act (IDEA) mandates a free, appropriate public education (FAPE) for children with disabilities. However, unlike Section 504 which focuses on access to educational services, IDEA mandates more intensive educational services to eligible children under this law. Any state receiving federal funds must ensure that a free and appropriate education (FAPE) is made available to eligible children within the states. IDEA defines 13 disability categories under which children and youth may be ruled eligible to receive special education services. Under the provisions of IDEA Part C, infants, and toddlers with disabilities ages birth- to two and their families are eligible to receive early intervention services. The provisions of IDEA Part B provide special education and related services for children and youth ages 3-21 (Individuals with Disabilities Education Act, 20 U.S.C. 1412 [a][5]). Eligibility categories under Part B are: intellectual disabilities, hearing impairments including deafness, speech or language impairments, and visual impairments including blindness, emotional disturbances, orthopedic impairments, autism, traumatic brain injury, other health impaired, specific learning disabilities, deaf-blindness, and multiple disabilities (Individuals with Disabilities Education Act, 20 U.S.C. 1412 [a][5]).

In 2002, U.S. Congress passed the No Child Left Behind Act (NCLB), a comprehensive education reform bill that required states to implement statewide accountability systems that covered all students. These systems are based on state standards in reading and mathematics, annual testing for all students in Grades 3 through 8, and analysis of annual statewide progress objectives to ensure that all groups of students reach proficiency within 12 years. The federal legislation called for instruction based on *scientifically-based research*. Educators are required to utilize best practices

with foundations in scientifically-based research. Often for students with visual impairments, educators have used tradition, superstition, anecdotes, and common sense to make educational decisions for students with visual impairments, rather than the use of research-based best practices (NICHCY, 2012).

The most recent shift in educational programming has been from individually-identified state curriculum frameworks to the Common Core State Standards-CCCS (National Governors Association Center for Best Practices, 2010). For numerous years, states have relied on state frameworks to guide the instruction and assessment of students in public school systems. However, as accountability has increased, and comparisons among states are being made, a move to a more common curriculum is being made. The CCSS provide a transparent understanding of what ALL students (those with and without disabilities) are expected to learn, and are designed to be vigorous and applicable to the real world. CCSS is the knowledge and skills that students are expected to master for success in college and careers (National Governors Association Center for Best Practices, 2010).

#### Characteristics of Visual Impairments and Blindness

Visual impairment is often used as an umbrella term, but not all visual impairments are the same. There are many different causes of visual impairment including cataracts, glaucoma, corneal scarring (from a variety of causes), age-related macular degeneration, and diabetic retinopathy, (Foster & Resnikoff, 2005). Also, the degree of the impairment can range from mild to severe (AFB, 2012).

Rhi and Cable (2003) report the characteristics of the population individuals with visual impairments are changing due to an increased ability to prevent and treat disorders

that have historically led to visual impairments or blindness. Researchers believe this improvement in prevention and treatment is linked to the changing trends in childhood chronic disease and disabilities that once decreased the survival rate of many children (NICHCY, 2012).

The main causes of blindness and low vision globally is reported to be a result of uncorrected refractive errors (myopia, hyperopia, or astigmatism), cataract, and glaucoma (Pascolini & Mariotti, 2010). NICHCY (2012) describes visual impairment as the consequence of a functional loss of vision, rather than the eye disorder itself. The degree of impairment, age of onset, particular eye condition, and aspect of the visual system affected, can determine how much correction is possible through glasses, contacts, medicine, or surgery.

Douglas and McLinden (2005) described visual impairment as a term that outlines the wide spectrum of the loss of visual function. Visual functioning has many aspects, including visual acuity (ability to resolve detail), accommodation (the ability to focus), field of vision (the area that can be seen), color vision, and adaptability to light (Douglas, McCall, McLinden, & Pavey, Ware, Farrell, 2009).

Literature suggests that there is no universally adopted definition of visual impairment in the literature relating to children. IDEA defines visual impairment for the purpose of evaluation and receiving educational and related services. However, the research reflects no consistency in literature. There is general agreement that educational services for students with visual impairments should be based upon not only clinical assessments but also the functional implications of visual impairment. The use of

both clinical and functional definition is particularly important because it provides connection between health and educational services (Douglas et al., 2009).

#### Visual Impairments Defined by IDEA

The USDOE requires all states to report the number of children with visual impairments who receive special education and related services under IDEA. Visual impairment and blindness are defined by the USDOE as impairment in vision, even with correction, that adversely affects a child's education performance (U.S. Department of Education, n.d.). The data reported in 2011 for the 2010 school year showed 3,447 children ages (3-5) and 25,670 children ages (6-21) were served in the U.S. and its outlying territories under the category of Visual Impairment (NICHCY, 2012). This definition is very general, and one must look more closely at the eligibility criteria to have a better picture of the students with visual impairment and blindness who are receiving educational services and supports under IDEA. In order for a student to be identified as having a visual impairment, he or she must be identified in one of the four categories: partially sighted, low vision, legally blind, or totally blind. Partially sighted is characterized as a visual impairment that adversely affects a student's educational performance even when corrected to the extent possible. Low vision is characterized as having vision between 20/70-20/160, and cannot be corrected. Legally blind is a severe vision loss that is from 20/200-20/400 and can also be a profound loss from 20/400-20/1000. Totally blind is characterized as the lack of light perception or total blindness (Gabbert, 2012). Despite the level of vision loss, students must be properly identified in order to receive appropriate services.

#### Educational Services for Children with Visual Impairments

Individuals with visual impairments or blindness were among the first to receive specialized instruction based on their needs (Ferrell, 2007). Visual impairments can be classified on the spectrum from low vision to total blindness. The degree of the vision loss is often the determiner of the diagnosis, and also the level of services needed. Visual impairment and blindness manifest in many ways and require professionals who are trained to identify and assist individuals with these disorders. Historically, individuals with visual impairments or blindness were educated in schools designed specifically for students with these disabilities; however, today most students with visual impairments are educated in their neighborhood schools (AFB, 2011). Integrating students with disabilities into the general education classroom allows more opportunities for students with visual impairments to have more shared experiences with their non-disabled peers and provided numerous advantages to all students (AFB, 2012).

There is general agreement among experts in visual impairments that educational services for these students should be based upon not only clinical assessments but also the functional implications of visual impairment (AFB, 2011). The use of both clinical and functional definitions is particularly important because it provides connection between health and educational services (Douglas et al., 2009). Despite the ongoing push to educate all children (including those with visual impairments and blindness) in the general education setting, the National Council on Disability (2009) claims there are no detailed studies of the school-aged population with visual impairments being educated in the general education setting in the United States.

The population of students with visual impairments and/or blindness is extremely diverse. These students display a wide array of vision difficulties and a variety of adaptations to their vision loss. Moreover, of children with visual impairments, researchers estimate between 50% (Keil, 2002) and 71% (Ravenscroft et al., 2008) have disabilities in addition to their visual impairment. Therefore, it is important to consider a variety of factors when designing an appropriate educational program for a student with blindness or visual impairment (AFB, 1995). Although, the IDEA guarantees students with visual impairments a free and appropriate public education, these students still face many educational challenges such as leaving school without adequate skills or knowledge essential for further education, gainful employment, and independent living at home and in their communities; severe shortage of qualified teachers of visually impaired and orientation and mobility specialists to provided instructions to students, which restricts access to the specialized skills these children need; and the perception that residential and special schools for children with visual impairments are too costly (AFB, 2005).

History of the service delivery model. Historically, children with blindness and visual impairments were among the first children with disabilities to receive a public education (Ferrell, 2006). The first school for the blind in the United States was established in 1829 in Boston, and the first public school class for students with visual disabilities opened in Chicago in 1900 (Hatlen, 2000). Mandatory public education for children with all disabilities was not mandated until the passage of the Education for All Handicapped Children Act in 1975.

Sapp and Hatlen (2010) contends that educators of students with visual impairments pioneered inclusive education. In 1837, Samuel G. Howe, the first

headmaster of the New England Asylum of Boston, emphasized that instructional settings yielded contributing qualities that produced effective interventions. Howe asserted the beliefs that children who were blind should be provided with the same opportunities, experiences, and hopes as sighted children (McGinnity, Seymour-Ford, & Andries, 2004). In the late nineteenth century, social Darwinism replaced conservatism as the primary rationale for individuals that were different from those of the general population, and therefore more segregated programs and settings became the norm (McGinnity et al., 2004). At the onset of the twentieth century, children with disabilities were still often excluded from public schools and kept at home, if not institutionalized. In order to respond to the new population of students with disabilities entering schools, school officials created still more special classes in public schools (Mock et. al., 2002).

\*\*Least Restrictive Environment.\*\*

After nearly a century of placement debates, special educators in the 1960's began to focus attention on creating environments for the delivery of services based on a continuum of placement options that would address the needs of all students with disabilities, rather than a one size fits all model. The civil rights movement framed special education as an issue of access to minority groups (individuals with disabilities) to the educational privileges afforded the majority. This began a period of legislative mandates requiring educational services for children with disabilities in the least restrictive environment, or LRE. IDEA promotes that the "least restrictive environment" analysis begins with placement in the regular education classroom. School districts are required to provide a "continuum of placements," extending from the regular education classroom to residential settings, in order to accommodate the needs of all children with

disabilities. This concept of the array of services increases the likelihood of children being placed appropriately in an environment that is suitable for their specific needs (AFB, 2011).

The LRE mandate has been operationalized many ways, under many different titles, all with the ultimate goals of providing services and supports to students with disabilities in general education settings. One such term used was "mainstreaming" which advocated for the return of students with disabilities to the regular classroom whenever and wherever possible (Yell, 2005). In the 1980s, the Regular Education Initiative (REI) emerged to return responsibility for the education of all students to neighborhood schools and regular classroom teachers. This movement was aimed more at minority or disadvantaged children and lacked the momentum needed include students with disabilities in its efforts.

In the 1990's, the movement to educate children with disabilities with their typical peers was one again reconceptualized and the term "inclusion" was introduced. The inclusive education movement called for educating all students with disabilities in the general education classroom using a single, unified and responsive education system. Followers of Howe (Mock et al., 2002), supported the inclusive ideals of appropriate instruction provided to students with visual impairments by accessing content just as their peers without disabilities. Like many other advocacy groups, the American Foundation for the Blind (AFB, 2011) proposed that the terms inclusion, full inclusion, and inclusive education were used to describe the philosophy that all students with disabilities; despite the form or severity, shall receive educational programming within the general education setting.

Advantages and Disadvantages of the General Education Settings.

Research suggests academic and social outcomes for all students are better when all students are educated together (Felman, 2000). Others argue that placement does not make a difference (AFB, 2012). However, proponents of educating all students in typical education settings argue that the benefits for segregated education are weak and mostly compares students in segregated placements to those in general education classrooms without appropriate services and support (Felman, 2000). The literature presents evidence on both sides of the debate; with some studies showing advantages, while other emphasized disadvantages to providing instruction to students with disabilities in general education settings. However, of all studies reported, there is minimal research focusing specifically on students with visual impairments being educated in general education setting (Ferrell, 2006). Much of the research was conducted during the period of time that used the term "inclusion" to describe educating students with disabilities in general education settings. The term inclusion was used in this section when describing such studies.

Over the years, the educational systems not only in the United States but all over the world have changed significantly through educational reforms, including the movement towards educating students with disabilities in general education classrooms. Research has indicated several positive effects of educating students with disabilities, particularly developmental disabilities, in typical settings versus special classrooms (Baker, Wang, & Walberg, 1995). One such advantage of typical settings is the social integration of students with disabilities with their peers without disabilities. These

interactions provide opportunities for students to create relationships that would not be possible in more restrictive settings (AFB, 2012). Furthermore, educating all children in the same environment is said to teach students without disabilities to be accepting of differences and respect for individuals regardless of their disability (Perles, 2010). Research suggests that inclusive classrooms do not hinder the academic achievement of typical students, and may have various social and developmental advantages for students with and without disabilities (Peltier, 1997; Staub & Peck, 1995).

Early research on inclusion sought to examine and confirm the social efficacy of inclusion, rather than its academic efficacy (Katz & Mirenda, 2002). Research showed that contact with peers without disabilities is likely to increase the social, communication, and behavioral skills of students with disabilities. Research further provides evidence that supports the amount of contact with students without disabilities has been shown to be linked to increased social skills and mutual interactions (Cole & Meyer, 1991), increased attainment of IEP objectives (Brinker & Thorpe, 1984), positive parental expectations and attitudes (Hanline & Halvorsen, 1989), development of friendships and social support networks (Fryxell & Kennedy, 1995), and improved behavioral outcomes (Lee & Odom, 1996) for students. The benefits of educating students with disabilities in general education setting have been shown to extend beyond the school years. Those educated in general education settings have been shown to have greater success in competitive employment after exiting school (Katz & Mirenda, 2002).

In several qualitative studies investigating parent, teacher, and student beliefs surrounding inclusion, social goals/outcomes were frequently identified as being of central importance. The research support for inclusion provides compelling data that

supports the notion that inclusive education is at least as good and appears to be better than segregated settings for all students. The needs of diverse learners can be met by working together in inclusive environments. Parents, as well as teacher report experiences that are positive in inclusive environments. Also, the costs of inclusive environments are less than segregated environments (Felman, 2000).

Katz and Mirenda (2002) suggested increased opportunities to interact with and learn from peers without disabilities has been shown to correlate with measures of self-esteem, social skills, positive emotional and behavioral outcomes, and academic achievement for students with developmental disabilities (Alper & Ryndak, 1992; Brinker & Thorpe, 1984; Hunt, Alwell, Farron-Davis, & Goetz, 1996; Lee & Odom, 1996). Social benefits of inclusion provide for these interactions; direct social skills and outcomes (such as pragmatic language development, a sense of belonging, and friendships), but also more indirect outcomes such as happiness, self-concept development, and positive behavioral changes.

Perhaps more importantly, the literature cites academic benefits for students with disabilities who are taught in general education settings. Students are exposed to higher expectations from teachers and peers, as well as given opportunities to have positive academic role models in their peers without disabilities (AFB, 2011). The general education environment often reflects diversity, and therefore will provide many opportunities for educators to enhance learning of students, provide differentiated instruction, plan and instruct collaboratively, and promote social interactions between students (Perles, 2010).

Schools also benefit when they serve students with disabilities in general education settings, as monies that were allocated for special education classes can now be put elsewhere to fund inclusive schooling. When students are fully included in the general education setting, the money that was used for those segregated services may be used elsewhere. Money can be spent on staffing to support the general education teacher as well as materials for adaptation of curriculum (McCarty, 2006).

Researchers have also reported disadvantages to inclusive settings for students with disabilities. "Full inclusion is not the best placement for all students. The general education classroom is typically not individualized" (Bateman & Bateman, 2002, p. 3). Many proponents of full inclusion (every student in general education all day) feel that all students with special needs should be fully integrated into the general education setting even if that student may be disruptive to the other students. One major disadvantage is that if a student is so disruptive that the teacher cannot teach, it is not appropriate for the students in the general setting because they are not learning at the rate they should be learning. Another reported disadvantage of full inclusion suggests students with disabilities are not receiving the specialized attention needed to be successful within the environment. Students may feel uncomfortable due to their disabilities, which could cause social withdrawal (NICHCY, 2012). Teacher training and preparation have also been noted as a disadvantage of inclusion. Teachers may not be adequately trained to provide necessary adaptations for students with disabilities (AFB, 2012). Teachers may not be aware of the most appropriate strategies to use to individualize instruction for students with specific needs. While legislative requirements and reported benefits are

pushing more and more children with disabilities into general education settings, some researchers continue to cite apprehension to this model (AFB, 2012).

Understanding How Children with Visual Impairments Learn

It is important to highlight the notion that educational goals for individuals with visual impairments should be essentially the same as for all students. Students with visual impairments require specific interventions and modification of their educational programming. Children with visual impairments can learn, but the access of their visual senses is impaired. As such, they require different ways to interact with information, relying on touch, taste, and hearing to gather information, (NICHCY, 2012). Vision is the primary sense upon which most traditional education strategies are based (AFB, 2011). Douglas and McLinden (2005) reviewed pedagogy and visual impairment education and argued that the research of the past has emphasized the concept of gaining access. The rationale for this appears to be a view that the impending barrier that individuals with visual impairments are faced with is the lack of access to visual information (Cavanaugh, 2002).

Full participation of students with visual impairments in general education classes is also affected by the need to access print materials using alternative methods. Braille readers tend to read more slowly than print readers (Nolan & Kederis 1969; Trent & Truan, 1997; Wormsley, 1996) and students with low vision who use magnification devices (Cowen & Shepler, 2000) and large print (Corn et al., 2002; Gompel, van Bon, & Schreuder, 2004). The use of assistive technology devices can be useful, but valuable academic learning time can be lost while locating the correct section of an audiotape or

turning on a computer, interacting with a note taker, opening the correct application, and getting ready to take notes or prepare written materials.

The educational environment itself can also create a barrier for students with visual impairments since the general education classrooms are designed with sighted students in mind. The formats of the educational materials are presented in a variety of visual formats: posters, charts, diagrams, videos, models, demonstrations, and print materials. The students with visual impairments often have difficulty benefiting from these materials (Cavanaugh, 2002).

Teaching Students with Visual Impairments.

Literature provides evidence of how a student with visual impairments should learn, and the appropriate strategies that should be used to provide instruction. The lack of any degree of vision will affect learning, and students with vision loss often require specialized instruction to grasp concepts. Children with visual impairments have specific needs and should be educated through a holistic, team approach. Students with visual impairments are often unaware of activities going on around them and are often limited from acquiring information through incidental learning. These students often must learn through alternate mediums, using his or her other senses (AFB, 2012). Therefore, instruction should be designed to promote learning that is best for the student's unique abilities and learning needs. Effective teachers of students with visual impairments employ strategies that support the child's multisensory capabilities (visual, auditory, and tactile) in the classroom environment (AFB, 2011). In order to meet students' educational needs, specialized services, appropriate instructional books, and materials (including Braille), as well specialized equipment and technology should be integrated.

Students with disabilities also rely on specialized materials in order to meet their individual learning needs, and teachers are required to identify ways to alter their teaching in order to meet those individual learning needs. The enhancement of visual information and alternative forms of presenting visual information using auditory or tactual means are two widely used strategies that are effective to convey concepts to students with visual impairments. Researchers are now focusing on developing and evaluating this broad approach. However, research on these strategies has been criticized because studies lack a comparative design (Douglas et al., 2009). Adapted books, specialized equipment, and other technologies have provided students with sensory impairments equal access to the core and specialized curricula (Sapp & Hatlen, 2010). Challenges of Teaching Students with Visual Impairments.

The educational trends of the last twenty years have all led to increasing number of children with disabilities being taught within general education settings whenever possible (Turnbull, Turnbull, Shank, & Leal, 1995). This has posed challenges to those educating these students, as students with visual impairments strive to learn the content required of all students despite the challenges their vision loss present. Barriers include under-identification of students with visual impairments, inadequate teacher training, lack of appropriate support services, lack of supplemental curricula focusing on the needs of students with visual impairments, general education environments which are highly visual, and teacher perceptions of these students (Hatlen, 2005).

Students with visual impairments often have other conditions which impact their ability to learn, and their visual impairment is often not identified as their primary condition. Not determining the visual impairment as the primary disabling condition

could prevent these students from receiving appropriate services based on their needs (USDOE, 2012). Visual impairment occurs so infrequently in the school-age population (Adams, Hendershot, & Marano, 1999; Jones & Collins, 1966; Wenger, Kaye, & LaPlante, 1996) that few school psychologists are able to acquire sufficient experience evaluating students with visual impairments (Spungin & Ferrell, 1999). Furthermore, the number of specialists in visual impairments in instructional positions is insufficient given the number of students with visual impairments requiring specialized instruction. Despite this, all students are held to a standard of accountability for acquiring sufficient skills and knowledge through their school career (AFB, 2012).

Another challenge to providing adequate services to students with visual impairments is inadequate teacher training and preparation. Teachers that are not trained properly hinder the rate of learning for students with visual disabilities (Silberman, Bruce, & Nelson, 2004). Teachers of students with visual impairments are responsible for providing specialized instruction and support services for these students, and this instruction should be adequate to compensate for the student's lack of visual functioning. There are many barriers that could impact the academic and social progress of a student with visually impairment (Hatlen, 2005).

Perhaps the most influential aspect of instruction of students with visual impairments is making sure these students have access to instructional materials. Students with visual impairments must master the same educational curriculum as their typical peers, but the visual impairment itself imposes restrictions on their ability to access the curriculum when presented in the typical method by the classroom teacher. In addition to being taught the content itself, students with visual impairments must be taught the

necessary skills to obtain access to information (Riley, 2000), particularly in the high-stakes context of an increasingly rigorous standards-based curriculum. Students with disabilities benefit from receiving instruction in general education settings, yet limited studies have been conducted that investigate the students' perspectives of experiences in these settings.

Students with visual impairments require supplementary instruction and support in order to help learn skills to cope with the challenges of their vision loss. The Expanded Core Curriculum (ECC) was developed to address the gaps in the general education curriculum that are critical to the success of these students (AFB, 2011). The need to provide students with visual impairments a dual curriculum (general education curriculum and the ECC) was recommended based on concerns that these students were not receiving the instruction needed to prepare them for adult living (Hatlen, 2000). The available literature related to educating students with visual impairments in general education settings further documents that the needs of students are not being met due to the lack of competent teachers providing instruction, and also because the lack of access to available resources (Al-Zyoudi, 2006; Ali et al., 2006; Gyimah, Sugden, & Pearson, 2009; Nyoni et al., 2011).

The educational environment itself can be a barrier for students with visual impairments if the environment is not designed for their specific needs (Hatlen, 2005). This could include anything from the delivery of instruction to the independent practice activities for students. Students with visual impairments have to be provided opportunities in which they are receiving information in various modalities (touch, hear, taste, and feel) in order to compensate for their lack of vision. Students with visual

impairments may also not receive specialized instruction in the student's most appropriate learning style (AFB, 2012).

The perceptions of teachers have been the main focus of various studies on providing instruction to individuals with visual impairments or blindness in general education settings (Avramidis & Norwich 2010; Rae et al., 2010; Wungu & Han, 2008). According to Nyoni and colleagues (2011), general education teachers should have both appropriate skills and attitudes in order to adequately and meaningfully assist students with visual impairments in general education settings. Teachers should be trained to implement various strategies to facilitate students' assimilation into the classroom, school, community and work setting (National Board for Professional Teaching Standards [NBPTS], 2001).

Preparations for Teachers of Students with Visual Impairments.

While there is consensus that teaching children with visual impairments require certain skills in their teachers and related service providers, there appear to be no detailed studies of the number of trained teachers of the visual impaired qualified to provide such services in U.S. schools. Some evidence from international studies related to teachers' attitudes towards students with visual impairment being included in the general education setting is available (Hatlen, 2002), but no findings of this type of study in the Unites States. In relation to the United States, there is evidence that supports the push for Expanded Core Curriculum (ECC) for students with visual impairments, but no consistent data related to the results of students that are educated using the curriculum compared to those that are not.

Another area of concern reported in the literature is the lack of sufficiently trained personnel (AFB, 2012). Students with visual impairments frequently receive instruction from personnel who are not qualified to teach critical skills such as Braille, cane and other travel skills, and effective use of available vision. This problem is even more alarming in rural communities, where shortages of qualified personnel are most acute (NICHCY, 2012).

Adequate personnel preparation programs must be in effect to train staff and to provide specialized services that address the academic and non-academic curriculum.

AFB (2012), reports that itinerant personnel serves most students with visual impairments in their home schools. However, there are increasing apprehensions that students with visual disabilities are not receiving the concentration of services needed to develop adequate skills to make them successfully included in school (NICHCY, 2012). Research supports the essential elements that teachers of students with visual impairments should possess including effective communication skills, ability to correctly place students in appropriate settings, and knowledge of the educational implications of eye conditions (AFB, 2012).

These competencies aligned with the development of personnel preparation programs have provided a foundational structure of future teachers. Experts contend that students with visual impairments need instruction by a teacher with expertise in the areas of visual disorders, and sufficient training in effective use of strategies. Students with visual impairments are not only required to master the same educational curriculum as their peers, but also the Expanded Core Curriculum (ECC) if they are to be successful (Hatlen, 2000).

Expanded Core Curriculum.

The Expanded Core Curriculum is a unique cluster of knowledge and skills needed specifically by students with visual impairments and blindness (Miller, 2003). If students with visual impairments are provided adequate instruction in both curriculum areas, experts suggest the chances of the student having appropriate educational opportunities increases (AFB, 2012). One key factor to ensuring the chances of student success are maximized is providing trained teachers with competence in both the general education curriculum and the ECC (McGinnity, Seymour-Ford, & Andries, 2004).

Literature suggests that an important aim in the field of visual impairment is to identify educational models for students who are blind or who have visual impairments that demonstrate evidence-based outcomes for these individuals. The majority of the literature demonstrates the need to improve access as an essential outcome. Implications of this focus have relevant bearings on the creation of recommendations that are directly related to the teaching approaches and constructs of the curriculum required for students with visual impairments (Douglas et al., 2009).

Hatlen (1996) called for the adoption of an Expanded Core Curriculum (ECC) for students with visual impairments. The ECC is comprised of nine core clusters of knowledge base and skills that are essential to students with visual impairments due to their disability-specific needs. The ECC must not be confused with the Common Core State Standards. The ECC is designed specifically for students with visual impairments and focuses on functional academic skills (including communication skills), orientation and mobility, social interaction skills, independent living skills, recreation and leisure

skills, career education, use of assistive technology, sensory efficiency skill, and selfdetermination. These skills are needed along with the general education curriculum.

The research was conducted in public schools where students with visual impairments were taught in a general education setting to gain information related to how teachers employ their time within the class. The results indicated that the teachers spent the majority of instructional time on academics, tutoring and teaching communication skills; even after efforts to promote the importance of including the ECC in the education of students with visual impairments (Wolfe et al., 2002). Research studies related to students with visual impairments in general education environments reveal a consensus that these individuals are often not receiving the support of teachers to be fully integrated (Sapp & Hatlen, 2010).

# Summary

As education has evolved over the past years, there are complexities of many factors that require ongoing research to conclude the most effective educational contexts and strategies for all students. Evidence continues to mount in support of the positive effects of inclusive education for students both with and without disabilities. However, the best approach is to provide effective instruction to all in the inclusive setting. As educators, it is important to develop ways to provide instruction to students in the most appropriate manner to address their unique abilities, regardless of their level of skill or whether they possess a disability.

Social benefits of inclusion for students with disabilities have been found to increase the development of improved social and communication skills. It is evident from the research, that inclusive educational practices provide enhanced social and emotional

skills of students with and without disabilities. As legislation mandates education for all students, the biggest defeat seems to be providing instruction and strategies to individuals with specific learning needs. Teachers are lacking training in areas related educating students with visual impairments, which can hinder the outcome of student success. Students with visual impairments require specialized training in various aspects of the general education core curriculum as well as Expanded Core Curriculum (ECC). Until this need is met, students with visual impairment may be at a minimal level of progress due to insufficient instruction or the lack of access to material and services.

#### CHAPTER III - METHODOLOGY

This chapter is organized to revisit and support the initial problem and purpose addressed in Chapters I of this dissertation. The data analysis process will be discussed in order to provide an overview of how the data was collected and analyzed in order to yield findings of the study, as well as discuss the propositions that the researcher has linked to this study. This case study was designed to gain insight from students with visual impairments and their teachers regarding their lived experiences in the general education setting; more specifically, to examine if and how these experiences in the general education setting are impacted by their teachers, educational services and/or related services.

This chapter describes the qualitative research paradigm and case study design, as well as provide a rationale for choosing this method. In addition, this chapter describes the methodology for the study, including a description of the participants, how participants were selected, the researcher's role, and ethical issues. An explanation is included regarding the data collection tools, how data was collected and analyzed.

Qualitative research strives to understand participants in natural settings and constructs various approaches to interpreting meanings that participants share (Guba & Lincoln, 1994). According to Creswell (1998), the qualitative research paradigm should be undertaken when: (a) research questions begin with *how* and *why* (b) the topic requires the exploration of multiple views and/or a lack of theory, and (c) a natural setting is required. The purpose of qualitative research is to recognize the various interpretations of human experience and to promote understanding of how people make sense of their world from various aspects. It provides both the researchers and the participants with a

discovering experience. Qualitative research is not merely a different way of doing research, but a different way of thinking (Joniak, 2000). Creswell (1998) defines qualitative research as the following:

An inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The research builds complex, holistic pictures, analyzes words, reports detailed views of informants, and conducted the study in the natural setting. (p. 15)

This study was conducted using a case study research design. The case study methodology seeks to provide understanding of the unique experiences of each participant. It seeks to attain deep levels of understanding of reality (Lindlof, 1995). Case study design assumes multiple realities that seek a deep understanding of processoriented methods to provide rich and valid data (Treise, 1999).

#### Researcher's Role

Visual impairment is classified as a low incidence disability (NIHCHY, 2012) which significantly limits potential research participants available when studying this population. This is particularly true in a rural state such as Mississippi. Therefore, a case study methodology was chosen in order provide an in-depth understanding of the individuals with visual impairment in the general education setting. The case study design allowed the researcher to aim at producing an invaluable and up close viewpoint based on the participants' real-world experiences. Therefore, a naturalistic approach to interviewing and observation were used to carry out this study. This method was chosen to ensure adequate dialogue between the researchers and respondents. According to Creswell (2003), the researcher is an "instrument of data collection who collects words or

pictures, analyzes them in an exploratory fashion, which focuses on the meaning of participants, and describes a process that is expressive and influential in language" (p. 14). As the instrument of investigation, the researcher must identify and acknowledge the subjectivity that cannot be absent outside the research space shared by the participant. As part of the researcher's role, a set of propositions were established to support the overall methodology of this study.

Setting of Study.

This study was designed to gain insight from students with visual impairments and their teachers regarding their experiences in the general education setting; more specifically, to examine if and how these experiences in the general education setting are impacted by their teachers, educational services and/or related services. This study was undertaken in a rural Mississippi school district. This setting was chosen based on Mississippi Department of Education's census data related to students with disabilities receiving special education services in Mississippi, and also as being one of the districts with the highest percentages of students with disabilities of visually impairment in the State of Mississippi.

The settings of the study consisted of a primary elementary, upper elementary, and junior high school. All three schools were a part of the Mallory County School District and located within a five-mile distance from one another. A naturalistic inquiry approach was used in examining the experiences of the students and teachers who voluntarily responded to invitations sent to district representative and parents. Mallory County Schools consists of approximately 2,200 students, and 167 teachers, with a teacher to student ratio of 13.6 in the rural school system.

Since the study focused on students with visual impairments in the general education setting, the research study took place in the participants' schools. The district in which the schools were located, was considered as a low, socio-economic area. The three schools were older, brick buildings that seemed recently renovated, to some areas of each school. The principals and assistant principals of all three schools were females, as well as the special education director. All teacher participants were female, and the student participants were represented by two males and one female. The demographics of the school district represented approximately 1, 200 white students, 1,010 black students, and 32 Hispanic and other. Through observation of the schools of the three participants, the three schools visited in the district represented a predominately white population of teachers and students.

Data was collected from the participants through the primary source of interviewing. Apart from the interviews, observations were also conducted in the general education classes in order to address how students with visual impairments were navigating around in the general education setting. The remainder of the student body were not asked to change the format of their learning. A statement to the students was made to the class by the teacher, that the researcher was observing the class for the day and was not be a part of the class activities. No explicit description was provided that stated the researcher was observing students with visual impairments. This decision was made in order to help protect the social dynamics established in the classroom and to eliminate undue or unwanted attention on students with visual impairments.

Sample of Study.

Case study was decided as the best fit for this research, as its design is often used to uncover knowledge of an individual, group, organizational and related phenomena (Yin, 2009). A case study format would allow several cases of students with visual impairments to be bound together with the commonality of their disability, geographical location, and experiences within the general education setting.

The case study approach further provides options for purposeful sampling (Stake, 1995; Yin 2003). According to Champion (2005), purposive sampling is used when there are "clear criteria for selecting the participants for the sample group to be studied" (p. 62). Rather than gathering a random sample of the accessible population from all of the students with visual impairments in Mississippi, a purposive sampling of three students from three schools in a single school district was chosen to participate in the study, as well as a three of the students' teachers also participated in the study. When selecting the participants for the study. The census from the Mississippi Department of Education was reviewed and the selection of the Mallory County was made due to the high percentages of students being identified as receiving services under IDEA for visual impairment. The representation of the teacher participant was due by circumstance of having the students with visual impairment in their classes or being assigned to work with the student based on the student's disability.

The "Case"

In this research study, the unit of analysis, the "case" was identified as individuals diagnosed with visual impairments in the general education setting. All of the participants of the study were a part of a single school district in rural, Mississippi. This research

study took place in the participants' schools. With all minor participants, parental consent and youth assent were obtained before any portion of the audio recorders took place.

Participants were not excluded due to race, gender, socioeconomic status or religion.

Case study research should take place in the real world setting of the case, or natural environment (Creswell, 2005). The opportunity to conduct direct observation of the participants in their natural setting was essential to the design of this case study. The observations were conducted in a formal manner by using an in-class observational instrument. As part of the case study protocol submitted and approved by the Human Subjects Protection Review Committee at The University of Southern Mississippi, the observation instrument was acquired through public domain from the Texas School for the Blind website, therefore written authorization was not required.

# **Participants**

Individual participants were chosen for this qualitative case study because they share the experience of having a visual impairment, and/or because they are providing instruction as a general education teacher, special education teacher, or paraprofessional; in the general education setting for at least 80 % of the school day. The age range of the students ranged from no 9 to 13 years of age, ranging from grades 3rd-7th. The age of the teachers was not collected for this study. The participants for this qualitative case study was selected by the researcher from a rural, Southern Mississippi community. The racial demographics of the participants were all white teachers and students.

The six primary research informants included: a primary elementary student, special education teacher, and general education teacher; an upper elementary student and general education teacher; and a middle school student, general education teacher, and

paraprofessional. The teacher participants represented a variety of teaching assignments at their assigned locations. There were three school administrators and one school district special education director who participated in providing preliminary information about teacher and student participants. The information in Table 1 shows the demographic characteristics that represent the sample population that the researcher referred to in the case study.

Table 1

Participant Demographics

Participants	Role of	Gender	Race	Age
	Participant			
	G. 1	г 1	<b>77</b> 71 *.	0
Casey West	Student	Female	White	9
Bryson James	Student	Male	White	11
Braxton Thomas	Student	Male	African-American	13
Fiona Hyatt	Teacher (SS)	Female	White	
Nancy Adams	Paraprofessional	Female	White	
Diane Howard	Teacher (GE)	Female	White	
Janet Kelley	Teacher (GE)	Female	White	
surret Herrey	reaction (GL)	Temare	VV IIICO	

Note. SS=Special Services, GE=General Education

### Data Collection Plan

The data collection process occurred in three distinct phases: prescreening with initial brief interviews, observations with written instrument, and expansion of the study follow-up interviews observations... The targeted population was students with a primary diagnosis of visual impairment (VI), under the spectrum of legally blind, and the teachers and service providers that provide instruction and assistance in the general education setting.

The researcher collected data by using the following procedures: (a) request for permission letter was emailed to the school Superintendent and special education director (b) meetings were held with special education director, and referrals were provided to researcher (c) meetings were held with principals and teachers (c), and (d) request for permission to conduct research was gathered from all participants and parents.(e) conducted interviews and observations in the natural environment of the participants. (f) follow-up interviews and observations for some participants.

Data collection will consist of 1) audio-recorded and transcribed interviews of participants conducted by the researcher 2) classroom observations, and 3) researcher notes. The researcher conducted interviews with participants at appropriate times as identified by the school administrators. The researcher observed the participant within a general education class setting as approved by school administrator using an in-class observation form (Appendix E). All interviews and observations of students took place in participant's school based on administrative and parental consent, along with informed student assent. These interviews were conducted within a period of 2 months. *Instruments*.

The data gathering instruments consisted primarily of digital audio recorders and word-processing transcription software to gather interview data utilizing a list of openended interview questions in line with research methodology. In addition, the researcher collected data notes based on the classroom observations and interviews in the general education setting. These notes were structured in a fashion that records teaching styles, related services being provided, student activities, and involvement of students with visual impairment.

The in-class observation instrument was used to observe the following: visual functioning, classroom modifications, behaviors of targeted students and the class as a whole, and the use of technology. The observations occurred in general classroom settings, and also in other areas of the school such as in the hallways and on the playground. The use of observational evidence was used to provide supplemental information about the participants and their interactions in their general education setting.

The researcher also collected researcher's notes as source of data collection.

These notes were used as an additional method to record responses from participants, capture striking information observed by the participant, and other side notations about the overall process of the interviews and observations. The researcher's notes were not written in any formal fashion but considered to still be reliable sources of evidence to support the data collection process.

Validity and Reliability.

To ensure validity, this research study experience of students with visual impairments in general education settings will adhere to the three ideas presented by Merriam (2002). Validation of this study was gained through focus on strategies frequently used by qualitative researchers. The use of interviews in case study design is one of the most important methods for providing evidence. This method was used to corroborate specific findings that related to the established research questions and propositions.

The interview was conducted in a semi-structured manner and was audio taped and transcribed by the researcher. This method provided a more accurate depiction of the interview process rather than by taking notes alone and also yielded a connecting pattern

of evidence. The interview process was used to capture the participants own sense of reality. In this process, careful attention was paid to any researcher influence on the participant in order to minimize the threat of reflectivity. Therefore, the researcher remained sensitive to the existence of unintentionally influencing the participant's response during the process of interviewing, (Yin, 2014). During the interview process, a list of open-ended interview questions in line with the research methodology was used during all interviews. The list of open-ended questions for student participants and teacher participants can be found in Appendices A and B.

The strategy of prolonged engagements and persistent observation in the field were used to build trust with the participants, learning the culture, and checking for misinformation that may arise from distortion introduced by the researcher (Ely, Anzul, Friedman, Garner, & Steinmetz, 1991; Erlandson, Harris, Skipper, & Allen, 1993; Glense & Peshkin, 1992; Lincoln & Guba, 2000; Merriam, 1988). The researcher used the strategy of prolonged engagement to create a rapport with the participants by spending sufficient time through repeated visits and observations in the classroom settings and interviewing various members of the school culture. The process of checking for misinformation was implemented by interviewing the participants and school officials.

Reliability within this study was addressed by recording and transcribing data, and collecting detailed field notes. The use of coding procedures was implemented in this study to analyze the research to further focus on reliability (Silverman, 2005). This process ensures reliability was implemented by using consistent measures to interview the participants; through the use of a list of specific interview questions. All interviews data was examined through the process of holistic and emotional coding. The purpose of

coding in qualitative research is to learn from the data by revisiting it for several episodes until there is an understanding of patterns and themes.

Reliability was also addressed by establishing case study protocol and by creating a case study file. The case study protocol addressed all procedures and rules to be followed during the study. The protocol was used to increase reliability of the case study research and provide the researcher with guidance to carry out of the data collection process. The protocol for this research study was submitted and approved by the Human Subjects Protection Review Committee at the University of Southern Mississippi and can be found as Appendix A of this dissertation.

The creation of the case study file was also used to promote reliability in this case study. This file is compiled from various data information: interviews, in class observation reports, field notes, visuals displays, and audio files. The majority of the file was in electronic format, as the researcher also compiled a binder with multiple sources of information, both typed and written. This case study file is preserved in an organized manner in order to be retrieved efficiently.

The analysis of data will attempt to show how the researcher attended to all evidence collected through interactions with the participants. As interviews and observations were concluded, the researcher used specific analytic strategies to link the case study data to concepts of interest and to the research questions.

Measures of Ethical Protection of Participants.

It is the researcher's ethical responsibility to safeguard participants by maintaining the understood purpose of the research and outlining any potential risk. The risks to participants were minimal, but include the possibility of feeling performance

anxiety about sharing personal experiences in a formal interview process. However, to minimize the risks, participation was completely voluntary at the convenience of the participant, parents, and administrators. The participant or parent had the option to choose to discontinue participation in the research at any time, without providing a reason for discontinuation.

The researcher assured participants of confidentiality of their participation and responses. The methods for maintaining confidentiality are listed below and the parents were informed explicitly what the term "confidentiality" refers to and what procedures were used to protect their sharing the experiences. Pseudonyms were used for all participants and locations and documents that have names of persons or places were blurred using image manipulation software. The students' personal information was kept private at all times. Students and parents were told in the oral interview how researcher will secure personal information. To attempt to minimize the discomfort of participating in audio recorded interviews, the researcher conducted interviews at a preferential time and setting.

The researcher was ethically bound to the institution which supports or sanctions the study. No participants were contacted, and no data were collected until the researcher received approval of the dissertation proposal from the researcher's faculty advisor and dissertation committee member and researcher submitted an application to The University of Southern Mississippi Institutional Review Board (IRB) to receive extended permission to perform the research before soliciting for participants, arranging interviews, or collecting data.

Data was kept on the researcher's laptop computer, at the researcher's home, and at the researcher's office at The University of Southern Mississippi. This information was kept private and was only used for assisting the researcher to report the individual's experiences.

# Data Analysis

Case studies are a qualitative design that is used to answer specific research questions that lead to inform judgments or decisions based on human activity in the real word (Cohen, Manion, & Morrison, 2007). The organization of this case study was structured by drawing collecting and examining various sources of data such as interviews, observations and researcher's notes. The goal of the data analysis process of this case study is to reflect upon the many perspectives found in the case and to provide justification for findings through exploring and displaying evidence (Creswell, 2005). This case study design incorporated the following: the study's research questions, the propositions, units of analysis, linkage between data and proposition, and the criteria for interpreting the findings (Yin, 1994).

The researcher transcribed all interviews and wrote reports of all observations. This process yielded a large portion of written data related to the study. Therefore, the researcher reviewed and coded the data using the first cycle in vivo coding (Saldana, 2009, p. 48). In this process, the researcher was able to chunk sources of the participant's experiences into keywords and phrases. Following the data reductions process, the researcher then created tables of the keywords and phrases and from the interviews that provided representation of the chunked data. A second cycle coding method was also used to recognize similar codes and patterns (Saldana, 2009). This process was repeated

several times with each set of participant data. The data was then analyzed by the researcher to identify common codes based on experiences and the thus the codes was yielded into themes of the study.

## **Research Questions**

According to Yin's five component research design for case studies, the initial step was to develop questions that were "how" and "why" questions (Yin, 2014). In this dissertation, the central research question for this study: How do students with visual impairments (grades 3rd-7th), and their teachers in a single, rural, Mississippi school district describe their educational experiences in the general education settings?

This study will also address the following research sub-questions:

- 1. What do students with visual impairments report about their experiences in the general education setting in rural Mississippi?
- 2. What do teachers report about their experiences educating students with visual impairments in rural Mississippi?
- 3. How are students with visual impairments in rural Mississippi navigating daily routines in the general education setting?

The envisioned outcome of this study is to promote awareness for all stakeholders (administrators, teachers, paraprofessionals, related service providers, and parents) by reporting the experiences of individuals with visual impairments within the context of the general education settings. This outcome is hoped to provide stakeholders with real world that that provides information about the access, equity, and quality of services provided to individuals with visual impairment in the State of Mississippi.

# Criteria for Interpreting Findings

In seeking to describe the participant's experience of having a visual impairment and being educated in the general education setting, a case study descriptive design was used; collecting data from three students, two teachers, and one paraprofessional. Due to limitations imposed by the limited sample size of individuals with a primary diagnosis of visually impaired placed in the general education setting throughout the state of Mississippi, data was collected in a single district using the semi-structured interviewing as the primary method, supplemented with classroom observation, and researchers notes. It involved preliminary examination of experiences of students with visual impairments in the general education setting.

## Summary

Chapter III has described the methodology used to design this qualitative case study research, including a discussion of the qualitative paradigm and the rationale for the researcher's choices. A description of the population and participants, the researcher's role, propositions, data collection tools, data collection plan, and data analysis plans were also incorporated. The researcher discussed ways to in which this data quality, validity and reliability, and ethical considerations were obtained in reference to the current research study.

In summary, qualitative case study was very useful and capturing the experience of the participants based on their natural settings. The various participants provide their own details based on their unique experiences in the general education settings. The case study approach allowed for the experiences to be shared from individual point of views but to support the overarching case.

#### CHAPTER IV – FINDINGS

The purpose of this qualitative study was to gain insight from students with visual impairments and their teachers regarding their lived experiences in the general education setting in a single, rural Mississippi school district with a significant percentage of students with visual impairments identified by IDEA. A case study approach was utilized to capture the real-life events in a holistic and meaningful manner. This method was used to share the experiences of the participants; more specifically, to examine if and how these experiences in the general education setting were impacted by their teachers, educational experiences, and social relationships (Yin, 2009). The researcher believed that better understanding of these experiences would allow educators to proceed in a more informed perspective regarding designing and implementing services and support for individuals with visual impairments in the general education setting. The concept of emerged findings from this case study will be discussed in this chapter as themes, with attention directed to how these themes address the research questions of the study.

# **Research Questions**

In this dissertation, the central research question for this study was: How do visually impaired students (grades 3<sup>rd</sup>-7<sup>th</sup>) attending three different schools in a single, rural, Mississippi school district describe their educational experiences in the general education settings?

This study also addressed the following research sub-questions:

1. What are visually impaired students reporting about their experiences in the general education setting in rural Mississippi?

- 2. How are the teachers responding about educating students with visual impairments in the general education setting in rural Mississippi?
- 3. How are visually impaired students in rural Mississippi navigating through the daily routines of the general education setting?

# **Emergent Themes and Subthemes**

The information gathered through this study was organized into meaningful units of analysis by gathering, compiling, coding data. The researcher took interview data and created data tables, then data tables were coded using short words or phrases. Researcher created at table of hierarchy based on the words and phrases that were shared by the participants. The themes and subthemes were created based on the hierarchy of the information represented on the table. Four common, interrelated themes and eight subthemes provided a better understanding of how the students with visual impairments shared their experiences of being educated in the general education setting. The emerging themes and subthemes were:

1. Acknowledging Sense of Self

Self-Identity (which encompasses awareness of vision)

Awareness of Established Social Relationships

2. Depending on Structures of Support

The Usage of Assistive Technology in the Classroom

The Family as a Support System

Teachers as a Support System

Peers as a Support System

- 3. Desiring Sense of Normalcy
- 4. Responding to Barriers

Accessibility to curriculum and resources in class

Physical and Emotional

Following is a presentation of the experiences with details to support and explain the findings. The major goal of this study was to allow the students with visual impairments to share their experiences of being educated in a general education setting, with supporting information of these experiences from the teachers of these students. The findings will include quotations taken from the interview transcripts to portray multiple participant perspectives (Bernard, Russell, & Ryan, 2010). As needed, observational data and researcher notes are interwoven into findings identified through analysis of the interview data to corroborate the events and to substantiate the findings.

Theme I: Acknowledging Sense of Self.

The student participants shared experiences that suggested a strong sense of self, with knowledge and awareness of their visual impairment a central component of what was reported. The student participants shared their knowledge of being an individual with a visual impairment through self-identification of their specific conditions (Self Identity). Not only were students aware of their eye condition or diagnosis, but also the functional use of their vision (Awareness of Vision). The student participants were also able to express awareness of how their vision affected aspects of their environment such as dependency on family and friends and levels of independence at home and at school, (Awareness of Established Social Relationships).

The primary finding of this study was the notable awareness demonstrated by comments made by the student participants related to their sense of self. The subtheme, *Self-Awareness* was revealed in how the student participants expressed their cognizance of being an individual with a visual impairment, and the knowledge that these students possessed of the diagnostic/medical aspects of their vision, their identity, and the way their vision impacts how they interact at home and school. This theme was highly significant because of the number of participants who shared responses related to visual awareness, self-identity, and social awareness, as well as the frequency of those responses. Several subthemes emerged from this overarching theme of Acknowledging Sense of Self. The subtheme categories were Self-identity (which encompasses awareness of vision) and Established Relationships.

Throughout several student interviews, the theme of Acknowledging Sense of Self emerged by the student participants sharing their experiences through behaviors, character traits, and feelings One of the most prominent aspects of the interviews from the student participants was self-identification, in which all student participants identified themselves by stating, "I'm legally blind." When analyzing the student participants' responses, there appeared to be a connection between self-identity and visual awareness. For the student participants, the awareness of their vision reflected a self-identifying attitude that promoted a sense of awareness of their current visual functioning.

Self-identity was a prominent characteristic that all three student participants exhibited. All student participants revealed a sense of self-identity, visual functioning, and social awareness. All three student participants identified themselves as legally blind; two of the three student participants were able to provide the specific name of their

visual condition. Two of the student participants were able to share characteristics related to their visual condition based on information provided by their parents. Beyond this commonality, self-identity emerged differently for each student participant based on their life situations and their unique personalities. Casey, who was very vocal in informing about her visual abilities. When asked to describe herself, Casey with a great sense of humor and witty personality boldly stated: "I'm a little girl, not very tall. I have blond hair, pretty funny." Casey also shared, "I'm legally blind, with 20/200 vision. I'm color blind, and many people do not talk to me." This response captured how Casey shared her awareness of her current visual status and her positive attitude towards herself. This quote also highlighted how Casey interpreted the actions of others towards her in social situations.

Another student participant, Bryson, described his current visual status by stating, "My mom says I am legally blind. I have had problems with my eyes ever since I been born. My mom stated that they were informed when I was a baby that I had some kind of eye problem and I probably would be wearing glasses all my life." The information that Bryson gained from his mom related to his vision allowed Bryson awareness about his vision and the future implications of his eye condition. Bryson was able to identify as being "legally blind." During the interview process, Bryson spoke about how his mom informed him about his visual impairment, and how she taught him of the things to expect along the way related to his condition. This is discussed more fully in the next subtheme, Awareness of Established Relationships.

The third student participant, Braxton, was not only specific in his description of his condition, but also was detailed when describing how others perceive his visual

impairment. Braxton, shared a similar experience as Bryson, by stating, "My mom told me when I was born that the doctors tested my eyes because my mom has an eye condition and it is the kind she has passed on to me." Braxton shared that at times, others were not aware of his legally blind status due to his ability to get around well with minimal support. He shared that many people did not know of his legally blind status until he disclosed the information to them. Braxton shared that people often had a misconception about blindness. He stated, "Many people think when someone is legally blind that they a person can't see, they are confused with total blindness."

Misconceptions as such situates Braxton in a position where he has to be knowledgeable about his vision to inform others of their misconceptions, and also to able to self-identify with what degree of vision loss that he has.

Although all student participants described their experiences related to visual awareness and self-identity, the teacher participants did not share much information related to the students' visual conditions. The paraprofessional was the only teacher participant that was aware of the visual diagnosis of the student that was in the class she was assigned. The other teacher participants were unaware of the students' current diagnoses. While they all responded that the students were legally blind, but could not specify the student's diagnosed eye condition.

Awareness of Established Relationships.

In the aspect of awareness, responses related to social relationships were very prominent by both student and teacher participants. The student participants shared their experiences about their relationships with their families, teachers, and peers. All three student participants described their personal relationship with their families in a very

positive manner. Braxton and Bryson student participants' responses revealed a close relationship with their mothers. Casey shared information which revealed a connected relationship with her mother and brothers. Therefore, home and school relationships seemed to be very significant in the roles of for these students with visual impairment, due to the level of support and dependency needed for these individuals.

One of the identified connections that student participant, Braxton, shared was related to the relationship with his mom. Braxton shared how he and his mom were diagnosed with the same eye condition, retinitis pigmentosa (RP). Braxton stated, "My mom told me that when I was born that the doctors tested my eyes because my mom has an eye condition; and the kind she has may be passed on to me." Braxton described in the interview of how his mom was assisting him learning about living a life with RP. He talked to his mom as if she was a hero to him, using words such as "strong" and "brave" to describe his mom. Braxton discussed how it was much easier it seems to connect with his mom because they shared some of the same issues related to vision. Braxton stated how his mom was always giving him warning signs of what to look for as his RP progressed, and he stated how much he loved his mom for guiding him through his journey of RP. This connected relationship exemplified an awareness of established relationships. How the relationship that Braxton and his mom were a way to connect to each other on a very personal level. The established relationship between mother and son was heightened and much more intensified because they both are visually impaired, and Braxton's mom seems to be aware of how she should guide her son to help him navigate through life as a person with RP. Braxton seemed very reliant on his relationship with

his mom and consumed his conversations with things his mother has stated to him or experiences that his mother has had in her life as a person with a visual impairment.

The student participants shared mixed reviews of information about established relationship with peers. All student participants stated they had some level of peer relationships with classmates or relatives, but often those relationships seemed limited. Casey described her peer relationships to interacting with only a few students that were in her class that she had known for several years. She stated she had some close friends or "BFFs," but she stated those were the people that seemed to like her and the students that treated her normal. During in-class observations, Casey was always talking to peers and to this one student that sat next to her in each of her classes. Casey considered the girl to be her "BFF." During observations, this student was often seen assisting Casey in class and also playing with her during recess. Casey stated that some things that make her feel better when she feels sad are playing with her friends and sisters and brothers. Casey seemed to value her relationship with her friends and siblings. She stated that "going to recess, playing with my friends, making A+ on my test, and making my parents proud," as being the positive aspects of going to school. Without these established relationships, Casey's school environment and outlook about school could have been very different. Braxton specifically spoke of established relationships with his mom, teachers, and peers, but often highlighted the relationship he shared with his mom. Braxton gave details of how his mom had prepared him for life with RP, and he stated that "there are not too many things that I cannot do myself." This statement emphasized the level of independence and self-awareness that Braxton has and the level of support he felt he needed from others. In classroom observations, Braxton was often sitting close to the

delivery of instruction, and often working independently. In the first interview with Braxton, he stated "most of the time I'm able to do stuff mostly by myself because I don't have to ask for help a lot. Braxton seemed to be less willing to request assistance even with being assigned, Ms. Nancy as his personal teaching assistant. He explained that he often felt "lonely" and "confused," due to his paraprofessional not being able to assist him because at times the teachers may ask the Ms. Nancy help other students. However, he showed great appreciation for his assistance, Ms. Nancy, by complimenting her as "a good assistant." Braxton talked about how he was "thankful" for Ms. Nancy because before he moved to his current school, he only received assistance by going into the special education teacher classroom. Braxton shared his experiences with school stating that he likes school and that he is "pretty popular" and has "many friends." He seemed to have a positive social relationship with his peers. He described his interaction with peers by saying they always like "talking and joking" together. He stated that some of the things he likes about his school were the students, his friends and some of the teachers. Braxton was asked why he said some of the teachers, he responded: "because some of the teachers are just nice, and some are not." He shared that he was "frustrated" with some of the teachers because they seemed to "always be too busy." This information seemed to cause some tension in his established relationships, so Braxton was asked, "What the teachers were too busy for?" Braxton replied, "too busy to answer my questions, or too busy to assist me. Most of the time I just don't ever ask for help. They act like they don't want to be bothered." This tension also may explain Braxton's level of independence and his eagerness to do things without assistance from others. By the responses from Braxton, it seemed as if he had defaulted to not asking for help rather than getting

disappointed by being ignored or feeling as if he is bothering his teachers. This lack of established relationships could be a significant portion of how Braxton self-identified with himself and his needs; and the awareness of what others have offered him based on his needs of being an individual with visual impairment.

Bryson spoke of his established relationships with his mom, teachers, and friends. Bryson described his experiences from the perspective of a student who had transitioned from a special school for the blind to his local public school. He spoke of his closeness to his family, and how he was satisfied with the transiting to a school near home, he also stated: "it is closer to the rest of my family, my grandparents and cousins, it's is smaller, and the teachers are nicer." It was evident by Bryson's responses in the interview that he has closely connected relationship with his family. He seemed content with his school and his new friends. He spoke about how his friends assisted him at times in class, but he did not often ask for help from them because they often talked too much and was in trouble with the teacher. During classroom observation, Bryson seemed very friendly to his peers and seemed very content in his environment, by the way, he could maneuver around the class and how he was interacting with others in the class. However, in the interview with Bryson, the words he used to express how he felt in his new setting seemed to be disjointed from the classroom observations.

Their life situations and established relationships shared by the student participants appeared to have a positive effect on how Bryson, Braxton, and Casey viewed being visual impaired; this showed how the important role of self-awareness could be for individuals with visual impairments. The students' awareness of their vision

was supported by the student's knowledge of visual functioning, family connections, and the usage of vision in their everyday environment.

Theme II: Depending on Structures of Support.

Both students and teachers shared information that promoted depending on structures of support. These structures are both environmental (Usage of Assistive Technology in the Classroom) and people. The student participants shared experiences based on the various structures of support at home and school, particularly their personal connections and levels of support needed from family (Family as a Support System), peers (Peers as a Support System), and teachers (Teachers as a Support System). The student participants expressed their reliance on their established relationships. The students shared their experiences related use of assistive technology in the classroom. The teacher participants discussed the ways in which assistive technology was needed and used in the classroom; as well as how it affected student performance in the classroom (Usage of Assistive Technology). Teacher participants expressed dependency on structures of support by sharing experiences related to professional collaboration; training provided for teachers, and how students with visual impairments were supported with accommodations and modifications in the general education setting (Teachers as a Support System).

The study found that both student and teacher participants relied on various structures of support. Structures of support emerged as a theme due to the how the participants described their experiences and reliance on support to compensate the student's disability. In this study, structures of support were described in various aspects by both the student and teacher participants.

The Usage of Assistive Technology in the Classroom.

The student participants expressed their usage and needed for assistive technology in the general education classroom, as well as their experiences related to the availability of assistive technology in the classroom environment. The students shared their experiences related to the types of assistive technology devices they had available, barriers that prevented access to these devices, and their desire to have more assistive technology devices available. Casey and Braxton shared their experiences with having a magnifying glass for usage in class. Braxton stated, "I have a magnifying glass that I use to look at things in my books to make them bigger." Bryson shared his desire to have the additional assistive technology available for usage, "I would love to have a recorder to record things so I can listen to them at home. At my old school, the one, I went to two years ago, in Fenton; they would let you use a recorder. The teacher would give it to me to record her talking, and I could take it home at night and listen to it and study." This quote showed Bryson's awareness of how assistive technology had been useful previously in his life in another school environment. The student participants described their experiences of being in the general education class without the use of their needed AT devices and materials. Casey shared her experiences in class with using her CCTV devices, "It was horrible. The big one helps a lot. I use it all three days for the state test. I can change the color, the size, and I could turn it off and on." Braxton shared his inability to have assistive technology devices accessible to him. "I have a CCTV, but it is not in any of my classes with me at the moment. It's in our teacher's lounge at school, right here at school."

Teacher participants shared their experiences with the usage of AT in the general education classroom as well as the desire to have more assistive technology and support available for their students with visual disabilities. Ms. Fiona shared her viewpoint of how the uses of the assistive technology devices were beneficial to the academic success of her student. She stated that the use of assistive technology was ". . . necessary to make sure student accommodations were being met."

Ms. Fiona gave an example of how she used AT with Casey, "she took a test without using the machine and not blown up, and with and no magnifying glass and bombed it. And so, I had the test blown up and I had her to retake the whole thing because I knew and of course, she did much better the second time because she could see it." This quote revealed how important the use of AT devices could be in providing access for students with visual impairments. The teacher was aware of the student's skill level, and she was able to change the student's success rate by providing appropriate accommodations and using devices such as a CCTV to increase the student's visual functioning. With the example furnished by the teacher of her use of AT, and other teachers stating how AT was useful and needed for their students with visual impairments. During classroom observations, AT was rarely utilized in the daily schedule of instruction. There were no low-tech devices such book stands or desk lights. All three students were observed holding their papers close to their face or bending over so their face could be near the top of their desk to see their papers. There were no CCTV or magnification devices used in the classrooms while the teachers were delivering instruction. There was a SMART board in Casey's classroom that was being utilized

during instruction, but she was not seated near it, so she seemed to rely on her auditory skills to help follow along with the lesson.

The use of assistive technology emerged from the interviews as a structure of support that was mentioned and needed by both teacher and student participants.

However, the interview and observation data did not correlate to a direct use of the AT devices in class. The student participants shared the viewpoints and experiences of how AT was useful to them, as they also shared some of their less positive attributes of the use of AT in their school environments. Teacher participants shared how it was necessary to have the AT for their students with visual impairments, but not all teachers provided or utilized the AT devices during the daily classroom routines. These shared experiences warranted AT as a necessary structure of support, but the usage and availability across the board of student and teachers were at a minimal level.

Family as a Support System for Children with Visual Impairments.

The use of assistive technology emerged from the interviews as a structure of support that was mentioned and needed by both teacher and student participants.

However, the interview and observation data did not correlate to a direct use of the AT devices in class. The student participants shared the viewpoints and experiences of how AT was useful to them, as they also shared some of their less positive attributes of the use of AT in their school environments. Teacher participants shared how it was necessary to have the AT for their students with visual impairments, but not all teachers provided or utilized the AT devices during the daily classroom routines. These shared experiences warranted AT as a necessary structure of support, but the usage and availability across the board of student and teachers were at a minimal level.

The prominent aspect of the family as a support structure is shaped by family members being connected and supportive. In this study, some participants described the relationships with their families, which supported the subtheme of family as a support system. All three student participants conveyed positive aspects of family support, which emphasized aspects of advocacy, guidance, and protection. "Yes, my mamma and daddy, tell me all the time that there is no need to quit, just always do my best," stated Bryson. Braxton shared his connection to his mom related to them both having the same eye condition. He expressed about how his mom guided him to places she has already discovered with having visual impairments.

My mom always says that I do not have anything to worry about because I am so young. It makes me feel good when my mom tells me things like that because at n through it too, so I believe what she says. But I am scared too because I don't want to have tunnel vision early. (Thomas, personal communication, May 13, 2013)

Casey shared how she felt in relation to how her family was protective of her.

"Like my mom don't like me being outside alone, and she won't let me cut my own sandwich. She always says she just want me to be safe. I can understand that." This suggests that as Casey is aware of her need for assistance at times due to her visual impairments, it seems as if she would like to have more independence from her family.

Bryson shared his experience with moving to a residential facility for individuals with visual impairments, and how his family provided support. "I had to stay on campus, but mom moved up there and then I started staying back with her and my little brother." This student shared that after a two-year visit at the residential facility that his mom transitioned him back to their local school so that he could be near his family.

The family structure of support seemed very vital in the lives of the student participants. The students spoke very open about their families and how they were appreciative for the efforts of their family members.

The findings related to teachers as a support system was a mixed review of experiences provided by the student and teacher participants. Two of the student participants shared their experiences with responses attributed to teacher support in many aspects of their education in the general education setting. Bryson stated, "Some are nicer than others. It depends on the teacher." Casey shared her experience regarding her special education teacher.

Teachers as a Support System for Student with Visual Impairments.

The findings related to teachers as a support system was a mixed review of experiences provided by the student and teacher participants. Two of the student participants shared their experiences with responses attributed to teacher support in many aspects of their education in the general education setting. Bryson stated, "Some are nicer than others. It depends on the teacher." Casey shared her experience regarding her special education teacher.

Most of the time I just sit there like I'm working until the class is over. Then when the class is over if I'm not finished she will let Ms. Fiona, and I can finish it. She is always helping me and other students. She is always busy. She knows how to help me and she knows when I need help. She loves me. I am going to miss her. She tells me that I am going to be ok. I think I will, but I am just scared to leave Ms. Fiona. (West, personal communication, May 17, 2013)

In contrast, Casey had a different perspective about her general education teachers. When asked if she shared with her teachers when she could not see, she responded, "I just squint, I don't know how. I just get worried. How come I can't see it? I get worried. Why can't I see it? I just think it. I keep it to myself. I'm scared of the teachers?" Casey explained that when she was in situations in which she was afraid she just tries to think of a plan. This described feeling of fear by the student could have a tremendous effect on the support structure about her general education teachers. When observed in class, Casey actively participated by asking questions and raising her hands during large group instruction, but she was silent and introverted during independent practice. She often relied on her peer assistant that sat next to her. During observations, it was noted that the teacher would often check in with Casey's peer assistant to see how Casey was doing with completing her work, without regard to asking Casey herself.

Braxton shared his positive feelings about the paraprofessional that supports him daily. He stated, "Ms. Nancy cares for me and wants me to learn. I like how Ms. Nancy have my back. The participant progressed to describe the support his general education teachers provided him, by stating:

One of my teachers reads some of the stuff out to me, and she lets other students read to themselves while she reads to me. Sometimes she comes over to me and read it to me. The other teacher sometimes forgets to do this, but he changes the background on the Promethean Board to help me see better on the board. The other teachers don't do anything but act like I am supposed to get it the best way I can. It means they don't help, and they don't want me asking them for help. It makes me

feel like they need another job because teaching should be about helping all students, no matter what. (Thomas, personal communication, May 13, 2013)

This quote retrieved from the interview with Braxton expressed his feelings about his support provided by his teachers. He seemed to have a negative perspective towards some of his teachers, and that was noted during observation due to the lack of interaction that he often shared with some of his teachers. He seemed to adore his paraprofessional that was assigned to work 1:1 with him. When he was asked about his support system from his teachers he always shared his positive experiences related to Ms. Nancy. The relationship seemed reciprocal; Ms. Nancy shared positive interactions when discussing her experiences with Braxton. Ms. Nancy provided information about how she worked well with the Braxton's teachers and how they depended on a great deal on her for support for Braxton.

Bryson shared his negative experience with teacher support. Bryson shared his frustration with some of his teachers because he felt they often seemed "too busy" to assist him. Therefore, he often retreated from asking for help. Bryson described that he often noticed the teachers lack to want to support him by their tone in which they spoke to him. He shared feelings of being mad and sometimes sad. However, he informed that he just learned to ignore the teachers just as they ignore him. He described his experience by stating:

I have one class that the teacher does not like helping me. She says that there should be someone in there to help me. I heard her telling another teacher. I just do not understand why she doesn't want to help me; she helps other students. If I

didn't need their help, then I wouldn't ask for it. (James, personal communication, April 26, 2013)

This quote shared by Bryson revealed that there is a fractured relationship between him and some of his teachers. It seems as if he has felt neglected by his teacher and therefore he has learned to retreat as a coping technique. This negative relationship could significantly affect Bryson's academic and social relationship in class because he feels a lack of support from his teachers.

The teachers discussed their beliefs about the importance of being trained to work with students with visual impairments. They described how they felt in regards to the lack of knowledge they had to provide necessary support for students with visual impairments adequately. Ms. Nancy shared that she believes the school district overlooked the needs for teachers to be trained. She informed that she had gone to the administrators and expressed her concerned, but she felt as if they shrugged her off, by saying that the district was providing the best they had to offer.

The teacher participants provide their emotional responses to providing services to their students with visual impairments. Ms. Fiona responded with a sense of worry about how she can meet the needs of her students with visual impairments. Ms. Fiona shared a sense of despair, a sense of anxiety; trying to figure out how to best provide what the student need. However, with the awareness of knowing that she is not trained to provide those services needed for her student with a visual impairment, seems to impede the worry and stress of her job as a special education teacher.

Ms. Dianne shared feelings of being "worried and overwhelmed" about providing services for Casey. She responded that her limited experience and lack of training in

providing adequate services and support for students with visual impairments has made her feel "inadequate at times." Ms. Dianne stated that providing support for Casey was often "scary" and "time-consuming." She described the experiences as being "stressful". She described how she often felt uneasy because she was not sure if she was doing things right for Casey. She shared the desire to want to do things for Casey and that she was trying to assist Casey, but that her feelings often made her feel as she was shortchanging Casey.

Ms. Nancy shared her experiences with working with a student with a visual impairment in the general education setting. She also shared a similar concern related to lack of training and support for visual impaired students in the general education setting.

I think I should have been trained before I received the position or after I received the position. Trained to know how to make sure he has all the materials and all the things that he needs in order to succeed in life in the classroom. I just think if could have been trained, I could have had more references of things and more materials in class for him to be successful in class. (Adams, personal communication, April 28, 2013)

This response shows the Ms. Nancy's desire to acquire training in order to provide adequate and appropriate services. She shows a sense of wanting her student to be successful shares her experiences as if she feels like there are limits to what she can provide due to her lack of training in the area of providing services to students with visual impairments.

Peers as a Support System to Students with Visual Impairments.

The students and teachers responded that they often depended on peers as a daily support system in the general education setting. The experiences describe by the student participants were related to most peers being willing to assist in daily classroom activities.

Casey and Bryson explained their positive relationship with their peers and mentioned that their peer supports were also classified as their friends. Some of the ways the participants described their experiences. Casey stated how she relied on her peers to assist her in class. "Sometimes I ask my friends for help when something like that happens." She indicated that there were certain people that she relied on to ask for help. She labeled these individuals like her, 'best friends or BFFs." Casey discussed how her best friends were involved in attending after-school activities, such as her birthday party. She shared that she has a history established with her BFFS since first grade and that they always attended school together. Casey also discussed her feelings of isolation due to some peers not interacting with her at times when working in groups within the classroom setting. She stated she felt as if her visual impairment impacted the relationship with some of her peers and them talking to her. One striking aspect of Casey's interview was when she shared some legal reprimands she aware of that she felt she should use based on how some of her peers not wanting to talk or interact with her. Casey stated, "It makes me want to go home and tell Momma we need to sue somebody." She stated her basis for taking legal action was due to her peers not being nice to her. Casey responded a great deal related to her peers, and she observed often initiated conversations with her peers in class and at recess. Through observation Casey's

experience was supported by some of her peers showing a lack of interest in talking with her and interacting with her. Through observation, it was noted that she was interacting with almost the same peers in each setting observed.

The teacher participants all shared the information that they often paired students with visual impairments with their peers that were supportive and willing to help. There were identified members of the class that was deemed reliable and dependable to aid the student with visual impairment in the general education setting. Ms. Fiona shared how she included peer support when working with Casey in class. She stated that she had taken measures for the upcoming school year to involve peer support for Casey. She stated, "I have requested a particular student to be in her room next year that is a delightful child and one that Casey is friends with, and she can her get from one place to another until Casey learns the route herself." This type of peer support was very evident for Casey through data from interviews and observations. It was moderately evident for Braxton about peer support. However, it was minimally evident for Bryson about peer support. The teachers seemed to request peer support for their students with visual impairment rather than the students themselves. In each observation with Casey, she had a peer assistance in every location observed. She seemed very reliant on her peer assistant in the classroom setting, as she was often observed asking her peer questions rather than her teacher.

Theme III: Desiring a Sense of Normalcy.

The student participants expressed the desire to be like others. Student participants described their desire to be treated "normal," not as if they individuals with

impaired vision. Teacher participants provided supporting details about student's desires to feel normal.

The theme, *Desiring a Sense of Normalcy*, was identified first through the comments expressed by all three student participants related to their desires to be treated like their peers. Casey's experiences related to normalcy was described by using words such as "different" and "not like others," as Bryson and Braxton used the terms "being normal" during the interview process. Ms. Fiona and Ms. Dianne provided information that corroborated the students' feelings of being treated differently than their peers. Within the theme, *Desiring a Sense of Normalcy*, the participants' responses revealed a desire to be normal through the aspects of vision, support from teachers, and inclusion with peers. The student participants expressed a great deal of emotions related to this theme of *Desiring a Sense of Normalcy*, which added weight to the importance of this theme.

The expressed desire for a sense of normalcy was very prevalent with Casey. Her recurring use of terms such as "normal" and "different" during several interviews brought this desire to the attention of the researcher over and over. Her statements suggested that she was told or made to feel that having a vision problem or eye condition made a person different in ways beyond a physical difference. Moreover, she seemed to have harbored some negative emotions related to how she felt others treated her based on her being visually impaired. During the interview process, Casey was asked if her visual differences made her who she was as a person. She replied, "Sort of. I don't like it because it makes me feel different. I prefer to be like everyone else."

Casey shared that she felt like she was not treated like others, and she had a sense of resentment towards being visually impaired. Concerning this theme, Casey shared how she wanted to be treated like other students in her class.

I want to get my work done just like my other classmates. I have problems with seeing things. Sometimes I do not want to have these problems. My mama always tell me that I am the way God made me, but I still feel different. I just want to be like other kids my age. Sometimes, I don't, because people treat me like I am a baby, or if I can't do somethings. I sometimes have to show them I can do things. (West, personal communication, May 17, 2013)

Casey stated that she did not like being "treated like a baby" by her peers, providing details as to how she was often treated as if she could not do the same things as her peers. She expressed her anger in statements such as, "I have a vision problem, but I am not stupid." That statement represented a significant sense of the student's expectations of how she wanted to be treated by others. Casey shared how she how she was often overlooked and not selected to play games with other classmates, but she exclaimed that she "don't just quit."

The desire for normalcy in relation to teacher support was expressed by Bryson.

Like Casey, Bryson also shared a desire to be treated like others. One of the accommodations Bryson is to receive because of his visual impairments is copies of class notes from his teacher, which he indicated he did not always receive. This lack of accommodations made him feel different when his classmates had notes, but he did not.

When speaking of this, he said, "I just like having my notes like everyone else." Not only

did this make him feel different from his peers, but he also indicated it compounded the issues he had completing his school work.

Braxton shared similar experiences as Bryson, about desiring a sense of normalcy. However, his experiences were slightly different based on the level of support that his mom provided to him. Braxton shared his experiences about "feeling different" due to having a visual impairment, but he stated that he did not "feel different in a "bad way." This was a contrast of Casey's shared experiences related to "feeling different." Casey shared that she often felt "lonely" and "left out." Braxton's perspective of his vision may be related to the relationship he shared with his mom who also has the same diagnosed eye condition as Braxton. He expressed that his mom makes him feel good because many of the things he was encountering his mother have already been through it. Braxton shared that he desired the same opportunities to access context as his peers, but often the lack of support by his teachers hinders his access.

The teacher participants responded to the theme, *Desiring a Sense of Normalcy*, in a similar fashion as the student participants. The teachers supported the students' responses to a sense of normalcy through the avenues of vision, support, and inclusion.

Ms. Fiona stated how she provided support to Casey by measures of enlarging her work to 135 %. Ms. Fiona stated that providing this accommodation "helps her feel normal because she could not see what words were being displayed without the magnifier or the machine." Ms. Nancy expressed her experiences related to "being normal," by describing Braxton's experiences related to vision, support, and inclusion with peers.

Braxton expressed the desire to be able to see like other children, with the ability to see without his surroundings being modified. He shared that there are times that he felt as if

he was taken advantage of due to his visual impairment. Ms. Nancy shared how Braxton wanted to be "normal like the rest of the student." She described Braxton's experiences in being in the general education classroom, by stating it had its "pros and cons." Ms. Nancy expressed that while being in the general education classroom was good for Braxton to be included with his peers, it was also a burden because Braxton was often worried about the other students. Ms. Nancy stated Braxton sometimes would not ask for assistance from her due to being concerned if his peers would be aware that he could not see. Ms. Nancy shared that Braxton did not want his peers to see him as being different due to his visual impairment. He wanted to be "normal." However, Ms. Nancy felt this desire for normalcy caused difficulty with him feeling included by his peers as an individual with a visual impairment.

In-class observations also supported the participants' experiences related to being different, not having access, and not being included with peers. In the students' general education classrooms, there was the lack of support and access due to teachers not providing sufficient accommodations for assignments and task. There were instances when the teachers and paraprofessional did provide some accommodations and modifications, but the provisions were not enough to ensure that the students felt adequate support and access. There was a definite boundary against the students with visual impairments that was upheld by their peers. Casey was often the last to be called when playing team games as a group. Bryson was observed looking frustrated when his peers were taking notes from the board, and he was unable to due to his vision, and no one provided him with the necessary notes. Braxton often declined assistance on class assignments, yet he sat at his desk and pretended to complete tasks until class was

released. The variation of these inadequacies seemed to evoke emotions of the student participants, and those emotionally driven experiences are what made this theme of "being normal" prevalent.

The theme, *Desiring a Sense of Normalcy*, was prevalent in this study, by the experiences shared by the student and teacher participant. Not just the sense of normalcy through vision, but also the sense of being supported and included by peers. All the student participants shared how they desired to be like their peers, in the aspects of having support and access to curriculum resources and materials. The students shared their desire to be treated like their peers, as well as included by their peers. There was a mixed variation related to teacher support, but the student participants shared that lack of support and access often made them feel secluded and lonely. The teachers supported the students' experiences by sharing how they were aware of the students' desires to be like their peers and to not feel as if they were different.

# Theme IV: Responding to Barriers.

The student participants described experiences related to lack of accessibility, and access to many areas of the general classroom setting, along with the curriculum. The teacher participants described experiences of responding to barriers by being aware of their students' needs based on their visual impairment, providing positive interactions with students, and providing necessary accommodations and modifications for students to have access to the curriculum just as their peers (*Accessibility to curriculum and resources in class*). The students and teachers expressed the concerns about barriers that affected them on a physical and emotional level. The student participants shared experiences of how they responded barriers with a great sense of identity and awareness.

They responded to barriers by creating support systems, establishing and maintaining personal relationships, and acknowledging their feelings and making others aware of their feelings (*Physical and Emotional*).

In this theme, Responding to Barriers, the student participants identified barriers related to the lack of accessibility and access to areas of the curriculum and resources in the general education classroom setting. The term curriculum is used in this theme to describe the general education curriculum based on the student's grade level standards. The term resources are used in this theme is used to described people, technology, and materials. The teacher participants identified barriers related to how accommodations and modifications were being provided based on the student's visual needs. The teacher participants also shared experiences related to barriers in the aspects of lack of teacher training related to teaching students with visual impairments. Both student and teacher participants shared concerns about barriers that affected them on a physical and emotional level. The student participants shared how they responded to barriers with a great sense of identity and awareness. They responded to barriers by creating support systems, establishing and maintaining personal relationships, and acknowledging their feelings and making others aware of their feelings. The teachers responded to barriers by collaborating and creating support systems for other teachers as well as initiating opportunities to self-learn about ways to teach students with visual impairments in the general education setting.

Accessibility of Curriculum and Resources in the Classroom.

The student participants shared experiences related to barriers that were present in their general educational setting. The lack of accessibility of the curriculum was

prevalent as a barrier for the students. Braxton shared how there were "inconsistency" in the classroom. He stated that his teachers were inconsistent with providing accommodations to him to access the curriculum. He shared that he realized that his teachers were not interested in assisting him with his assignments. He shared that due to this lack of interest from his teachers, at times he felt "unwanted in class." Braxton shared that when he received support in class, that is was provided mostly by the paraprofessional, Ms. Nancy Adams. He stated that Ms. Nancy was a "good assistant," The relationship between Braxton and Ms. Nancy seemed to be very positive. He shared how she was the only person that made sure he had what he needed, but that was often limited because Ms. Nancy were often pulled to work with other students or to run errands. Braxton shared that when Ms. Nancy were not present in class, that he often felt "lonely" and "confused." He stated that he was "so thankful" to have Ms. Nancy; but when she was not in class, he often felt "left out," Braxton stated that he did not like feeling "left out." He shared that it reminded him of the previous year when he had to leave his "regular" class and attend class in the "special" class. He stated that experience of leaving his peers, "made him feel dumb sometimes." He stated he rather remain in class with his peers and "get the material" for himself, even if he felt like the teachers did not want to assist him. Braxton stated, "that is why I depend on himself."

Casey shared experiences about barriers in the form of access to the curriculum, but not as intensely as Braxton. It seemed as if one of the significant barriers for Casey were due to her vision. She shared that she did not want to be "different." She felt that others treat her differently due to her having a visual impairment. Casey stated that she asked herself, "Why can't I see." This visual barrier seemed to affect Casey's attitude

about herself. Casey described another barrier related to the lack of teacher support from her general education teacher. She stated how her special education teacher, Ms. Fiona assisted her in many ways throughout her day in class, but she also had to rely on her close friend/classmate to help her.

Bryson shared his experiences related to responding to barriers. Bryson stated that when he had difficulties seeing things that he would inform his teacher. Bryson stated that his teacher would, "sometimes read the questions to me, or she will give me printed copy of the notes, or she will let me work with a partner." Bryson seemed to be fine with the accommodations that his teacher was providing for him in the classroom. He stated, "My grades are okay, so I guess class is fine." Bryson stated that he would love to have a recorder to use at school to record class and then to use at home to review lessons from the day. He stated that even after sharing this desire with his teacher, he had not received the recorder device. Bryson stated that he used a recorder at his previous school, which was the state school for blind, and it was a tremendous help to him. Bryson stated that having the recorder was very helpful to him because he was having some difficulty in obtaining all his class notes in his current school setting. Bryson stated, "I have to take notes, or my teacher has to give me notes, sometimes she forgets to give me the notes where they are big enough for me to see. I sometimes have to wait another day to get notes. Bryson expressed that "he wanted his notes just like everyone else." Not having his notes, seemed to be the area of concern for Bryson, because he felt like not having his notes did not allow him to be like everyone else. Therefore, this was a barrier to the curriculum and resources in the class. Bryson shared how his teachers did provide accommodations and materials to provide him with access to the curriculum. He stated

he wore glasses, and that the teachers also provided him with a magnification glass to use to view things in his textbooks. Bryson also stated that his teachers printed his workbook pages on large paper so that he could see and have more space to work. Bryson stated when he used his magnification device, and he was provided accommodations, that things "go really well," but when those things are not provided in class; then things are "horrible."

Teacher and paraprofessional participants responded that the students with visual impairments were required to complete the same curriculum as their peers. While each student participant was entitled to the use of accommodations (including assistive technology) as designated on their IEP, limited access to these accommodations restricted their ability to access the general education curriculum. Some factors that were reported by Ms. Fiona and Ms. Nancy were: inconsistency or lack of implementing required accommodations and modifications designated on the students' IEPs, lack of or minimal usage of assistive technology devices in the classroom setting, and consistent and appropriate teacher support to students with visual impairments in the general education setting.

Ms. Nancy recognized the student's frustration related to the lack of being able to access some of the curricula by stating, "I think they were careless to the fact that he was frustrated. She provided details related to some barriers. Ms. Nancy shared that there was a Mac Computer that was designated for Braxton to use, but it sometimes would not work, and there was often no technician to assist in fixing the device. She explained how these such incidents would make the Braxton frustrated, due to the fact he did not have the necessary equipment need to complete his class assignments. Therefore, Ms. Nancy

stated she would be proactive and figure out ways to make the material accessible for Bryson. Ms. Nancy described ways she would make modifications for Braxton; such as enlarged handout, write electronic materials using in large font with a black marker, read items orally, and use teacher made tactile objects to explain concepts.

When asked if the students had support personnel, such as a Teacher of the Visually Impaired (TVI), Ms. Dianne responded, "No I have never heard of a TVI before. There has never been anyone sent to work with Casey beside Ms. Fiona." Ms. Fiona had never heard of a TVI before and was unaware that was a support that Ms. Nancy was aware of the title of TVI; she was not aware of the responsibilities of the TVI about students with visual impairments. Ms. Fiona and Ms. Dianne indicated that they were not aware of other curricula that were commonly used for students with visual impairments. These participants were unaware of the Expanded Core Curriculum (ECC), the curriculum commonly used as a secondary curriculum with students with visual impairment. Ms. Nancy also was not aware of the Expanded Core Curriculum that should be used with students with visual impairment.

Physical and Emotional Barriers.

Casey, Braxton, and Bryson identified physical and emotional barriers that hindered the progress in and access to the general education setting. Physical barriers included: setup of the classroom, the arrangement of seating, visibility of the Promethean Board or whiteboard in the class, materials and resources, usage of AT devices, and being physically present in the classroom during instruction. The emotional barriers discussed by student participants were related to acceptance by peers and fragmented relationships

between students, teachers, parents, and peers, due to the lack of support in the general education classroom.

Casey described her experience with physical barriers. She shared how she was unable to have access to things in class such as viewing videos being displayed on the Smart Board, due to her being seated too far over. Casey shared that she had many devices provided to her to use to magnify her assignments, but Casey stated, "They didn't work very good." She stated: "We have this thing called morning work, and we're supposed to copy it off of the board in the morning. I think it's pretty obvious of that, and I have to have it printed out in large print." Casey shared another experience related to the use of assistive technology, "Sometimes when I take a reading test like a computer or something like that; somebody had to read it to me because I can't see the computer." Casey expressed that she only had one or two peers that she could ask for assistance because her other peers seemed not to interact with her. Due to the lack of relationships with her peers, Casey stated she felt "useless" and "excluded." She stated how she wanted to be like her peers and wanted her peers to like her. She preferred that her assignments were not printed on larger paper because she did not want her peers to look at her as being different from them. This social barrier seemed to really make Casey feel as if she was "different," as she stated several times throughout the interview that she wanted to be "just like everyone else." Through classroom observation, is was apparent that Casey was dependent on her special education teacher and her friend Molly who sat next to her in each of her classes. Casey had very little interaction with her general education teacher.

Braxton shared his experiences of not having his handouts enlarged, printed material not being large enough, and not being provided with teacher support to have assignments read orally to him. Braxton stated that he was aware of his needs, so he compensated for his lack of vision with his "listening skills." He shared that the use of his auditory skills helped him, so he did not have to ask his teachers for assistance because the teachers often "seemed too busy to help." Braxton responses showed a strong sense of self-sufficiency. He described how he was "often frustrated" with his teachers because they were not providing him with the assistance he needed. Braxton described how he often would often ask a peer for help or clarification of an assignment rather than ask the teacher.

Bryson shared that he was unable to see the material when his teacher wrote on the white board during class. He stated that he was not able to see the materials that were displayed on the Smartboard especially when the lights were on in the class. He stated how the lights made the glare on the board and made it very difficult for him to see what was being presented. In response to these barriers, Bryson demeanor seemed to be calmer than Braxton and Casey. He stated, "it does not bother me too much about not able to see some of the items; it's just part of being legally blind." Bryson shared that he sits in the front of the class near the window in each of his classes. He stated that the "natural lighting" was better for him to see. Bryson shared his experiences of feeling supported by all his teachers except one. He stated, "I have one class that the teacher really does not like helping me. She says that there should be someone in there to help me." Bryson stated that he overheard her in a conversation with another teacher saying that his support should come from someone else. Bryson expressed that he felt okay by

the teacher's comment, but he just did not understand why she would have a problem with assisting him when she assisted other students. In responding to this barrier of support, Bryson stated, "if a person does not want to help me, I do not want them to help me." Even though Bryson stated that he was okay with the comment of the teacher, he also shared that when he feels as if someone does not want to help him it makes him feel "sad and "lonely." Bryson stated, that when he feels "lonely" he feels "as if no one understands." Bryson said, "If I did need help I would not ask for it." Bryson shared that he does not have daily support in his classes. He explained that he had a special education teacher, Ms. Carla, to come in about twice a week, normally in between classes to check on him. However, he shared he felt okay with the amount of time Ms. Carla came into his class because his grades were good.

Ms. Fiona discussed how the student's seating arrangement in the class was critical in ensuring he could benefit from instruction provided by the teacher in the classroom stating, "Using the Smart Board, Casey would always say I can't see it. I can't see it." She expressed frustration in these types of situations, stating it was difficult because she," could not make it any bigger." Ms. Fiona also indicated that using proximity (bringing Casey closer to the board) was the only way she could remove this physical barrier to class participation. She stated, "It made me feel bad, because many times if I had a really good presentation, and everybody else could see it, and Casey had trouble. I felt guilty".

Emotional barriers were represented in the responses of the student and teacher participants. All student participants shared feelings of how they wanted to be a part of a group or have interaction with peers. The students expressed a want to feel accepted by

their peers. Casey indicated that it made her feel "sad" when her peers did not talk to and interact with her. She shared her feelings about being "color blind" and having to rely on others to assist her with distinguishing with colors. She described herself as feeling, "kind of useless." Bryson stated that he had experienced his peers using name calling tactics to reject him. He stated how a student called him a "blind bat," and how that made him feel "very sad" and "hurt." However, Bryson stated that he has many friends and he would not allow a few people to make him upset with everyone. The social aspects of peer included by peers seemed more important for Casey and Bryson rather than Braxton.

Casey and Bryson seemed to desire to be accepted by their peers, as Braxton just seemed not to be for or against close peer connection. His relationship with his mother seemed to the connection he depended on upon and desired more than with peers.

## Summary

This chapter presented the four findings identified through analysis of data collected in this study. The researcher organized results as themes according to prevalence in the interviews, as well as the emphasis placed on them by the participants. Data from individual interviews, observations, and researcher's notes revealed research participants' experiences. As is typical in qualitative research, sample quotations from the participants were included in this chapter.

In the theme *Acknowledging a Sense of Self*, all three of the student participants had a distinct visual impairment with distinct characteristics and their own set of challenges that they faced each day and will continue to face. However, these individuals had a common thread among them, and that was the awareness of what was needed for them to access information visually. Each student relied on their vision and support

systems in various ways, the understanding of their needs based on their conditions was paramount. These individuals expelled a sense of their awareness of what was necessary for them to be a part of a functioning environment, whether school or home. Even as their personalities and backgrounds were diverse, they all have one thing in common and the fact of knowing that they have a sense of awareness of their visual needs, awareness of themselves in space, and awareness of their identities.

The second theme, *Depending on Structures of Support*, both all participants expressed evidence about structures of support. Student participants expressed that the use of assistive technology was represented and needed within the classroom setting. Teacher and paraprofessional participants discussed the ways in which assistive technology was utilized in the classroom as well as how it affected student performance in the classroom. The findings related to this theme included the support systems at home and school, training provided for teachers, professional collaboration, and accommodations and modifications.

The third theme, *Desiring a Sense of Normalcy*, the student participants described the perspective of "being normal." The findings revealed how student participants shared a desire to be like others. Student participants described their desire to be treated "normal," not as if they were "different." Teacher and paraprofessional participants provided supporting details about student's desires to be normal, and how students perceived themselves to be different due to their visual disability.

The fourth them, *Responding to Barriers*, the participants shared their experiences to overcome physical and emotional barriers that preventing access to the curriculum, resources, and or services due to their visual impairment. However, many barriers limited

the access of the visually impaired student in the general education curriculum. Some barriers mentioned were: inconsistently implementing required accommodations and modifications for students, lack of or minimal usage of assistive technology devices in the classroom setting, inconsistent and adequate teacher support to students with visual impairments in the general education setting.

Findings from the observations and researcher's notes corroborated the findings from the interviews. All three student participants indicated that they relied largely on themselves and that they called on classmates and teachers only when necessary, only as a last result. Students expressed their frustration in regards to the level of teacher support they often received, as teachers expressed their frustration about the lack of training they receive to provide appropriate services for students with visual impairments. The overall, aim of this research was to provide insight of how students with visual impairment are being educated in the general education setting.

### CHAPTER V – SUMMARY, DISCUSSION, AND IMPLICATIONS

This study was designed to explore the experiences of students with visual impairments who are being educated in the general education setting. To this end, students and teachers were interviewed, and students were observed in the general education setting. By describing the experiences of these students, the researcher hopes to promote understanding for stakeholders (administrators, teachers, paraprofessionals, related service providers, and parents) which may lead to better services for this population.

#### Methods and Procedures

This study used naturalistic inquiry to gather qualitative data through interviews, as well as collecting other supportive data through direct observation and researcher's notes. Each interview provided a unique glimpse into the participant's real world. Participants in this study included three students diagnosed as visually impaired, one general education teacher, one special education teacher, and one paraprofessional. The data were coded, analyzed, and organized into themes.

The study was based on the following research questions and sub-questions: How do visually impaired students (grades 3<sup>rd</sup>-7<sup>th</sup>) attending three different schools in a single, rural, Mississippi school district describe their educational experiences in the general education settings?

This study also addressed the following research sub-questions:

1. What are visually impaired students reporting about their experiences in the general education setting in rural Mississippi?

- 2. How are the teachers responding about educating students with visual impairments in the general education setting in rural Mississippi?
- 3. How are visually impaired students in rural Mississippi navigating through the daily routines of the general education setting?

The previous chapter presented the findings of this study by organizing data from various sources into categories. These categories were used to produce themes that expressed the story of the participants' experiences. The researcher analyzed the data to find connecting patterns within the categories, as wells as themes that emerged among those various categories. The process of developing categories was based on the participants' responses. Thus, the responses were analyzed using a data summary table which examined categories both within each category as well as across individual responses. The purpose of this chapter is to provide interpretative insights from those findings by presenting a more holistic understanding by aligning the findings to the original research questions.

# **Summary of Findings**

Four themes emerged representing the experiences described by participants.

Themes have been titled, "Acknowledging Sense of Self," "Depending on Structures of Support," "Desiring a Sense of Normalcy," and "Responding to Barriers." These themes are briefly summarized below.

Each student participant expressed during the interview sessions awareness of their visual impairment, sharing not only details about their specific form of visual impairment, but also aspects of self-identify, and acknowledgment of depth of family and teacher awareness. This data were organized into Theme I: Acknowledging Sense of Self.

Both student and teacher participants described students' personal connections with family, peers, and teachers. Student and teacher participants expressed their reliance on established relationships as they navigated school.

The individual responses from students and teachers revealed some levels of disconnect and concern regarding the type and amount of support in various environments. These data were organized into Theme II: Depending on Structures of Support. Both students and teachers shared information suggesting a dependence on structures of support, including usage of assistive technology in the classroom, family as a support system, peers as a support system, and teachers as a support system. The student participants expressed their reliance on established relationships and described experiences related to the use of assistive technology in the classroom. The teacher participants discussed ways in which assistive technology was needed and used in the classroom; as well as how it affected student performance in the classroom. Teacher participants expressed dependency on structures of support by sharing experiences related to professional collaboration; training provided for teachers; and how students with visual impairments were supported with accommodations and modifications in the general education setting. Students discussed their reliance on family, peers, and teachers for support; as teachers discussed reliance on other teachers.

The way student participants described their experiences in relation to their peers was consistently linked to desires to feel "normal." The student participants shared a desire to be like others and candidly shared how their visual impairment gave them a sense of being different. The teacher and paraprofessional provided supporting details about students' desires to be normal, and how the students perceived themselves to be

different due to their visual disability. The participants' responses revealed a desire to be normal through the aspects of vision, support from teachers, and inclusion with peers.

Student participants shared many emotional experiences within this theme, which was categorized as Theme III: Desiring a Sense of Normalcy.

The final category that emerged was based on student and teacher responses related to the identifying and responding to barriers that the students with visual impairments encountered in the general education setting. These data were organized into Theme IV: Responding to Barriers. Barriers described the lack of accessibility/access to areas of the curriculum and resources in the general education classroom setting, accommodations and modifications being provided based on the student's visual needs, lack of teacher training related to teaching students with visual impairments, and barriers on a physical and emotional level. The student participants shared how they responded to barriers by creating support systems, establishing and maintaining personal relationships, and acknowledging their feelings and making others aware of their feelings. Teachers responded to barriers by collaborating and creating support systems and initiating opportunities to self-learn about ways to teach students with visual impairments in the general education setting.

### **Interpretation of Findings**

Theme I: Acknowledging Sense of Self.

This theme characterizes a common notion among the participants' reports of their personal experiences having a visual impairment. The findings revealed that the students with visual impairment shared both a mature sense of self-awareness of their visual functioning, as well as their self-identity. Theme I describe not only how the

students perceived and understood themselves based on their visual disability, but also an awareness of how they are viewed by others. This theme also describes the students reported experiences based at home and school, and how the students felt those settings affected their self-awareness and self-identity. These experiences took the form of awareness of vision and awareness of social relationships.

As cited from Chapter II, Douglas and McLinden (2005) described visual impairments as a term that describes a wide spectrum of the loss of visual function. Visual functioning has many aspect including visual acuity, visual focus, field of vision, color vision, and visual adaptability to light (Douglas et al., 2009). The participants shared a range of experiences which were related to their awareness of their vision in aspects to legal blindness, etiology, and visual functioning. From the participants who had a broad sense of awareness, all of them stated that they were "legally blind" and they could identify the characteristics of their visual functioning. Furthermore, they believed that their visual functioning did not reflect on their ability to do things just as their peers. Casey's experience best illuminates the idea of being self-aware of her visual impairment, as well as her other qualities as a human being. In the interview, Casey stated, "I'm a little girl, not very tall. I have blond hair, and pretty funny. I'm legally blind, with 20/200 vision. I'm color blind, and many people do not talk to me." A result of this theme was a new found understanding of the legally blind perspective inability to make sense and understand the story behind the voice. The story revealed that even with a visual impairment, the student participants were aware of their life challenges and readily willing to approach the challenges with diligence, confidence, and awareness of themselves as in individual with a visual impairment

This theme alludes to the research question in a fashion that suggest that students with visual impairment can hold their ground in the general education setting due to their own sense of self. These students could identify their visual functioning and identity their visual history. As well, as indicate how their perception of things could be affected by vision. The student participants indicated that they were "legally blind," therefore identifying themselves within the categories of blindness, and thus allowing themselves to educate others of the differences of the categories. Bryson reflected the view when he stated, "Many people think that when you are legally blind that you can't see at all, that is not true. I can see, they are thinking of total blindness."

According to the United States Department of Education (USDOE, 2012), there are four categories of visually impairment on the spectrum. These four categories are listed as partially sighted, low vision, legally blind, and totally blind. As previously discussed in Chapter II, literature suggest that there is no universally adopted definition of visual impairments related to children. IDEA defines visual impairment for the purpose of evaluation and receiving educational and related services. Even with no consistency in literature, there is a general agreement that educational services for services should be based upon not only clinical assessments but also the functional implications of the visual impairment (Douglas et al., 2009.) Bryson's awareness of his visual functioning of being legally blind allowed him the ability to promote his sense of self. This sense of identity and visual awareness were the responses that were compiled and led to the emerged theme of "Acknowledging Sense of Self." The degree of vision depends on the particular eye condition. Based on their responses, two of the three student participants were aware of their eye condition or the characteristics of their eye

condition. Casey was not able to identify the specific name of her eye condition, but she was aware that it caused her to have color-blindness and sensitivity to light. Her best visual functioning was when she was in low-lit settings. She identified her eye condition in the following manner, "I have something that is called the dancing eyes. My eyes move back and forth and I can't control it." The participant's description of her condition provides insights into her world of being visually impaired.

With all three-student participant being labeled as visually impaired, each student provided their description of visual impairment in their own distinct way. There seemed to be a disconnect in the identifying information gathered from the teachers related to the students and their visual impairment. Both teachers and the paraprofessional were unable to identify the diagnosed visually impairment of their students, and unable to identify their visual functioning. When interviewed, both teachers often referred to their students as being blind rather than legally blind. The teachers provided minimal information about the student's visual functioning and overall condition of the student's eye condition. With teachers not being able to provide ample amount of information about their student's visual impairment, it was then up to the students to provide the information to others about their vision, and their needs based on their visual impairment. According to AFB (2012), research supports the essential elements that teachers of students with visual impairments should possess, including effective communication skills, ability to correctly place students in appropriate setting, and knowledge of the educational implication of eye conditions. That lack of knowledge on the behalf of the teachers seemingly put the students in a position of having to be aware of their vision,

which then elevated their sense of self-awareness, self-advocacy, and self-identity. They had to be their own keeper of knowledge in relation to their visual impairments.

Even though the literature from Chapter II did not suggest information about relationships with family, this study revealed family as an integrate part of the student participants' world. All student participants shared information that implicated a great connection with their families. Many shared how they received their knowledge and strong sense of self from their families. All participants described their relationships with their mom, while only one participant mention her dad. This strong connection with family was another aspect of Theme I, which supported awareness of established social relationships. The family unit seemed to be the cornerstone for all three students, by providing love, support, and guidance. The participants did not share much information about interaction with others outside of school besides family. Many discussed how their mothers were very protective of them at home and at school. Casey mentioned the notion that if her mom knew how she was treated by another student, then she may take legal actions against that person for mistreating her. This student at age nine had a strong sense of self-advocacy which seemed to emerge from her dialogue and relationship with her mom. Braxton described his connection with his mom due to them both having the same type of visual impairment. Therefore, their relationship was based on guidance and advice of how to cope and handle the conditions of his progressive eye condition. Bryson shared how often he did not tell his mom about problems at school due to the fact that his mom would come to the school, and he did not want any problems. He was in fear of being retaliated against from the teacher due to involving his mom in certain situations.

The student described his experience from a previous event in which a teacher retaliated against him and he shared that he had a horrible educational experience that year.

It is obvious that even though each of three student participants are different by age, race, and gender; they all have one common characteristic. They are legally blind. These individuals are aware of their visual impairments and they take opportunities to make others in their world aware of their visual functioning and needs. They are grounded by established relationship, primarily with family, and they seem to be very confident based on those connections. Even with the teachers' lack of knowledge about the student's visual impairment, the students were much aware of their condition and the things they needed. Therefore, in the aspect of the research question in connection to Theme I, these students with visually impaired share their experiences of being educated in the general setting in a positive manner, but with a great sense of awareness, identity, and determination.

## Theme II: Depending on Structures of Support.

The student and teacher participants expressed information about their reliance on support systems. The student participants indicated that assistive technology was a structure of support was represented and needed within the classroom setting. The teacher participants discussed the ways in which assistive technology was used in the classroom as well as how it affected student performance in the classroom. In this study, structures of support were characterized by the support systems at home and school. These support systems are related to how families were providing support, how teachers were providing support, as well as being supported, and how peers were providing

support; along with how accommodations and modification were being used within the school support systems.

The student participants provided information about their experiences related to support structures and how support was needed in the general classroom environment. The student participants' responses were related to what supports were needed in the general education setting, and the lack of support they were receiving in certain areas in the general education setting. Teacher responses were geared around supports they provided to students and other teachers, as well as areas in which they felt they lacked support.

The topic of assistive technology as a support system emerged across participants. Most students described their experience with assistive technology devices in the general education setting in a positive manner, as others experiences highlighted the need for additional support in the area of assistive technology. For example, all three student participants shared their inventory of assistive technology devices that they had used in the classroom environment to enhance their visual opportunities. According to AFB (2011), in order to meet students' educational needs, specialized services, appropriate instructional books, and materials, as well as specialized equipment and technology should be integrated. However, even with the devices being available, there were areas of concerns based on the consistency of use by the teachers, the location of the device in relation to where instruction was being delivered, the operating status of the devices, and the technical support of the devices. These aspects of assistive technology seemed to outweigh the positive aspect of having the devices available. Students even reported that they would attempt to locate technical assistant personnel themselves in order get

assistance with a device in order to have devices available in the class. This implies that as the assistive technology may be available is not always being utilized for the students with visual impairments.

As discussed in Chapter II, Sapp and Hatlen (2010) asserts that adapted books, specialized equipment, and other technologies have provided students with sensory impairments equal access to the core and specialized curricula. However, it is sensible to presume that if the availability of these devices is inconsistent or not existent, then it will have a negative effect on the students' access to the classroom curricula. In this study, the teachers' responses in relation to assistive technology were not as vocal as students, as they seemed to not be very comfortable with use of many of the devices. Several of the teachers were not aware of the name of the devices; they were only able to provide descriptions of the devices of how they looked and functioned. Therefore, this was another area in which the student's knowledge outweighed the teachers. To meet student's educational needs, specialized services, appropriate instructional books, and materials as well specialized equipment and technology should be integrated.

Based on the findings, the most influential structure of support was their families. This was not connected to the literature from Chapter II, but results were prominent in this study. The family structure of support provided the students with concepts of protection and guidance. As mentioned in relation to Theme I, the family support system seemed to complete an impressive task of educating their children to become self-aware individuals that were capable of being vocal of their identities, and their needs in relation to their visual functioning. The family support seemed to be a positive aspect for all three

student participants, due to the warm energy and happy stories these students shared when discussing their families.

Student participant, Braxton, discussed his experiences based on his mom being his structure of support. The support was provided in a fashion of a nurturing mother, guidance counselor, and empathetic confidant to guide him through his journey of understanding and exploring his congenital, hereditary eye condition. Retinitis pigmentosa (RP), the eye disease that both Braxton and his mom have in common is a rare, inherited disease in which the light-sensitive retina of the eye slowly and progressively degenerates. In many instances of Braxton sharing his experience of having RP, he also seemed to share a sense of understanding and a sense of acceptance. One thing he seemed to value most is that his mom was his coach through the process of the various aspects of living with RP, as his mom had already experienced many of these challenges in her life. Also, his mom provided him with insight of future expectations of his visual functioning and thus attempted to prepare him for any problems he may incur in the future due to his visual impairment. Braxton's story was one of the most heartwrenching descriptions in regards to all three students because he seemed to have a grasp that his vision will eventually progressively decline, rather than improve. Yet, he seemed to be somewhat optimistic, and that positive perspective could be a result of having his mom as a positive structure of support that he depends on.

In relation to teachers being a structure of support, there were mixed responses from the student participants. The teacher that received the most positive comments related to providing support was Mrs. Hyatt, the special education teacher. There appeared to be a close connection between the Mrs. Hyatt and Casey seemed evident, and

revealed qualities of mutual respect, concern, and care for each other. Casey's perspective in relation to the Mrs. Hyatt asserts that she depends to her teacher as being the person to support, protect, and guide her within the general education classroom setting.

However, in contrast, Braxton and Bryson, shared their experiences in relation to how they did not feel supported by their teachers in the classroom setting. These students shared how they were sometimes afraid to ask for support from their teachers in the classroom. They indicated that many of the teachers seemed as if they were not interested in assisting them even when they asked for help in the class. The lack of support in the classroom environment, not only weakens the student/teacher relationship, but it also threatens the outcomes of student success in these teacher's classroom.

The student participants identified the general education teachers as teachers that often seemed "too busy" or "not interested" in assisting them. Often this negative viewpoint could potentially cause students to retreat within, and consequently only depend on themselves, if there was no other dependable adult available. The lack of support provided by teachers seemed to have a lasting effect on two of the student participants. One student shared his perspective by saying, "It's a teacher's job to assist students, and if a teacher does not want to do that job, then maybe they should not be teaching." This was a powerful statement by a middle school age student who has experienced incidents in which he felt that his teacher did not want to assist him.

Statements such as this allows students to share their feelings and knowledge of what they know based on who should be doing what when they should be doing it, and how they should be doing it in the classroom environment. Consequently, if the who, when,

and how aspects are not attended to by teachers, then students are often the individuals that are affected most.

Ironically, findings suggest just as the student participants reported lack of support from the teachers; teachers reported lack of support from administration. The major emphases of support that the teachers stressed that they lacked were related to being provided sufficient training related to teaching, assisting, and accommodating students with visual impairments. As cited in Chapter II, students with visual impairments frequently receive instruction from personnel who are not qualified to teach critical skills, NICHCY (2012), All teacher participants stated that they were not prepared nor adequately trained to provide educational services and support for individuals with visual impairment in the general education settings. Many teachers shared feelings of being "scared" and "worried" about if they were adequately addressing the students' needs.

According to AFB (2012), adequate preparation programs must be active to train staff and to provide specialized services that can address the academic and non-academic curriculum. The special education teacher was the only one of the three teacher participants that had been to a training related to visual impairment. Therefore, with the information she received from that single training event, she was often looked to as the "school expert" in relation to assisting their student who was visually impaired. This role was one that pushed upon the teacher, and one that she felt very uncomfortable with carrying out because she admitted to not having adequate knowledge to best provide services based on her student's visual needs. The special education teachers stated that

many times it was "a lot of trial and error," in trying to provide appropriate support for her VI student.

The general education teachers shared that they relied on the special education teacher to guide them in relation to providing services for their student with visual impairment. These teachers shared that they would be lost without the support of the special education teacher because the district provided minimal support in the areas of training and support to prepare teachers to work with students with visual impairments. Teachers shared how they often felt "bad" and "sorry" for the students with visual impairments because they realized that these students had no control over their visual status, and yet they were missing out on so many learning opportunities due to the teacher's lack of knowledge. This lack of knowledge was directly linked to lack of support in the areas of training. Teachers not adequately trained to provide necessary adaptations for students with visual impairments and to provide necessary support has been noted as a disadvantage of inclusion, (NICHCY, 2012).

As discussed in Chapter II, research studies related to visually impaired students in general education environments reveal a consensus that these individuals are often not receiving the support of teachers to be fully integrated (Sapp & Hatlen, 2010). According to Hatlen (2000), Students with visual impairments are not only required to master the same educational curriculum as their peers, but also the Expanded Core Curriculum (ECC) if they are to be successful. Literature suggests that students with visual impairments have increased chances to obtain appropriate educational opportunities when adequate instruction in both curriculum areas, (AFB, 2012). In this study, both the teachers and paraprofessional responded they were not aware the Expanded Core

Curriculum (ECC) that the students with visual impairments needed in conjunction with the standard curriculum. Therefore, this study supports what researchers have verified related to general education teachers in the general education setting not adequately addressing the Expanded Core Curriculum for students with visual impairments, primarily due to lack of training (Sapp & Hatlen 2010).

Also, these teachers were not aware that these students should be receiving specialized training from a Teacher of the Visually Impaired (TVI), to assist them in mastering the ECC and standard curriculum. This lack of awareness seemed to frustrate teachers during the interviewing process, and thus their responses were related to feeling even more compounded by pressure of providing adequate services.

In citing literature from Wolfe and colleagues (2002), research was conducted in public schools where visually impaired students were part of a general education setting to gain information related to how teachers employ their time within the class. The results indicated that the teachers spent the majority of instructional time on academics, tutoring and teaching communication skills; despite the efforts to promote the importance of including the ECC in the education of visually impaired students. Wolfe and colleagues (2002) suggests that even though it is over a decade later since this research was published, it is still relevant in aspect that schools are still falling being in relation to teachers providing adequate and appropriate services based on the needs of individuals with visual impairments. Thus, this reveals that teachers as a structure of support for students can be limited based on the knowledge and training of the teachers, which in turn affects the access and success of the student in the general education setting.

Even though the findings of this study did not suggest students felt they could depend on teachers as a support structure, it did reveal teachers reported depending on teachers as a structure of support. This data was not connected to the literature but it does imply how teachers could more easily support each other if adequate trainings are provided since teachers are looking to colleagues for support. The general education teachers were greatly dependent on the knowledge of the special education teacher to guide decisions related to students with visual impairments. Based on the findings, the general education teachers express that this was areas that should be addressed by the special education teacher, and they had minimal input of how programming should be implemented for students with visual impairments in the general education settings. There seemed to be in unbalance in the roles of the general education and special education teachers in relation to providing educational opportunities for students with visual impairments. Nonetheless, this unevenness of roles did evolve collaborative efforts for both general and special education teachers. Thus, the structure of support in relation to teachers helping teacher were strengthen and the professional relationships seemed to be beneficial in the aspects of teachers working together to some degree, with the understanding that the roles were not truly balanced.

Lastly, in relation to depending on structures of support in the general education classroom, the category of peer support surfaced. Student participants shared mostly positive experiences related to peers aiding them in the general classroom setting. They discussed how they had a network of friends they could depend on for assistance in class. The students shared experiences that peers often provided, such as: providing verbal instructions, reminding students of tasks, assisting with selecting items, providing verbal

descriptions of items, as well as assisting them to navigate throughout the classroom and school environment. Casey referred to her peers that assisted her as her BFFs, or Best Friends Forever. However, the other two students did not share that connection of having their friends and peer assistants as the same individuals. Bryson and Braxton spoke sparingly about their friends. They did not seem to depend on peers as much as the female participant. This could be due to personality differences or possibly age difference since Casey was the youngest, as well as the most vocal of all three student participants.

Being in the general education setting has it benefits in relation to students interacting with peers. Based on literature, there are academic benefits for students with disabilities who are taught in general education settings. These students are exposed to higher expectations from teachers and peers, as well as given opportunities to have positive academic role models in their peers without disabilities, (AFB, 2012). Perles (2010) reported that the general education environment often reflects diversity, and therefore can provide opportunities for educators to enhance the learning of students, through means of differentiated instruction; planning and instructing collaboratively, and promoting social interactions between students. The general education environment allows for students to be a part of the "big picture" in relation to the education system. That "big picture" should be a variety of all different kinds of students with different backgrounds, interests, ethnicities, genders, and abilities. Therefore, it becomes a view of what is common rather than what is not common, due to students not being a part of the general education setting. This allows students to interact with peers of all the various elements as just described, which will base interaction on common goals. The interaction that peers establish in such environments that welcome this type of setup ultimately has a

lasting positive impression of inclusion of all. Thus, it is believed, that this is when students learn to trust their peers and therefore they can depend on one another as structures of support.

The findings from Theme II, Depending on Structures of Support, adheres to the research question and/ or sub-questions in various aspects, based on the support they receive from the general education setting and how the support is assisting in them navigating through daily routines in the general education setting. Students reported a dependence on others to assist them in general education environments due to their visual impairment. Students depend on family, teachers, and peers as means of support. Teachers depend on administration and other teachers as means of support. Teachers also incorporate the use of assistive technology to provide students with opportunities to access various elements in their environment. However, students shared experiences in which the assistive technology was not often available to provide the access needed. Students discussed ways in which they experienced inadequate support from teachers. Teachers suggested that their lack of knowledge related to providing adequate and appropriate services to students with visual impairments were due to their lack of training provided by administration. In contrast, teachers reported their experience of being a support system to other teachers. Therefore, based on participants' responses, students with visual impairment depend on family, teachers, and peers for support to access and navigate themselves in the general education setting.

Theme III: Desiring a Sense of Normalcy.

The student participants expressed the desire to be like others. Casey, Braxton, and Bryson described their desire to be treated "normal," not as if they have impaired

vision. Based on the study findings, much of student perceptions of themselves was that they were "different." The students shared their experiences in the manner that suggest they did not want to be looked upon as if they are different. Perles (2010) suggests that educating all children in the same environment is said to teacher students without disabilities to be accepting of differences and respect for individuals regardless of disability. However, the results of this study refuted this claim. Their differences were expressed in not being treated like everyone else. In the aspect of all the three students and their experiences related to desiring a sense of normalcy, their relationship with "being normal" was not expressed in the same manner. Casey's experiences were shared based on her sense of being "different." She discussed how she was treated different at home by her mom, being very protective or her; at school by her peers, not calling on her to participate on their teams during outside play; and in the classroom, when her teachers increased the fonts and paper size of her assignments. Casey described all these events as experiences that made her feel different, and she did not feel positive about feeling different. Casey statement to a student, in relation to a class activity, revealed the darkness of her personality when she felt as if she was being treated different. Casey stated, "I'm legally blind, not stupid." That statement seemed have a boldness and yet sadness to it in relation to how Casey felt. Bryson shared similar instance such as Casey, when he informed his classmates, that "because I am visually impaired does not mean I do not know anything," These statements seem to warrant instances of frustration about misconceptions that their peers may have about students with visual impairments.

Some factors that the student participants shared that made them feel different, were wearing of glasses, not being allowed to complete activities independently, having

their assignments look different from their peers, and not being provided their work or materials the same time as their peers. The student participants shared negative viewpoints in relation to these factors and often did not discuss the consideration that these factors were in place to enhance their visual opportunities or to provide safety measures. The area in which student participants emphasized were "being like everybody else." The most striking thing about this concept is that even though the students seem to promote self-awareness and positive self-identity, they still seemed to have some issues with being like their peers. The notion of being like everybody else as they described, can be considered as frail statement because no two individuals are alike, and thus being like everybody else does not provide a more define perspective of the student viewpoint. However, when the student adds the context of having differences made in relation to interactions in class, font and paper size, or ability to complete task in an independent manner; this focuses on actual individuals' perspective that can be viewed and manipulated in some manner. Two of the student participants made some suggestive responses that their visual impairment were factors that made them different.

Teachers responded minimally in the aspects of "Desiring a Sense of Normalcy." The teacher participants were not able to entirely corroborate the student's aspects of their stories, related to the sense of being normal or not different.

In relation to how "Desiring a Sense of Normalcy "connects to the research question and/or sub-questions, it shares what the students are reporting about their experiences in the general education setting, based on wanting to be like others, feeling different, and desiring a sense to be normal.

Theme IV: Response to Barriers.

According to literature (Cavanaugh, 2002), an educational environment itself can create a barrier for students with visual impairments, since the general education classrooms are designed with sighted students in mind. The formats of the educational materials should be presented in a variety of visual formats: posters, charts, diagrams, videos, models, demonstrations, and print materials. The students with visual impairments often have difficulty benefiting from these materials. Therefore, teachers should be mindful and knowledgeable about how to set up a classroom if they have a student with visual impairment. The student and teacher participants cited lack of accessibility, and access to many areas of the general classroom setting, along with curriculum. Participants expressed the concerns that these barriers affected them on a physical and emotional level. The theme of response to barriers highlighted aspects of how students were not always receiving adequate access to curriculum and the classroom based on barriers in the environment. Barriers that limited the access of the visually impaired students in the general education setting studied were: setup of the classroom; seating arrangements; proximity of student to instructional objects, materials and resources; usage of AT devices; and physical presence in classroom during instruction; irregularity of implementing required accommodations and modifications for students; and inconsistent and adequate teacher support to students with visual impairments. Despite prior research suggesting removal of these barriers is critical, there seemed to be no special considerations made to how the classroom was set up to accommodate student with visual impairments.

The barriers that were discussed in the findings section is evidence that students with visual impairments are not receiving the specialized attention needed in relation to their visual needs. Therefore, the students are not being afforded the best education opportunities possible under FAPE and IDEA.

According to the literature, another factor was referred as a disadvantage of inclusion was related to teacher training. Teachers may not be adequately trained to provide necessary adaptations for students with disabilities," (Educating Students, 2012). Teachers may not be aware of the most appropriate strategies to use to individualize instruction for students with specific needs. This means that students with visual impairments frequently receive instruction from personnel who are not qualified to teach critical skills such as Braille, cane and other travel skills, and effective use of available vision. This problem is even more alarming in rural communities, where shortages of qualified personnel are most acute (NICHCY, 2012). This statement can be confirmed based on supported findings of this study, which was conducted in a rural location.

Lack of teacher training is directly related to the findings discussed in Theme II:

Depending on Structures of Support. This lack of teacher training is a barrier for students because of inadequate skills. Therefore, they are not aware of how to properly accommodate and modify the assignments in classroom so that the students have access to curriculum and environment. With these barriers evident, it has an effect on how much the teacher can provide support in the classroom. Therefore, there is a connection of how much the student with visual impairment depend on teachers as a structure of support. In many aspects, it seems as if the most connected categories that directly impacted student success in a negative manner was directly related to lack of teacher

training related to educating students with visual impairments. Until this area of concern is addressed, then there will more than likely continue to be barriers that hinder student progress and success; as well as limited usage of teachers as an adequate support system in the general education setting.

In relation to how Theme IV, Responding to Barriers, connected to the research questions, it provides the interrelationship of how the lack of teacher training affects student progress. This theme also suggests that students are reporting physical and emotional barriers that are hindering their learning opportunities in class. Findings related to student feelings of these experiences were not projected in a positive manner. These factors should be considered as a barrier itself, in the emotional aspect. Teachers were vocal in responding how they were educating students with visual impairment in the general setting, by stating the current practices and procedures that they were using in class. However, they were not confident in the notion that they were providing the most appropriate and adequate services that addressed the needs of the students with visual impairments. Therefore, students with visual impairment are navigating through the general education setting with minimal support and excessive barriers that limits total access to the environment and curriculum.

# Limitations of Study

Limitations can vary in a study. In this study, an initial limitation was related to the sample included in the study. There were three additional teachers and one student participant that were contacted for the study, but they declined to participate. Therefore, there were no participants from high school, only at the elementary and middle school level. The study followed a qualitative research approach involving the use of the semi-

structured interviewing as the primary method, which were supplemented with classroom observation and researcher's notes. Finally, the study involved the examination of experiences of students with visual impairments in the general education setting. Due to a limited number of students in this population in rural Mississippi, qualitative methodology was the most appropriate to collect in-depth data.

Another limitation of the study was the timing of the school year in which the data were collected. Data were collected in late spring, and various factors often limited the researcher access to students and teachers. Time was a limitation of this study due to data being collected in the spring semester, time was constricted by mandated state testing, school field trips, teacher conferences, and other school functions that marked the closing of the school year. This limits the potential findings of the study, as data collection during another time period could have provided more opportunities to interview and observe both teachers and students in which may have provided more details about the experiences.

#### Discussion for Future Direction of Research

The findings of this research may have implications for other research in educating students with visual impairments in the general education setting. The following recommendations are proposed by the researcher to further expand what is known about educating students with visual impairment in the general education setting. Further study is needed to determine how students with visual impairment respond to being educated using the Expanded Core Curriculum along with the Standard Curriculum. This could provide an opportunity to determine if there are any potential gaps in incorporating the two sets of standards for individuals with visual impairments.

The nature of special education and general education collaborative partnerships when teaching should also be examined, focusing on how each unit provides support to educate students with visual impairments in the general education setting.

Another recommendation for future research would be to follow one of the three student participants in this study over time, examining the educational experiences and eventual outcomes as they exit the public-school system. In an opportunity to explore the long-term effects of how the rural education system prepared the student with visual impairments to transition to adulthood. Last, conduct a quantitative study regarding the number of the general and special education teachers as well as their training levels in regards to educating students with visual impairment in the general education setting. This could be used to help determine the effects that training have on teacher effectiveness and student outcomes.

#### Conclusion

This chapter summarized the findings of this study related to the experiences of students with visual impairment in general education settings. The unique aspects of each participant's experiences led to emergence of four themes. Each theme suggested a basis for understanding the experiences of these individuals, while also supporting how these experiences were affected by various factors. This discussion reveals various reasons that students might be limited in access to the environment and curriculum, as well as noting the teacher's limited access to training opportunities. The goal was to offer an explanation as what students could describe about their experiences in the general education setting, to provide a rationale for understanding how they are best receiving what they need.

Presenting an analysis of the finding uncovered the impact of teacher training on student learning. In many aspects of the findings, there were connections to how the lack of teacher training impacted the learning opportunities of the student in a negative manner. Hence, this finding is one that should be addressed by stakeholders to move the education of students with visual impairment forward on a positive slope. The experiences of students and teachers yielded great evidence that there is a great deal of efforts and changes need to be made for students with visual impairments to really be included in the general education setting. Even though the physical representation of students is evident, it is often the barriers in the class that prevents these students from acquiring equal access to the curriculum and environment.

Even as this study yielded some important information related to these individual experiences, it is also best recognized that others may have told a different story, this study is essentially a presentation of how the researcher understood and made meaning of the material and the connections provided by the participants.

#### APPENDIX A – IRB APPROVAL LETTER



#### INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001 Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

#### NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- . The risks to subjects are reasonable in relation to the anticipated benefits.
- · The selection of subjects is equitable.
- · Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- · Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects
  must be reported immediately, but not later than 10 days following the event. This should
  be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
   Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 11111507

PROJECT TITLE: Students with Visual Impairments in the Inclusionary Setting: The Lived Experience

PROJECT TYPE: New Project

RESEARCHER/S: Kerri Johnson-Jones

COLLEGE/DIVISION: College of Education & Psychology DEPARTMENT: Curriculum, Instruction, & Special Education

FUNDING AGENCY: N/A

IRB COMMITTEE ACTION: Expedited Review Aprpoval PERIOD OF PROJECT APPROVAL: 04/12/2012 to 04/11/2013

Lawrence A. Hosman, Ph.D. Institutional Review Board Chair

#### APPENDIX B – IRB REVISION AND RENEWAL MEMO

# DEPARTMENT: Curriculum, Instruction, & Special Education FUNDING AGENCY: N/A IRB COMMITTEE ACTION: Expedited Review Approval PERIOD OF PROJECT APPROVAL

## **MEMO**

To: Institutional Review Board (IRB)

CC: Dr. Hollie Filce, Dr. John Bishop, Dr. Lawrence A. Hosman, & Betty A.

Morgan,

From: Kerri Johnson-Jones

Date: 2/16/2017

Re: IRB revision and renewal for Protocol # 11111507

This memo is submitted as a request to make revisions to an open IRB (#1111507) currently active until 04/11/13. The revisions consist of adding School District as a participant of the proposed study, and also to renew the IRB dates for another year. The project procedures will remain the same, the study will be used for dissertation purposes. A permission letter from has been included with this request.

Below is reference information based on the current approved IRB provided by Lawrence A. Hosman, Institute Review Board Chair, which was received on 04/12/12.

PROTOCOL NUMBER: 11111507

PROJECT TITLE: Students with Visual Impairments in the

Inclusionary Setting: The Lived Experience

PROJECT TYPE: New Project

RESEARCHER/S: Kerri Johnson-Jones

COLLEGE/DIVISION: College of Education & Psychology

DEPARTMENT: Curriculum, Instruction, & Special Education

FUNDING AGENCY: N/A

IRB COMMITTEE ACTION: Expedited Review Approval

PERIOD OF PROJECT APPROVAL: 04/12/2012 to 04/11/2013

Please contact me at <u>Kerri Johnson@eagles.usm.edu</u> or (601)550-0225 if any additional information is needed.

#### APPENDIX C -APPROVED IRB RENEWAL LETTER



#### INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001 Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

#### NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects
  must be reported immediately, but not later than 10 days following the event. This should
  be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
   Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 11111507

PROJECT TITLE: Students with Visual Impairments in the

Inclusionary Setting: The Lived Experience

PROJECT TYPE: New Project

RESEARCHER/S: Kerri Johnson-Jones

COLLEGE/DIVISION: College of Education & Psychology DEPARTMENT: Curriculum, Instruction, & Special Education

FUNDING AGENCY: N/A

IRB COMMITTEE ACTION: Expedited Review Aprpoval PERIOD OF PROJECT APPROVAL: 04/12/2012 to 04/11/2013

Lawrence A. Hosman, Ph.D. Institutional Review Board Chair

# APPENDIX D -LETTER OF REQUEST TO SCHOOL DISTRICT



I am a graduate student at the University of Southern Mississippi working on my Ph.D. in Special Education with emphasis in Low Incidence Disabilities. I also serve as your district contracted Teacher of the Visually Impaired (TVI) for your students with visual impairments and blindness. I am writing to ask your permission to conduct a portion of my research in various school settings within the

The goals of this research project are aimed at investigating the experiences of visually impaired students within an inclusionary class setting in the public education setting. The procedures for this project include collecting data from individuals in several Mississippi K-12 public education settings with a primary diagnosis of visual impairment (VI). Data collection will consist of 1) audio-recorded and transcribed interviews of participants conducted by the researcher 2) classroom observations and 3) anecdotal notes in the form of weekly reflections conducted by the researcher.

The potential benefits for this study is to share their experiences and provide awareness to all stakeholders about the individuals with visual impairments' current level of functioning within the inclusion setting. This study can provide potential benefits visually impaired students to have needs met that may not have been identified previously. It allows administrators, parents, teachers, and other related service providers opportunities to emphasize with individuals that have a sensory loss and how to make necessary accommodations and modifications so that visually impaired students have equal access to the curriculum.

Pseudonyms will be used for all participants and locations and documents that have names of persons or places will be blurred using image manipulation software.

This project will be reviewed by the Human Subjects protection Review Committee before any research begins. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive # 5147, Hattiesburg, MS 39406-0001, (601) 266-6820. Any questions about the research should be directed to Kerri Johnson-Jones at (601)818-1820. Thank you in advance for your time and consideration.

Sincerely,

Kerri Johnson-Jones, Graduate Student The University of Southern Mississippi

# APPENDIX E -INTERVIEW QUESTIONS FOR STUDENT PARTICIPANTS

# **Open-Ended Questions for Student Participants**

- 1. Tell me about your diagnosed visual impairment?
- 2. Tell me how you feel about your visual impairment. What is that like for you?
- 3. Tell me about your experiences in class?
- 4. Tell me about anything you use in class that helps you with your visual impairment. Do you have any special devices or programs?
- 5. Tell me about how your teachers or assistant teachers work with you?
- 6. Tell me about your experience with peers in class?
- 7. Tell me about the things you may need help with class?
- 8. Tell me about the things you don't need help with in class?

### APPENDIX F -INTERVIEW QUESTIONS FOR TEACHER PARTICIPANTS

# **Open-Ended Questions for Teacher Participants**

- 1. Tell me about your students that are diagnosed with visual impairments that are part of your class?
- 2. Tell me how you feel about providing instruction to students with visual impairment. What is that like for you?
- 3. Tell me about the experiences of students with visual impairment in your class?
- 4. Tell me about anything you use in class that assists your students with visual impairment. Do you use any special devices or programs?
- 5. Tell me about how you work to assist your students with visual impairment to access the curriculum?
- 6. Tell me how your students with visual impairment interact with peers?
- 7. Tell me about areas in which you feel you may need assistance in relation to providing services to students with visual impairment?
- 8. Tell me about areas in which you feel you do not need assistance with in relation to providing services to students with visual impairment?

# APPENDIX G -CLASSROOM OBSERVATION FORM

Student: School:
Date: Observer(s):
Time Begin: Time End:
· —
Student is in (Check all that apply): Regular Ed Resource Life Skills MI
Reason for observation:
Visual Functioning Behavior Use of Technology Classroom Modifications Teacher/Parent request
Classroom Modifications Teacher/Parent request Other (Specify: ) Other (Specify: )
Technology student used during observation:
Arrangement, location, storage of technology
Lesson Observed:
Classroom Environment: Number of students in room: Number of adults:
Lighting in room: Natural Fluorescent Incandescent
WhiteboardsChalkboardsIndividual desksTables
Describe student placement in room (i.e. back row of desks, facing windows, near exit door)
Describe student placement in foom (i.e. oack fow of desks, facing windows, near exit door)
Sketch of the classroom, including windows, doors, etc:

Cyral Miller & Elizabeth Eagan, 2005

Classroom Activities:  1. Is the Classroom environment organized into specific areas for different activities? Accessible to student N/A Examples: N/A N/A Examples: N/A N/A N/A N/A N/A N/A N/A N/A N/A
Are there modifications in the environment for your student's visual needs? (e.g. lighting, highlighting, tactual markers, organization of the room, etc.)? N/A Does student have access to all parts of the classroom? N/A Does the student take advantage of the modifications made for him/her? Examples:
Are materials modified for student's needs? Is additional materials or technology needed to support instruction
Is there a schedule with planned activities for the day/class? N/A How is the schedule communicated to your student?
Does the schedule reflect activities that support your student's IEP goals and objectives (if known)?
Are activities meaningful for your student?
7. How are upcoming transitions communicated to your student?N/A Examples observed:
8. How is your student communicating? (Include sign, gestures, body language, eye gaze, etc) Is it appropriate for his/her sensory abilities? Is your student initiating responses?
9. Student participates in class discussion? Comments:
10. Student attends to lesson during class? Comments:
11. Student is able to find their materials, equipment, etc. during class in a timely manner?  Comments:

Cyral Miller & Elizabeth Eagan, 2005

12. Describe interactions with teacher/students:
13. Behaviors observed:
14. Are paraprofessionals and related service professionals trained in the modifications and strategies needed to your student due to his/her sensory abilities? YesNo N/A
15. Are paraprofessionals involved in direct instruction given sufficient supervision and support to appropriate interact and instruct? YesNo N/A
16. What more could YOU do, as a VI professional, to further this student's education?
Follow up:  Conference needed with Teacher Student O&M Speech Pathologist Counselor Technology Specialist Parent Other
Additional training needed: (specify)
Additional training needed for Teacher Student O&M Speech Pathologist Counselor Technology Specialist Parent Other Additional Observations:

Cyral Miller & Elizabeth Eagan, 2005

#### REFERENCES

- Adams, P.F., Hendershot, G.E., & Marano, M.A. (1999). Current estimates from the National Health Interview Survey, 1996. National Center for Health Statistics. *Vital Health Statistics*, *10*(200).
- Al-Ayoudi, M. (2006). Teachers' attitudes towards inclusive education in Jordanian schools. *International Journal of Special Education*, 21(2).
- Ali, M., Mustabpha, R., & Jelas, Z., (2006). An empirical study on teachers' perceptions towards inclusive education in Malaysia. *International Journal of Special Education*, 21(3), 36-44. Retrieved 4<sup>th</sup> March 2012 from http://www.mind.org.my/index.php?page=26
- American Foundation for the Blind. (2005). The expanded core curriculum for blind and VI children and youths. Retrieved from http://www.afb.org/Section.asp?

  Retrieved from SectionID=44&TopicID189&SubTopicID=4&DocumentID=2117
- American Foundation for the Blind. (2005). Educating students with visual impairments for inclusion in society: A paper on the inclusion of students with visual impairments Executive summary. Retrieved from http://www.afb.org/Section.asp?SectionID.
- American Foundation for the Blind. (2011). Educating students with visual impairments for inclusion society. Retrieved from SectionID=44&TopicID189&DocumentID=1344.

- American Foundation for the Blind. (2012). Expanded core curriculum (ECC)Introduction: What is core curriculum. Retrieved from

  http://www.afb.org/info/programs-and-services/professionaldevelopment/expanded-core-curriculum-ecc/123.
- Americans with Disabilities Act of 1990, Pub. L. No. 29 U.S.C. § 794 (1990).
- Alper, S., & Ryndak, D.L. (1992). Educating students with severe handicaps in regular classes. *The Elementary School Journal*, 92, 373-387.
- Apling, R. (2001). Individuals with Disability Act (IDEA): *Identification and misidentification of students with disabilities*. United States Congressional

  Research Service. Cong. Rept. RL31189. Washington, DC: Library of Congress.
- Avramidis, E., Baylis, P., & Burden, R. (2000). Students teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school.

  \*Teaching and Teacher Education, 16, 1-16.
- Avramidis, E., & Norwich, B. (2010). 'Teachers' attitudes towards integration/inclusion:

  A review of literature'. *European Journal of Special Needs Education*, 17(2),

  129–147.
- Baker, E., Wang, M., & Walberg, H. (1995). The effects of inclusion on learning. *Educational Leadership*, 52(4), 33-34.
- Bardin, J. A., & Lewis, S. (2008). A survey of the academic engagement of students with visual impairment general education classes. *Journal of Visual Impairment & Blindness*, 102(8), 472-483.

- Bardin, J. A., & Lewis, S. (2008). A survey of the academic engagement of students with visual impairments in general education classes. *Journal of Visual Impairment & Blindness*, 102(8), 472-483
- Bateman, D., & Bateman, C. (2002). What does a principal need to know about inclusion? Arlington, VA: ERIC Clearinghouse on Disabilities and Gifted/Education. (ERIC Document Reproduction Service No. ED473828).
- Bernard, R. B., & Ryan, G. W. (2010). *Analyzing qualitative data*. Thousand Oaks, CA: Sage.
- Berryman, J. (1989). Attitudes of public school teachers towards educational mainstreaming. *Remedial and Special Education*, *10*, 44-49.
- Bowan, I. (1986). Teacher training and the integration of handicapped pupils; some finding from a fourteen nation UNESCO study, *European Journal of Special Needs Education*, 1, 29-38.
- Brinker, R. P., & Thorpe, M.E. (1984). Integration of severely handicapped students and the proportion of IEP objectives achieved. *Exceptional Children*, *51*, 168-175.
- Building the legacy: IDEA 2004. Washington, DC: U.S. Department of Education.

  Retrieved from http://idea.ed.gov/explore/home.
- Butler, S. (1990). *Exceptional Child in Schools*. Sydney, AUS: Harcourt Brace Jovanovich Group Pty.
- Buultjeans, M., Stead, J., & Dallas, M. (2002). Promoting social inclusion of pupils with visual impairments in mainstream schools in Scotland. Paper presented at the Annual Conference of British Educational Research Association, University of

- Exeter, England. Abstract retrieved from http://www.leeds.ac.uk/educol/documents/00002281.htm.
- Cavanaugh, T. (2002). Assistive Technology and its Relationship with Instructional/

  Educational Technology. Retrieved from:

  http://www.unf.edu/~tcavanau/research/aet/index.htm.
- Champion, D. J. (2005). Research methods for criminal justice and criminology (3rd ed.).

  Upper Saddle River, NJ: Prentice Hall.
- Chien-Huey Chang, S., & Schaller, J. (2002). The views of students with visual impairments on the support they received from teachers. *Journal of Visual Impairment & Blindness*, 98, 558-575.
- Cohen, L., Manion, L., & Morrison K. (2007). Research Methods in Education (6th Edition). London, UK: Routledge Falmer.
- Cole, D. A., & Meyer, L. H. (1991). Social integration and severe disabilities: A longitudinal analysis of child outcomes. *Journal of Special Education*, 25, 340-351.
- Corn, A. L., & Silberman, R. K. (1999). Personnel preparation programs in visual impairments: a status report. *Journal of Visual Impairment and Blindness*, 93(12), 755–769.
- Corn, A. L., Wall, R. S., Jose, R., Bell, J., Wilcox, K., & Perez, A. (2002). An initial study of reading and comprehension rates for students receiving optical devices.

  \*Journal of Visual Impairment & Blindness, 96, 322-334.

- Corn, A., Hatlen, P., Huebner, K. M., Ryan, F., & Siller, M. (1995). *National agenda for children and youths with visual impairments, including those with multiple disabilities*. New York, NY: AFB Press.
- Cowen, C., & Shepler, R. (2000). Activities and games for teaching children to use magnifiers. In F. M. D'Andrea, F.M., & Farrenkopf, C. (Eds.), *Looking to learn:*\*Promoting literacy for students with low vision (pp. 167-186). New York, NY:

  AFB Press.
- Creswell, J. W. (1998). Qualitative Inquiry and Research Design: Choosing Among Five Traditions. London, UK: Sage Publications, Ltd.
- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2005). Educational research: *Planning, conducting, and evaluating* quantitative and qualitative research. Upper Saddle River, NJ: Pearson Education, Inc.
- Creswell, J.W. (2008). Research design: Qualitative, quantitative, and mixed methods approaches. Los Angeles, CA: Sage Publications, Inc.
- Davis, P., & Hopwood, V. (2002). Including children with a visual impairment in the mainstream primary school classroom. *Journal of Research in Special Educational Needs*, 2(3), 1-11.
- Denzin, N. K., & Lincoln Y.S.(2000) (Eds). *Handbook of Qualitative Research*. London, UK: Sage Publication Inc.
- Denzin, N., & Lincoln, Y.S. (2008). (Eds). *Collecting and interpreting qualitative materials* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.

- Denzin, N.K., & Lincoln, Y.S. (2012). *The Sage Handbook of Qualitative Research*, (4th ed.). Thousand Oaks, CA: Sage Publications.
- Dimigen, G., Roy, A. W. N., Horn, J., & Swan, M. (2001). Integration of visual impaired students into mainstream education: Two case studies. *Journal of Visual Impairment & Blindness*, 95, 161-164.
- Douglas, G., & McLinden, M. (2005). 'Visual Impairment', in A. Lewis & B. Norwich (eds). *Special Teaching for Special Children? Pedagogies for Inclusion*, pp. 26–40. Maidenhead, UK: Open University Press.
- Douglas, G., McCall, McLinden, M., & Pavey, S., Ware, J. & Farrell, A. (2009).

  International review of the literature of evidence of best practice models and outcomes in the education of blind and visually impaired children. *National Council for Special Education*. Trim, Ireland: David Fulton Publishers.
- Education for All Handicapped Children Act of 1975, Public Law 94-142 (1975).
- Ely, M., Anzul, M., Friedman, T., Garner, D., & Steinmetz, A. (1991). *Doing qualitative research: circles within circles*. London, UK: Falmer Press.
- Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry: a guide to methods*. Newbury Park, CA: Sage Publications, Inc
- Felman, M.S. (2000). Managing for inclusion: Balancing control and participation.

  International Public Management Journal, 3, 149-167.
- Ferrell, K. (2006). Evidence-based practices for students with visual impairments.

  \*Communication Disorders Quarterly, 28(1), 42-48.

  doi:10.1177/15257401060280010701.

- Ferrell, K. A. (2007). Visual development in normal and low vision children. In A. Corn, A. Koenig, & J. Erin (Eds.), *Foundations of low vision: Clinical and functional perspectives* (2nd ed.). New York, NY: AFB Press.
- Foster, A., & Resnikoff, S. (2005). The impact of vision 2020 on global blindness. *Eye*, 19, 1133-1135.
- Fryxell D., & Kennedy C.H. (1995). Placement along the continuum of services and its impact on students' social relationships. *Journal of the Association for Persons* with Severe Handicaps, 20(4), 259–269.
- Gabbert, C. (2012). *Common types and characteristics of visual impairments*. Retrieved September 20, 2014, from http://www.brighthubeducation.com/special-ed-visual-impairments/35103-common-types-of-visual-impairment-in-students.
- Glense, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. White Plains, NY: Longman.
- Gompel, M., van Bon, W. H.., & Schreuder, R. (2004). Reading of children with low vision. *Journal of Visual Impairment & Blindness*, 98, 77–89.
- Gray, C. (2005). Inclusion, impact, and need: Young children with a visual impairment.

  Child Care in Practice, 11, 179-190.
- Gray, C. (2009). A qualitatively different experience: mainstreaming pupils with a visual impairment in Northern Ireland. *European Journal of Special Needs Education*, 24(2), 169-182. doi:10.1080/08856250902793644.
- Guba, E.G. (1990). The alternative paradigm dialogue. In E.G. Guba (Ed.), *The paradigm dialog* (pp. 17-27). Newbury Park, CA: Sage Publications. Retrieved from http://faculty.rcoe.appstate.edu/jacksonay/guba.pdf.

- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N.K. Denzin & Y. S. Lincoln (Eds.). *Handbook of qualitative research* (pp. 105-117). London, UK: Sage Publications, Inc.
- Gyimah, E., Sugden, D., & Pearson, S. (2009). Inclusion of children with special educational needs in mainstream schools in Ghana: influence of teachers' and children's characteristics. *International Journal of Inclusive Education*, *13*(8), 784-804.
- Hallahan, D. (2000). The illusion of full inclusion: A comprehensive critique of a current special education bandwagon. Austin, TX: Pro-Ed.
- Halvorsen, A.T., & Neary, T. (2001). Building inclusive schools: Tools and strategies for success. Needham Heights, MA: Allyn & Bacon.
- Hanline, M. F., & Halvorsen, A. (1989). Parent perceptions of the integration transition process: Overcoming artificial barriers. *Exceptional Children*, *55*(6), 487-492.
- Hatlen, P. (1996). The expanded core curriculum for students with visual impairments, including those with additional disabilities. *Review*, 28(1), 25-32.
- Hatlen, P. (2000). Appendix B: The core curriculum for blind and visually impaired students, including those with additional disabilities. In A.J. Koenig, & M.C.Holbrook (Eds.), *Foundations of Education* (p. 782). New York, NY: AFB Press.
- Hatlen, P. (2002). Responsible inclusion belongs in an array of placement options.

  Austin, TX: Texas School for the Blind and Visually Impaired. Retrieved January 8, 2011, from http://www.tsbvi.edu/Education/inclusion.htm.
- Hatlen, P. (2005). Is Social Isolation a Predictable Outcome of Inclusive Education? [Electronic Version]. *Journal of Visual Impairment & Blindness*, 98.

- Hunt, P., Alwell, M., Farron-Davis, F., & Goetz, L. (1996). Creating socially supportive environments for fully included students who experience multiple disabilities.

  \*Journal of the Association for Persons with Severe Disabilities, 21(3), 53-71.
- Individuals with Disabilities Education Act, 20 U.S.C. 1400 et seq. (1997).
- Individuals with Disabilities Education Improvement Act of 2004 (IDEA). (2004).

  Amendments PL 108-44, 108 U. S. C.
- Joniak, L. (2000). The qualitative paradigm: an overview of some basic concepts, assumptions, and theories of qualitative research. Retrieved April 23, 2012, from http://www.slis.indiana.edu/faculty/hrosenba/www/Research/methods/joniak\_qual\_par.pdf.
- Jones, J. W., & Collins, A. P. (1966). *Educational programs for visually handicapped children*. Washington, DC: U.S. Government Printing Office.
- Katz, J., & Mirenda, P. (2002). Including students with developmental disabilities in general education classrooms: Educational benefits. *International Journal of Special Education*, 17(2), 15-26.
- Keil, S. (2002). Survey of educational provision for blind and partially sighted children in England, Scotland and Wales in 2002, *British Journal of Visual Impairment*, 21(3), 93-97.
- Lee, S., & Odom, S. L. (1996). The relationship between stereotypic behavior and peer social interaction for children with severe disabilities. *Journal of the Association for Persons with Severe Handicaps*, 21, 88-95.
- Lincoln, Y. S., & Guba, E., G. (2000). Paradigmatic controversies, contradictions and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of*

- Qualitative Research (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage Publications, Inc.
- Lindlof, T. R. (1995). *Qualitative communication research methods*. Thousand Oaks, CA: Sage Publications Inc.
- McCarty, K. (2006, March 11). Full Inclusion: The Benefits and disadvantages of inclusive schooling. An overview. Retrieved October 14, 2012, from http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?\_nfpb=true&\_&ERICExtSearch\_SearchValue\_0=ED496074&ERICExtSearch\_
  SearchType\_0=no&accno=E6074.
- McGinnity, B.L., Seymour-Ford, J. & Andries, K.J. (2004) Founders. Perkins History

  Museum, Watertown, MA: Perkins School for the Blind.
- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass Publishers.
- Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis* (1st ed.). San Francisco, CA: Jossey-Bass Publishers.
- Mississippi Department of Education. (2009). Serving children that are visually impaired and/or blind in Mississippi [PowerPoint slides]. Retrieved from www.mde.k12.ms.us/.../serving-visually-impaired-and-blind-children-in-mississippi.pptx.
- Mock, D., Jakubecy, J., Kauffman, J., Sindelar, P., Brownell, M., Ackerman, P., Jaeger,
  R., & Smith, A. (January 7, 2002). Special Education. Encyclopedia.
  Encyclopedia of Education.com. http://www.encyclopedia.com/doc/1G2-3403200572.html.

- National Board for Professional Teaching Standards [NBPTS]. (2001). *Five core propositions*. Retrieved from http://www.nbpts.org/five-core-propositions.
- National Council on Disability. (2009). *National Disability Survey*. Retrieved from http://www.ncd.gov/progress\_reports/Mar312009.
- National Dissemination Center for Children with Disabilities–NICHCY. (2011).

  \*Disability and Education Laws. Retrieved from http://nichcy.org/laws.
- National Dissemination Center for Children with Disabilities–NICHCY. (2012).

  \*Disability and Education Laws. Retrieved from http://nichcy.org/laws.
- National Governors Association Center for Best Practices & Council of Chief State

  School Officers. (2010). Common Core State Standards (CCSS). National

  Governors Association Center for Best Practices, Council of Chief State School

  Officers Washington, DC: Authors.
- Nolan, C.Y., & Kederis, C.J. (1969). Perceptual Factors in Braille Word

  Recognition, Research Series. New York, NY: American Foundation for the Blind.
- Nyoni, M., Marashe, J., & Nyoni, T. (2011). The quest for inclusive education: The case of Pakame High School. *Journal of Sustainable Development in Africa, 13*(1).

  Retrieved from http://www.jsdafrica.com/Jsda/V13No1\_Spring2011\_A/PDF/The%20Quest%20f or%20Inclusive%20Education%20%28Nyoni,%20Marashe,%20Nyoni%29.pdf.
- Pascolini D., & Mariotti S. (2010). Global estimates of visual impairment. *British Journal Ophthalmology Online*. Retrieved from

- http://www.icoph.org/dynamic/attachments/resources/global\_est\_vi\_2010\_pascoli ni\_mariotti\_nov\_11.pdf.
- Peltier, G. L. (1997). The effect of inclusion on non-disabled children: A review of the research. *Contemporary Education*, *68*, 234-238.
- Perles, K. (2010). *Mainstreaming and inclusion: How are they different?* Retrieved from http://www.brighthub.com/education/special/articles/66813.aspx.
- Porter, J., & Lace, P.J. (2008). Safeguarding the needs of children with a visual impairment in non- VI special schools, *British Journal of Visual Impairment*, 26, 1, 50-62.
- Rae, H., Murray, G., & McKenzie, K. (2010). Teachers' attitude towards mainstream schooling. *Learning Disability Practice*, *13*(10).
- Ragin, C. C. (1987). *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*. Berkeley, CA: University of California Press.
- Rahi, J. S., & Cable, N. (2003). Severe Visual Impairment and Blindness in Children in the UK. *The Lancet*, 362(9393): 1359–65.
- Ravenscroft, J., Blaikie, A., Macewen, C., O'Hare, A., Creswell, L. & Dutton, G.N. (2008). A novel method of notification to profile childhood visual impairment in Scotland to meet the needs of children with visual impairment. *The British Journal of Visual Impairment*, 26(2) 170-189
- Riley, R. (2000). Tough love: State accountability pushes student achievement. *Insights* on Education, Policy, Practice, and Research, 11, 1-16.
- Saldana, J. (2009). *The coding manual for qualitative researchers*. Los Angeles, CA: SAGE.

- Sapp, W., & Hatlen, P. (2010). The expanded core curriculum: Where we have been, where we are going, and how we can get there. *Journal of Visual Impairment & Blindness*, 104, 338-348.
- Schwandt, T.A. (1994). Constructivist, interpretivist approaches to human inquiry. In N.K. Denzin and Y.S. Lincoln, (Eds.), *Handbook of qualitative research*.

  Thousand Oaks, CA: Sage.
- Silberman, R. K., Bruce, S., & Nelson, C. (2004). Children with sensory impairments. In F. P. Orelove, D. Sobsey, & R. K. Silberman (Eds.), *Educating children with multiple disabilities*. Baltimore, MD: Brooks Publishing.
- Silverman, D. (2005). *Doing Qualitative Research: A Practical Handbook* (second edition). London, UK: Sage.
- Simon, C., Echeita, G., Scandoval, M., & Lopez, M., (2010). The inclusion education process of students with visual impairments in Spain: An analysis from the perspective of organizations. *Journal of Visual Impairment and Blindness*, 104 (9).
- Smith, A. J., Geruschat, D., & Huebner, K. M. (2004). Policy to practice: Teachers' and administrators' views on curricular access by students with low vision. *Journal of Visual Impairment & Blindness*, 98, 612-628.
- Smith, D. W., Kelley, P., Maushak, N. J., Griffin-Shirley, N., & Lan, W. Y. (2009).

  Assistive technology competencies for teachers of students with visual impairments. *Journal of Visual Impairment & Blindness*, 103, 457-469.
- Snyder, T. D., & Dillow, S.A. (2013). *Digest of Education Statistics 2012*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department

- of Education. Washington, DC. Retrieved from https://nces.ed.gov/pubs2014/2014015.pdf.
- Spungin, S. J., & Ferrell, K. A. (1999). The role and function of the teacher of students with visual handicaps: CEC-DVI position statement, Blind and visually impaired students: Educational service guidelines (pp. 164-173). Watertown, MA: Perkins School for the Blind.
- Stake, R.E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage Publications.
- Staub, D., & Peck, C.A. (1995). What are the outcomes for nondisabled students? *Educational Leadership*, 52, 36-40.
- Treise, D. (1999). A slightly exaggerated comparison of some characteristics and assumptions of qualitative and non-qualitative approaches to the world. *Journal of Communication*, *4*, 20-32.
- Turnbull, A., Turnbull, H., Shank, M., & Leal, D. (1995). *Exceptional Lives: Special Education in Today's Schools*. Upper Saddle River, NJ: Merrill.
- Trent, S. D., & Truan, M. B. (1997). Speed, accuracy and comprehension of adolescent Braille readers in a specialized school. *Journal of Visual Impairments and Blindness*, *91*(5), 494-500.
- U. S. Department of Education. Office for Civil Rights. (2010). Free Appropriate Public Education for Students with Disabilities: Requirements under Section 504 of the Rehabilitation Act of 1973, Washington, D.C.
- U. S. Department of Education. (2012). Thirty-fifth annual (2011) report to Congress on the implementation of the individuals with Disabilities Education Act.

- Washington, DC: Office of Special Education and Rehabilitative Services, Office of Special Education Programs.
- U. S. Department of Education. (n.d.). "Building a legacy: Idea 2004. Vaughn, S., Schumm, J. S., Klingner, J. K., & Saumell, L. (1995). Students' views of instructional practices: Implications for inclusion. Learning Disability Quarterly, 18(3), 236-248.
- Wenger, B. L., Kaye, H. S., & LaPlante, M. P. (1996). *Disabilities Among Children* (No. 15). Washington DC: U.S. Department of Education, National Institute on Disability and Rehabilitation Research (NIDRR).
- Wolfe, K., Sacks, S., Corn, A., Erin, J., Heuber, K., & Lewis, S. (2002). Teachers of students with visual impairments: What are they teaching? *Journal of Visual Impaired and Blindness*, 96(5). Retrieved from http://www.afb.org/JVIB/JVIB960502.asp.
- Wormsley, D. P. (1996). Reading rates of young braille-reading children. *Journal* of Visual Impairment and Blindness, 90(3), 278-282.
- Wungu, E., & Han, A. (2008). General teachers' attitudes toward the inclusion of students with visual impairment (VI): A study in DKI-Jakarta Indonesia.

  Retrieved from http://pustaka.unpad.ac.id/.
- Yell, M. (2005). *The Law and Special Education*. 2<sup>nd</sup> ed. Upper Saddle River, NJ:

  Merrill/Prentice Hall.
- Yin, R. K. (1994). *Case study research: Design and Methods*. (2nd ed.). Thousand Oaks, CA: Sage Publications.

- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (2011). *Qualitative research from start to finish*. New York, NY: The Guilford Press.
- Yin, R.K. (2014). Case Study Research. (5th ed.). Thousand Oaks, CA: Sage Publications.