Balanced Literacy Instruction for Students with Significant Cognitive Disabilities:

Barriers to Implementation

by

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Abstract

Currently, students with significant cognitive disabilities (SCD) are predominately exposed to a functional curriculum commonly delivered through behaviorists' methods (Keefe & Copeland, 2011). The most recent research has established that students with SCD who are presented with a high-quality comprehensive approach comparable to the best practices associated with general education practices can and do make positive gains in literacy skills (Bock, 2013; Browder, Ahlgrim-Delzell, Courtade, & Flowers, 2008; Erickson, Clendon, Abraham, Roy, & Van de Karr, 2005; Koppenhaver& Erickson, 2003,). The purpose of this phenomenological study was to examine potential barriers to implementing a comprehensive balanced literacy instructional program to students with SCD. The central question in this study was, what are the barriers to implementing a balanced literacy approach for students with significant cognitive disabilities? Three research questions guided the study, 1) What is the current knowledge base and understandings of administrators and teachers as it relates to teaching literacy skills to students with significant cognitive disabilities, how is this knowledge acquired, and how has it changed over time, 2) what are the perceived needs that need to be fulfilled in order for a systemic shift from a functional literacy curriculum to a balanced literacy curriculum approach to occur, and 3) how does the efficacy and beliefs held by teachers and administrators relate to the translation from research to practices as it corresponds to literacy instruction? Data was collected through interviews with administrators, special education teachers, and researchers. The analysis of the data from this study lead to the emergence of five key themes related to potential implementation barriers: acquisition of knowledge, current perspectives and understanding of literacy education, factors influencing curriculum decisions, high quality and relevant resources and supports, and systemic changes.

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To my mother, Geri, I am eternally thankful for the courage and strength you instilled within me. I learned by your example that a woman can be a well-educated professional and caring mother and wife. You never doubted my ability to achieve my personal and career goals.

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Dedication

This study is dedicated to my daughter, Lucy, who provided me with the inspiration to step out of my comfort zone as a parent, educator, and student. She provided the passion for this exploration into the world of education for students with significant cognitive disabilities.

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Chapter 1: Introduction

The evolution of special education reform has allowed for students with significant cognitive disabilities to move from segregated institutions to the public school setting. Recent legislation through No Child Left Behind (NCLB), Individuals with Disabilities Education Improvement Act (IDEA), and Individuals with Disabilities Education Improvement Act (IDEIA) have established mandates that students with disabilities have access to public schools along with general education settings and curriculum (NCLB, 2001; IDEA, 1997; IDEIA, 2004). Regardless of the legislation, research has shown that students with the most significant disabilities are more often than not taught in a segregated classroom with curriculum that is vastly different from their same age peers that includes access to literacy instruction (Agran, 2011; Erickson, Hanser, Hatch, & Sanders, 2009; Kliewer, Biklen, & Kasa-Hendrickson, 2006). Because this unique population of students often does not follow the typical path of literacy development, the individuals are provided with a life skills-based functional curriculum (Keefe & Copeland, 2011). However, the most recent research has provided a counter argument that students with significant cognitive disabilities (SCD) who are presented with a high-quality comprehensive approach comparable to the best practices associated with general education practices can and do make positive gains in literacy skills (Biklen & Cardinal, 1997; Bock, 2013; Browder, Ahlgrim-Delzell, Courtade, & Flowers, 2008; Erickson, Clendon, Abraham, Roy, & Van de Karr, 2005; Erickson & Koppenhaver,1995; Erickson, Koppenhaver, Yoder, & Nance, 1997; Koppenhaver& Erickson, 2003; Ryndak, Morrison, & Sommerstein, 1999).

Background of the Study

A student with significant cognitive disabilities may also be referred to with various synonyms through literature including, severely cognitively disabled, mentally retarded,

intellectually impaired, cognitively impaired, and developmentally disabled. IDEA states that individuals who are intellectually disabled have, "significantly sub average general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance"(34 *Code of Federal Regulations* §300.7(c)(6)). A developmental disability (a) is manifested before the age of 22, (b) is chronic and severe, (c) is attributed to a mental or physical impairment or both, (d) results in substantial functional limitations in major life activities, and (e) requires a lifelong need for special services (Handleman, 1986).

Historically, IQ has been used to designate levels associated with intellectual disabilities: mild (70-55), moderate (55-40), severe (40-25), and profound presenting below 25 (American Psychiatric Association, 2013). Today, labeling combines IQ with other factors such as adaptive skills, emotional and health needs, along with the individual's environment (MacLean, 1997). To compound matters, often times these individuals will have other disabilities, such as orthopedic, communication, or vision issues, that present additional challenges in the educational setting. Many of these individuals also rely on assistive technology and augmentative communication to interact with the world around them (Koppenhaver, Hendrix, & Williams, 2007). These students are complex and require extensive supports (Browder & Spooner, 2006).

IDEA outlines thirteen disability categories: autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment (NICHCY, 2012).   Although individuals with significant cognitive disabilities may have various eligibilities listed on their individual education programs (IEP), the majority of these students would be considered to have

multiple disabilities. Multiple disabilities is defined as "…concomitant [simultaneous] impairments, the combination of which causes severe educational needs that cannot be accommodated in special education programs solely for one of the impairments" (NICHCY, 2012, p. 4).

The education system within the United States has both purposely and inadvertently segregated the population of learners determined to have significant cognitive disabilities (Bock, 2013). Initially, the focus of education for this group of students was to keep them intentionally isolated from the typically developing students so that they would not interfere with their academic achievement (Brownell, Sindelar, Kiely, & Danielson, 2010). This era was characterized by institutionalizations, behavior management practices, and medical treatments (Jackson, Ryndak, & Wehmeyer, 2009). Through civil rights legislation, these individuals were eventually given access to the public education setting (Brownell et al., 2010). While these students were now found in the neighborhood schools, their educational experiences remained vastly different from their same aged peers (Erickson, Hanser, Hatch, & Sanders, 2009; Bock, 2013). These students remained in isolated classrooms and the curriculum was built upon the underlying philosophy that teaching academics was unrealistic and unnecessary. Students with significant cognitive disabilities could expect to be taught self-help skills in the hopes of gaining some level of future independence (Spooner & Browder, 2006).

Public Law 108-445, better known as IDEIA, extended educational access to not just the schoolhouse but the general education classrooms. This piece of legislation opened the doors for the possibility for students with SCD to move from self-contained classrooms to the typical grade level environment. Research has provided the theoretical framework to support this change. Inclusion has repeatedly been shown to lead to positive academic and social outcomes

not only for the child with a disability but for their typically developing counterparts as well (Biklen & Cardinal, 1997; Erickson, Clendon, Abraham, Roy, & Van de Carr; Erickson, Koppenhaver, Yoder, & Nance, 1997; McGregor & Vogelsberg, 1998; Ryndak, Morrison, & Sommerstein, 1999; Sharpe, York, & Knight, 1994; Tashie, Jorgensen, Shapiro-Barnard, Martin, & Schuh, 1996). No Child Left Behind took the education programs of students with SCD to the next level by declaring that not only should these students be taught alongside their typically developing peers but should also have access to the same curriculum (NCLB, 2001).

Even though empirical data exists that students with SCD can and do make learning gains in inclusive settings with goals centered around the general education curriculum, a substantial percentage of these students remain in a self-contained setting (OSEP, 2011). Inadvertently, these students have now been exposed to a separate physical location, resources, peers, curriculum, instructional practices, assessments, goals, and expectations. As a result, these students have limited opportunities to learn the necessary skills that will allow them to fully participate in today's society (Bock, 2013).

The foundation of educational programming offered to students with significant cognitive disabilities lies within the framework of behaviorist versus constructivist approaches, which include the manner in which literacy instruction is presented. The behaviorist approach stems from the institutionalization days and is characterized by explicit instruction, repeated drill-practice sessions, and the ability to have observable and measurable data (Jackson, Ryndak, & Wehmeyer, 2009; Spooner & Browder, 2006; Katims, 2000). In terms of literacy instruction, the behaviorist approach would translate to sight word programs where students memorize teacher-selected or program-specific words. The students are repeatedly assessed to determine mastery in trial-based scenarios (Westling & Fox, 2008). Research studies have concluded that

these practices are effective for students with SCD and are therefore considered to be best practices (Spooner, Knight, Browder, & Smith, 2012). Even though some of the students are able to meet the levels of mastery required by the sight word approach, these students are frequently unable to make generalizations within their daily lives; i.e., they cannot translate their learning across contexts (Erickson, Hanser, Hatch, & Sanders, 2009).

In contrast to behaviorism is constructivism. Constructivism is common within the research related to teaching students who are typically developing. Traits commonly found in a school and/or classroom based upon this philosophy are relationships (peer-to-peer, teacher-peer), engagement, active participation, metacognition, authentic experiences, and support of emotional and social development (Block & Pressley, 2007). Sight words may be a part of the constructivist classroom but they are no longer random, teacher selected, and isolated. Instead, sight words are imbedded within the context of meaningful learning experiences. Literacy defined by a constructivist would include not only the ability to read and write but also a focus on obtaining and conveying meaning in order to be a full participant in society (Katims, 2000; Ferrara, 2012).

Balanced literacy, also referred to as comprehensive literacy instruction in the literature, is a perspective on teaching students reading and writing skills derived from a constructivist position. Balanced literacy is the notion that literacy curriculum should contain a balanced emphasis on skills, reading authentic and meaningful texts, and the incorporation of writing to increase student outcomes (Foorman, 1996). This educational philosophy drives much of the literacy instruction for the general education curriculum but is not the norm for students with significant cognitive disabilities (Browder, Wakeman, Spooner, Ahlgrim-Delzell, & Algozzine, 2006; Katims, 2000; Spooner, Knight, Browder, & Smith, 2012). These students are still

receiving a program based almost exclusively on sight words that are taught in isolation and lead to little real-world application of literacy skills (Argan, 2011; Erickson, Hanser, Hatch, & Sanders, 2009; Katims, 2000; Spooner, Knight, Browder, & Smith, 2012).

A specific literacy program was developed and marketed in 2005 with the hopes of providing a comprehensive curriculum and instructional guidelines for teachers working with students with significant cognitive disabilities. A group of researchers used this program, MEville to WEville Early Literacy and Communication Program, to study the outcomes of implementation in a self-contained classroom setting with twenty-three students (Erickson, Clendon, Abraham, Roy, & Van de Carr, 2005). The results showed that after eight weeks of instruction the students made academic gains and the teachers felt the students improved their self-initiated communication skills along with increased engagement.

In 2013, Bock followed the work of Erickson, Clendon, Abraham, Roy, and Van de Carr, (2005) and conducted a qualitative study examining literacy instruction in a self-contained classroom that provided instruction to students with significant cognitive disabilities. Bock concluded that "when teachers provided comprehensive literacy instruction using constructivist teaching methods, students demonstrated higher levels of attention, interest, and communication than they did during instruction using behaviorist teaching methods and focusing on rote skills" (p. 95). Further findings of this study indicated that when the teacher employed a balanced approach, then a natural by-product was a more meaningful and challenging experience for the students, that often lead to higher cognitive demands.

Legislation states that students with disabilities, including those with significant and complex needs, must have access to the general education curriculum (NCLB, 2001). Data shows that this special population continues to receive their educational services predominately

in a self-contained learning environment that often is far removed from the implicit and explicit

curriculums offered to their same-aged typical developing peers (OSEP, 2011). While there is

not a wide body of knowledge specifically analyzing balanced literacy for students with

significant cognitive disabilities, there does exist substantial studies that indicate the traditional

behaviorist approach most commonly used is not effective in teaching these individuals literacy

skills that will ultimately allow them to better participate in society (Browder, Wakeman,

Spooner, Ahlgrim-Delzell, & Algozine, 2006; Browder & Xin, 1998; Erickson & Koppenhaver,

2007; Hanser & Erickson, 2007; Katims, 2000). A theoretical framework may help in

understanding components of the apparent disconnect between theory and practice.

Senge (1990) described the phenomenon of mental models and how they impact not only

the way an individual but a system responds to new information. Mental models are conceptual

frameworks that are based upon untested generalizations and assumptions. Often we are not

aware of our mental models until we are called upon to question them. Senge explains that one's

mental models can be a detriment to an organization causing individuals to make incorrect

assumptions and decisions. In new experiences, most people are drawn to take in and remember

only the information that reinforces their existing mental models (Senge, Canbron-McCabe,

Lucas, Smith, Dutton, & Kleiner, 2000). Mental models can be simplified as beliefs. The

underlying beliefs of practitioners regarding individuals with SCD play an integral part in the

educational services afforded to them.

Studies have indicated that a teacher will make a determination of the type of literacy

instruction an individual should receive based upon a combination of factors that include the

student's communication level (verbal/non-verbal) and perceived cognitive ability. In addition,

whether the teacher works within self-contained or inclusive settings also impacts their beliefs on

the level of literacy instruction appropriate for individuals with significant cognitive disabilities. (Browder, Gibbs, Ahlgrim-Delzell, Courtade, Mraz, & Flowers, 2009; Durando, 2008; Ruppar, Dymond, & Gaffney, 2011). Ferguson (1985) conducted a qualitative study that examined interviews held with teachers of students with SCD. She concluded that teachers made curriculum decisions based upon stereotypes of their students and their perceived ideas of what the children would be able to do as adults. Curriculum decisions were also made according to the perception of how hard it would be to teach the student.

An educator's sense of efficacy related to their ability to implement an educational program for students with SCD built upon the general education curriculum also contributes to the decisions made in today's schools. An individual is more likely to carry out a particular behavior if they have a high level of confidence and believe in a successful outcome (Bandura, 1997). The textbooks used in preparation programs across the nation are heavily concentrated with behaviorist practices for students with significant cognitive disabilities (Katims, 2000). Administrators and teachers must have the necessary experiences, training, support, and continued professional development in order to carry out a meaningful literacy curriculum for students with significant cognitive disabilities. Current research indicates that today's administrators and special educators are not prepared for the change. (Gurley, 2011; Katims, 2000; Keenoy, 2012; Li, 2012)

Various theorists have explored individual and group response to change. Change theory attempts to provide a guideline on the, who, what, when, why centered on change in society and organizations. Social Cognitive Theory proposes that an individual must possess self-efficacy in order for change to occur. A person looks to their experiences, discourse with colleagues, and observations in order to learn about new ideas. The individual also must feel there is some level

of incentive for making this change. In the end, the belief in one's ability to successfully implement the change is the driving force in determining whether it will take place (Kritsonis, 2004-2005).

Statement of the Problem

The field of education is based upon a large body of research that is designed to provide guidance on what we should teach, how we should teach, and when we should teach it. While debates may be a natural outcome of research, the education of typically developing students is built upon research-based best practices. General education teachers are prepared to bring these practices to the classroom through up-to-date university preparatory programs, ongoing professional development offered by states, regions, districts, and schools, and access to numerous content and age-specific publications. When change is called for within the general education classroom, consideration is given to the level of education and support needed to successfully address the legislation and/or desired outcomes. The same levels of systemic supports are needed when addressing the educational needs of individuals with significant cognitive disabilities.

In the National Reading Panel's (2000) report, five major components of an effective reading program were identified: phonemic awareness, phonics, fluency, vocabulary, and comprehension. While this study provided the guidance for general education classrooms to move toward a balanced literacy approach, it did little to impact how we address the learning needs of students with significant cognitive disabilities. Katims (2000), followed this report with the suggestion that the field of special education needed to explore the possibility of following the NRP guidelines for students with significant cognitive disabilities. Past studies have explored the implementation and outcomes of a balanced literacy approach in self-contained

classrooms that included students with significant cognitive disabilities (Browder & Spooner, 2006; Bock, 2013; Erickson & Koppenhaver, 2007). Literacy programming for this population is inadequate because instruction still remains rooted in the behaviorist strategy of the sight word approach and hence is ineffective (Hanser & Erickson, 2007). Research is not being translated to practice consistently or with fidelity in the area of literacy for students with significant cognitive disabilities.

A qualitative study conducted by Zascavage and Keefe (2004) explored opportunity barriers to literacy instruction as reported by interview participants. The researchers interviewed a combination of professors, teachers, administrators, and parents to identify perceived barriers to implementing literacy instruction to students with severe speech and physical impairments (SSPI). This phenomenological study utilized a constant comparison approach to analyze the data collected. The researchers compared their results to the opportunity barrier categories identified by Beukelman and Mirenda (1998) who explored the use of assistive technology with student with disabilities (Zascavage & Keefe, 2004). The process began with twenty participants completing an open-ended interview in which the participants had some choice in selecting questions to respond to. Based upon these interviews, the researchers in this study then selected certain participants to interview further based upon their demonstrated knowledge on the research questions. In the end, four participants completed the entire interview process.

Four main categories were used to analyze the data in the Zascavage and Keefe (2004) study: policy, practice, knowledge, and attitude. "An opportunity barrier occurs within a particular category when an obstacle imposed upon the individual with SSPI cannot be eliminated simply by providing an intervention" (Zascavage & Keefe, 2004, p. 227). The key findings of this study identified numerous potential opportunity barriers within these categories.

First, policy impacted instruction through funding. Access to updated and appropriate assistive technology and training require monetary support. The participants felt that the necessary funds to implement assistive technology with fidelity were not available. A second barrier within this category was identified as those policies that foster segregation of students with significant cognitive disabilities.

Practice barriers were a second major category. This category was further detailed by Zascavage & Keefe (2004) to include reading readiness prerequisites, limitations on instructional time, absence of transdisciplinary programs, and life skills/functional skills programs. "Practice barriers are procedures, precedents, and patterns accepted by family, school, or society in general" (Zascavage & Keefe, p. 229).   Several of the faculty participants felt the continuing practice of using reading readiness prerequisites to guide instruction has kept students from reaching their academic potential. Parents and university faculty strongly felt the limiting of literacy instructional time as an issue. One participant provided the example of a student receiving less than thirty minutes of literacy instruction within a day. Many students with SSPI have days filled with therapy that can occur in isolation. Participants believed that having a team approach where therapists and teacher were working on common goals, which include literacy, would remove the barrier due to lack of transdisciplinary programming. Finally, all parents and faculty participants agreed that an educational program emphasizing life skills/functional skills in lieu of a strong literacy curriculum was a potential barrier.

The third category explored as an opportunity barrier was knowledge. The authors of the study found three barriers that may result from lack of information regarding effective instructional practices (Zascavage & Keefe, 2004). Students with SSPI often require technology to access literacy materials. School staff need continuous training to stay abreast of assistive

technology. Teachers are not typically trained in assistive technology that includes

communication devices. Parent participants expressed concerns about staff being proficient on

the equipment and software their children required. Teacher preparation and qualifications vary

from educator to educator. Members of the administrative and teacher participant groups

explained that not all special educators are prepared to teach reading and writing instruction

(Zascavage & Keefe, 2004).

The final category explored within the study was attitude barriers. "Attitude barriers

reflect the prejudices of individual educators, rather than institutional policies" (Zascavage &

Keefe p. 231).   The first perception that emerged was centered on the value of literacy education

for students with SSPI. Each participant group made statements that highlighted the belief that

students with SSPI did not need literacy instruction as a potential opportunity barrier. Placement

of students within segregated classes and schools presented as an additional barrier to literacy

instruction. In connection with placement comes curriculum choice. All participant groups had

members expressing either their view or realizing other's beliefs that students with SSPI should

have an education program focused on life.

Significance of Study

While it is encouraging to see the increase in research and data centered on students with

disabilities, a deficiency still exists surrounding the population of students with significant

cognitive disabilities. The study conducted by Zascavage and Keefe (2004) gives insight into

potential obstacles to literacy education for students with significant cognitive disabilities and

provides solid background information for this study. However, the work by Zascavage and

Keefe (2004) focused on a population of students that had both physical and speech disabilities

but did not necessarily consist of significant cognitive disabilities; many of the participants

identified working with individuals with cerebral palsy. In addition, the study did not specifically look at examining barriers to comprehensive literacy instruction. An exhaustive review of the literature did not produce a comprehensive study directly focusing on identifying the factors that are impeding progress toward the implementation of a constructivist approach to literacy education for learners with significant cognitive disabilities.

This qualitative study explored the formal training, beliefs, practices, experiences, and systemic supports of special education teachers and administrators in public school as it relates to teaching literacy skills to students with significant cognitive disabilities. This information was combined with the perceptions of key researchers in the field of literacy instruction for students with SCD as it relates to these same focus areas. Therefore, the outcomes of this research contributed to an increased knowledge and awareness of the current reality of literacy instruction for students with significant cognitive disabilities. Additionally, it may supply information to guide school districts and universities as they aim to improve educator preparation programs and professional development. Furthermore, the results can provide researchers and curriculum developers an insight into what school districts and teachers need in order to make the transition from behaviorist/functional curriculum to a constructivist/balanced literacy approach.

Overview of Methodology

This study was designed as phenomenological study conducted through in-depth interviews with special education teachers, administrators, and key researchers who all play a role in the education of students with significant cognitive disabilities. Purposeful sampling was used to identify interview participants. All teachers and administrators were selected by the researcher from elementary public school districts within mid to southern portions of the states of Illinois and Missouri. These regions were selected to provide research on the improvement of

reading instruction for students with significant cognitive disabilities in the St. Louis metro area and its surrounding vicinities. The main selection criterion for the sample respondents and researchers to be included in this study was their work in the field of education focusing on students with significant cognitive disabilities. In addition, the feasibility of access to these individuals was taken into consideration. For example, through informal conversations at a literacy conference, it was discovered that one key researcher referenced throughout this document will not participate in studies outside of their own; however, their research assistants would be possible participants in this study.

The data was analyzed from a new perspective and did not utilize the constant comparison approach used by Zascavage and Keefe (2004). The data analysis spiral described by Creswell (2007) was used to organize, classify, and synthesize the data. Open coding was used within each set of interviews in order to identify distinct concepts and categories within the data. This was followed by axial coding to confirm the themes identified through open coding and determine relationships between the themes. Validity was addressed through the use of member checks, triangulation of data, and peer review.

Limitations/Delimitations

A major limitation of this study was the sample size of interviewees. The number of students considered to be significantly cognitively disabled is small. As a result the number of individuals who are responsible for their education is limited. This created a challenge in finding participants to interview. The number of researchers who have focused their attention on teaching students with significant cognitive disabilities is minimal, and those who specialize in studying literacy instruction are rarer. In addition, the number of researchers willing to participate once identified presented a limitation as well. Finally, this researcher's ability to

travel to access these individuals created a further limitation to the sample size.

How special education is addressed in regard to curriculum, teacher, and administrator preparation, setting of instruction services (self-contained vs. inclusion) varies greatly not only across the nation but within states and even districts. This study is limited in that it focuses on a particular geographic location, and future studies should aim to explore the same questions in other areas of the nation. This study is also focusing on elementary educators and does not consider the viewpoints of middle school/junior high or high school administrators and special educators.

The conclusions of this study are based upon interviews with researchers, teachers, and administrators. Their responses to the interview questions present another limitation in this study. This researcher must assume that the responses to the questions were truthful and represent the interviewees' actual attitudes, thoughts, beliefs, and experiences.

This study did not include educators who work in private or separate specialty-public schools. The purpose of this delimitation is due to the researcher's specific desire to identify the reported needs of administrators and teachers deemed necessary in order to make the shift from a behaviorist approach to a balanced literacy approach. Including nonpublic or separate education facilities would bring about another variable. These educators have a different job context than public school educators that does not typify the neighborhood public education experience.

Definition of Terms

Accommodations. Accommodations refers to the teaching supports and services that are a component of an individual education program in order to assist a student in the learning process and allow the individual to demonstrate knowledge by removing the barriers caused by the disability. Accommodations do not change the curriculum goals and objectives (Hallahan&

Kauffman, 2000).

Augmentative and alternative communication (AAC). AAC is an intervention that uses signs, symbols, and computerized devices that produce speech designed to represent an individual's full communication needs (Glennon, 2000).

Assistive technology (AT). AT refers to "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities" (US Department of Education, Assistive Technology Act, 2004, § 300.5).

Axial coding. Axial coding is a qualitative coding method used to confirm themes initially identified in the beginning analysis of the collected data and ultimately determine relationships between themes (Creswell, 2007).

Balanced literacy. Balanced literacy is a researched based instructional practice that incorporates the National Reading Panel's recommendations of phonemic awareness, phonics, fluency, vocabulary, and comprehension while making connections between text and experiences to create meaning that is transferable (NICHD, 2000; Katims, 2000).

Bracketing. Bracketing is a method used within qualitative research to avoid the impact of personal bias upon the analysis of the data (Tufford & Newman, 2010).

Communication. Communication is defined as the transmission of meaning from one individual to another about that person's desires, needs, knowledge, or feelings (Beukelman & Mirenda, 1998).

Comprehension. Comprehension is the process of using word recognition skills to identify written words while simultaneously using verbal and language knowledge and abilities to generate meaning (Houston, Otaiba, & Togensen, 2006).

Conventional literacy. Conventional literacy is the use of form, content, and standard conventions within reading and writing (Koppenhaver, 2000).

Curriculum. Curriculum refers to "all of the experiences that individual learners have in a program of education whose purpose is to achieve broad goals and related specific objectives, which is planned in terms of a framework of theory and research or past and present professional practice" (Parkay & Hass, 2000, p. 3).

Decoding. Decoding is the analysis of spoken or graphic symbols to determine their intended meaning (Harris & Hodges, 1995).

Direct instruction. Direct instruction has two meanings as follows: (a) a step-by-step teacher lead process for presenting a lesson (Harris & Hodges, 1995); (b) a marketed highly scripted language arts program which may be purchased by school districts to remediate reading (National Institute for Direct Instruction,n.d.).

Emergent literacy. Emergent literacy is the combination of all the reading and writing experiences of individuals before they learn to read and write in a conventional manner (Teale &Sulzby, 1986).

Environmental print. The print that exists in real life settings for a variety of purposes; e.g., road signs, logos, warnings are referred to as environmental print (Alberto, Fredrick, Hughes, McIntosh, & Cihak, 2007).

Evidence-based practice. The instructional strategies that are used to increase student achievement and are based upon a systematic process that involves a convergence of evidence (Gambrell, Malloy, & Mazzoni, 2007).

Fluency. Fluency *is* the ability to read with speed, accuracy, and expression (NICHD, 2000).

Functional literacy. Functional literacy is the use of various forms of communication to perform daily activities. In schools this program will often include sight word reading programs through life skills curricula (Browder & Cooper-Dufy, 2003).

 Guided reading. Guided reading refers to teachers guiding students in the application of reading skills and strategies in the context of reading. The focus is on how to read instead of on what is being read (Cunningham, Hall, & Sigmon, 1999).

 Individualized education plan (IEP). An IEP is a written statement, created by an IEP committee, for each child with a disability that is developed, reviewed, and revised in a meeting by the IEP team (IDEA, 2004).

Inclusion. Inclusion *is* "the practice of educating all students in general education classes, including those students with the most significant disabilities" (Jorgensen, Schuh, & Nisbet, 2006, p.2). *Integration:* the placement of students with disabilities in both general education and self-contained classes. The goal of the general education placement is to gain social, behavioral, and communication skills. Academic skills will be addressed in the self-contained setting. (Jorgensen, Schuh, & Nisbet, 2006).

Language. Language is defined as the expressive or receptive use of spoken, written, or symbolic use of words (Paul, 1997). *Literacy:* the use of oral and written language to convey meaning in everyday contexts (Erickson & Clendon, 2009).

Mainstream(ing). students with disabilities who receive the majority of their academic instruction in a self-contained setting while going to general education classes for an activity or particular lesson with the main focus on socialization is referred to as mainstreaming (Jorgensen, Schuh, & Nisbet, 2006).

Member checks. Member checks is a research validation method that allows a research participant to review the data and offer additional information or correct the findings collected through interviews (Lincoln & Guba, 1985).

Modification.   Changes made to the expectations, level of instruction, assessments, and/or curriculum based upon a student's individualized education program (Hallahan & Kauffman, 2000).

Open coding. Open coding is a qualitative data coding method used to organize the data to identify distinct concepts and categories (Leedy & Ormond, 2007).

Peer review. Peer review is the process of exposing oneself to a disinterested peer in a manner paralleling an analytical sessions and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind" (Lincoln & Guba, 1985, p. 308). The process allows for hidden bias and assumptions made by the researcher to exposed. In addition, the process allows for another perspective on the data (Lincoln & Guba, 1985).

Phonemic awareness. Phonemic awareness is the ability to identify and change individual phonemes. This allows the individual to create new words or recognize sound blends within words (Cunningham, 2007).

Phonics. Phonics is using letter-sound relationships to read and spell (NICHD, 2000).

Reductionist. Reductionist is a philosophy that includes a hierarchy of skills that are typically taught through drill and practice methods (Katims, 2000).

Research-based practice. Research-based practice is qualified as an instructional strategy that has shown to improve student achievement through data (Gambrell, Malloy, & Mazzoni, 2007).

Self-contained classroom. A self-contained classroom is a classroom where a student

spends more than 60% of their school day to receive instruction from a special education teacher. The self-contained classroom is separate from the general education classroom (ISBE, 2007).

     Self-selected reading. The practice of having students make decisions about what they want to read and share what they have been reading about (Cunningham, Hall, & Sigmon, 1999).

     Shared reading. Shared reading is characterized by groups of students interactively involved in reading a particular book in order to gain emergent literacy skills (Holdaway, 1979).

     Sight words. Sight words are words that are taught for the immediate recognition of the word and often do not follow decoding rules (Pearson, Raphael, Benson, & Madda, 2007).

     Significant cognitive disabilities (SCD). A person who has a significant cognitive disability is described as an individual who, "1. requires substantial modifications, adaptations, or supports to meaningfully access the grade-level content; 2. Requires intensive individualized instruction in order to acquire and generalize knowledge; 3. is working towards alternative achievement standards for grade-level content" (Browder & Spooner, 2006, p. xviii).

     Triangulation. Triangulation is a technique used by qualitative researchers to ensure the analysis is comprehensive and well developed. The four types of triangulation are methods-examining the reliability of findings generated by different data collection methods, sources- scrutinizing the consistency of different data sources from within the same method, analyst-using multiple analyst to review findings or using multiple observers and analysts, theory- using multiple theoretical perspectives to examine and interpret the data (Denzin & Lincoln, 2005; Patton, 1999).

     Whole language. Whole language is literacy instruction where students are provided authentic reading and writing experiences (Goodman & Goodman, 1979).

     Working with Words. Working with Words is a component of the Four Blocks

approach that focuses on further exploration of words, letters, sounds, and patterns

(Cunningham, Hall, & Sigmon, 1999).

Organization of Study

  This chapter served as the introduction to this research study. It included a thorough

background of the study, established the nature of the problem, the significance of the research, a

brief review of the methodology, described the limitations and delimitations of the study, and

finally defined the key terms to be used throughout the study. The remainder of the study is

organized into four chapters. Chapter 2 will provide an in depth review of the literature as it

pertains to the identified research problem. Chapter 3 will outline the research methods that

were used to gather data related to the study. Next, the results of data analysis and a report of the

findings will be discussed in Chapter 4. The final chapter is devoted to an in depth summary and

discussion of the results.

Chapter 2-Review of Literature

The purpose of this study was to examine the factors that are hindering the implementation of a balanced or comprehensive approach to literacy instruction for students with significant cognitive disabilities within public elementary schools. This chapter analyzes the literature relevant to this study. The chapter begins with a theoretical framework and follows with an overview of the impact of Vygotsky and Bruner on special education along with an examination of the Change and Concern Theory. The chapter then provides a historical perspective of special education through political, legal, and educational lenses. Next, this chapter reviews the literature regarding research-based best practices for special education programs servicing students with significant cognitive disabilities, literacy instruction for general education students, and literacy instruction for students with significant cognitive disabilities. Finally, an analysis of the potential influencing factors as they relate to literacy and students with significant cognitive disabilities is discussed.

Theory

This study is grounded by three underlying theoretical frameworks: (1) learning is interactive and social and is gained through authentic experiences, (2) education is more than simply the acquisition of discrete knowledge but a focus on how we use it, and (3) educational practices are rooted in individual and systematic belief systems that makes change challenging. The works of Vygotsky, Bruner, and Fuller provide this study with the foundation necessary to examine the identified problem and related questions.

Vygotsky.   Learning is defined as, "…an enduring change in behavior, or in the capacity to behave in a given fashion, which results from practice or other forms of experience" (Shuell, 1986, p.412). Individuals learn through their interactions with those around them in addition to

their own actions (Vygotsky, 1978). Vygotsky believed that a child's environment is critical to their development. If those surrounding the individual with disabilities do not have the necessary knowledge and skills then we risk limiting their learning both academically and socially (Gindis, 1999; Berk, 2004). A person can extrapolate this concept and conclude that individuals with significant cognitive disabilities require an educational environment comprised of individuals with the knowledge, skills, and experiences to address their learning needs. In addition, Vygotsky stressed the importance of literacy by stating that individuals, including those with disabilities, must learn ways of reading and thinking in order to fully participate and make meaning within the culture (Vygotsky, 1962).

Vygotsky's research provided the field of education some guidance on how to approach teaching any student. According to Vygotsky, the distance between what an individual can independently accomplish now and what they can accomplish with assistance is called the zone of proximal development (Vygotsky, 1978). The educational program of a student should aim to provide them with learning tasks that are meaningful, engaging, and rigorous. These learning tasks should be within the student's identified zone of proximal development; i.e., the learning objective should not be able to be independently accomplished by the student but will result in success when they are provided supports by a competent adult or peer (Roosevelt, 2008; Shabani, 2010). The concept is that the student will be able to complete the learning task independently after successfully completing the tasks with supports that leads to their zone of proximal development expanding (Shabani, 2010). The assistance a teacher or peer offers in order to help an individual accomplish this new and more challenging task is a strategy referred to as scaffolding (Vygotsky, van der Veer & Valsiner, 1994). While the nature of their supports and scaffolding can be quite complex, students with significant cognitive disabilities benefit

from these concepts and practices.

      Bruner. "Behaviorism equates learning with changes in either the form or frequency of observable performance. Learning is accomplished when a proper response is demonstrated following the presentation of a specific stimulus" (Ertmer & Newby, 2013, p.48). Within behaviorism, the importance of the consequences of individual performance is emphasized. The student is more likely to produce the desired outcome when their response is followed by reinforcements (Ertmer & Newby, 2013). In a behaviorist learning environment, the teacher determines the level at which to begin instruction and then identifies which methods of reinforcement to implement with a particular student (Ertmer & Newby, 2013). Examples of behaviorism within schools include task analysis, mastery learning, reward systems, and prompting systems (Ertmer & Newby, 2013).

      Theorists, such as Bruner, have questioned the behaviorist approach to learning that has had a dominant role in special educational pedagogy. Constructivism is considered to be the counterpoint to behaviorism. This perspective states that individuals gains knowledge through their experiences (Ertmer & Newby, 2013). An individual acquires knowledge through involvement with content instead of imitation or repetition; e.g., drill and practice, (Kroll & LaBoskey, 1996). The interaction between the learner and the environment is crucial and hence education should take place in realistic settings (Ertmer & Newby, 2013). Research indicates that children are more likely to become literate if reading and writing skills are taught and learned while the students are participating in real-life experiences that engage all of us outside of the school setting (Weaver, 1998).

      Bruner firmly believed that any subject can be taught to any individual in a meaningful way regardless of their developmental level (Smith, 2002). Making learning relevant, drawing

upon natural curiosity, celebrating accomplishments, and including strong motivators for learning increase the likelihood that learning will occur (Bruner, 1960). Bruner stated, "Knowing is a process not a product" (Bruner, 1996, p. 72). Balanced literacy instruction is rooted in constructivism as it emphasizes the personal, social, and intellectual nature of literacy education (Gambrell, Malloy, & Mazzoni, 2007).

Change and concern. As educational institutions are called to change their focus to providing each student access to the general education curriculum, a shift in traditionally accepted teaching methodologies must take place. In order for this transition from a functional curriculum (behaviorist) to a balanced literacy (constructivist) based curriculum to occur, an understanding of how change takes place is critical to successful implementation. Change is difficult and complicated. It requires an individual to deconstruct their current thoughts, ideas, feelings, perception and eventually reformulate what was once learned (Sherry, 2003).

Fuller began exploring the nature of change and concern in the late 1960s. He described a hierarchy presented by teachers: self-concerns associated with self-efficacy of a new idea, task-concerns centered around the daily requirements of a teacher's assigned duties, and concerns related to the impact the change has on student learning (Fuller,1969). Hall, Wallace, and Dossett (1973) followed Fuller's study and identified the stages of concern related to an innovation. The stages are: awareness, informational, personal, management, consequences, collaboration, and refocusing (Hall et al., 1973). Individuals require different levels of support depending on their location within this continuum. Understanding this process and knowing where a particular individual lies on the continuum will assist in designing ongoing professional learning opportunities for educators (Hall & Loucks, 1978).

Collectively, teachers do not have the necessary education, training, and knowledge

regarding scientifically-based reading instruction and those educators that are aware of this information often ignore the research due to personal beliefs and biases (Lyon & Weiser, 2009). Heydon, Hibbert, and Iannacci (2005) explored specific strategies to support balanced literacy approaches in both teacher preparation and professional development programs. The study's findings are in alignment with change theory. The authors suggested the following:

> To help guide teachers in their practice, we need to help them deconstruct their own knowledge, beliefs, and practices, as well as those that surround them. We ask teachers to challenge a transmission version of teaching and learning by beginning their specific practice; looking at related research, information, and perspectives; connecting this to their own knowledge, narratives, and experiences; and then reflecting upon, evaluating, and acting upon what they have learned (Heydon, Hibbert, & Iannacci, 2005, p. 318)

Special Education: Historical and Legislative Context

In the late 1950s, the field of education began to recognize the need to formally provide training to teachers in order to serve the population of students with special learning needs. These programs were typically provided to students with significant cognitive disabilities or other impairments such as deafness and blindness. Teachers learned and taught in a clinical setting based upon the accepted view that these students were in fact medically sick. Educators focused on methods to address the needs of each specific disability (Brownell, Sindelar, Kiely, & Danielson, 2010; Sullivan, 2011). This was the standard of practice until Brown v. Board of Education (1954) established that separate was not equal according to the Constitution. Now, not only were Americans questioning educational practices established according to race but to ability as well (Brownell et al., 2010).

During this era, the concept of behaviorism emerged from the field of psychology and is

the foundation of many of the techniques commonly employed in special education classrooms today; i.e., applied behavioral analysis (Brownell, Sindelar, Kiely, & Danielson, 2010). By the 1970s behaviorism was the norm and the medical approach; i.e., treating individuals with disabilities in medical treatment facilities using research practice developed by physicians, was abandoned (Brownell et al., 2010; Hammill &Larsen, 1978). As a response, teacher education programs shifted from categorical; e.g., programs designed for individuals with comparable disabilities such as autism or learning disabled, to non-categorical, and focused on blanket approaches to use in the classroom regardless of student disability (Brownell et al., 2010). Within this time frame students with disabilities typically were serviced under the mainstreaming concept (Jorgensen, Schuh, & Nisbet, 2006). Mainstreaming is the structure of placing students with disabilities in self-contained settings for the majority of their academic instruction but providing opportunities for participation in certain predetermined activities or lessons. The main focus of mainstreaming is to provide for socialization (Jorgensen et al., 2006).

In the 1990s the data emerged indicating that a separate class placement for students with disabilities did not improve learning outcomes and moral questions developed that lead to discussions of inclusion (Brownell et al.,2010). Teacher preparation called for special education and general education candidates to work together to meet the needs of the children. A marriage of content expertise and disability best practices hoped to improve student performance. During this time, constructivism thinking became a component of special education.

Brown v. Board of Education (1954) and *Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania* (1972) laid the foundation that established schools could not deny an education to a child due to a disability (Brownell, Sindelar, Kiely, & Danielson, 2010). Since this time numerous laws and mandates have been enacted with the aim

to equalize education of students with disabilities compared to their non-disabled counterparts. IDEA (1997) and IDEIA (2004) required students with disabilities to be educated alongside their peers in the general education setting. During this time frame, the No Child Left Behind Act of 2001 established that students with Individual Education Plans should not only be in the general education classroom but should also have access to the same curriculum (McLeskey, Rosenberg, & Westling, 2010). In spite of these legal mandates, the Office of Special Education Programs within the U.S. Department of Education reported in 2011 that roughly forty percent of students with disabilities still spend the majority of their day outside of the general education setting (OSEP, 2011). The focus on where a student is educated has brought about discussions on what they should be taught in addition to the question of how instruction should be structured.

The purpose of special education has evolved. The initial focus was on attempting to provide the individuals with some skill base and often took place within the institutional setting (Jackson, Ryndak, & Wehmeyer, 2009). As students were placed within the public school setting, students with disabilities were taught tasks atypical for their chronological age (Guess & Noonan, 1982). This is commonly referred to as the developmental approach (Brown, Nietupski, & Hamre-Nietupski, 1976). Little was achieved during this time frame, which lead to the life skills and functional curricula (Guess & Noonan, 1982). The functional approach places emphasis on vocational, home, community, and leisure skills (Brown, Branston, Hamre-Nietupski, Pumpian, Certo, & Greunewald, 1979).

As students with disabilities became more involved in the general education setting, whether it was through mainstreaming, integration, or inclusion, the addition of social goals became common place (Hunt &Farron-Davis, 1992). As inclusion became more prevalent for students with disabilities, and their goals became more academic, a substantial number of

students considered to be significantly cognitively disabled were still not participating in an

academic based curriculum (Zigmond, Kloo, & Volonino, 2009). In 1997, amendments to IDEA

aimed to address the need to provide more accountability by requiring schools to establish

measurable annual goals, participation in state-wide assessments, and increased parental

involvement in the IEP process (IDEA, 1997).

Today, approximately 7% of students within the United States have been identified as

having an intellectual disability (U.S. Department of Education, 2014) which is a 6% increase

from the reported data in 2002 (U.S. Department of Education, 2002). *The Diagnostic and*

Statistical Manual of Mental Disorders uses IQ to determine the severity of the intellectual

disability. Individuals with an IQ between 20-40 are considered to be severe and below 20 is

profound (American Psychiatric Association, 2000).   These labels often determine the type of

instructional program/curriculum offered to students. Interestingly, studies have shown that IQ

alone is not a reliable predictor of reading success (Cawley & Parmar, 1995).

Literacy Education Research

General instructional best practices for individuals with scd. The University of New

Hampshire's Institute on Disability (UCED) has published a document that is entitled, *Best*

Practices that Promote Learning of General Education Curriculum Content for Students with the

Most Significant Disabilities (Jorgensen, McSheehan, & Sonnenmeier, 2002). This document is

part of a larger professional development model called Beyond Access that specifically addresses

how to best include this population within the general education setting. The overall key best

practices are: establishing high expectations, following the least dangerous assumption,

promoting full membership in age- appropriate general education classes, ensuring quality

augmentative and alternative communication with the necessary supports for both academic and

social settings, including curriculum and instruction that accommodate diversity and allow all students to fully participate, requiring functional and life skills objectives to be met within the typical daily interactions and as part of the general curriculum learning activities, implementing assessments that are ongoing and authentic in nature and allow for the identification of a student's strengths and opportunities for improvements, and promoting continuous growth of instructional staff in order to keep abreast of the pedagogy related to this population (Jorgensen et al., 2002).

    High expectations. Systematically, the student with significant cognitive disabilities is seen as a learner that has value. Evidence that high expectations are a set and are supported exists in all aspects of the educational setting. The student is viewed as an individual and not a diagnosis. This is indicated through "people first" language (e.g., saying "individuals with Autism" versus "Autistic students"). "…The use of labels to refer to individuals has the potential to promote bias, devalue others, and express negative attitudes" (Granello & Gibbs, 2016, p. 31). An extension of "people first" is language that avoids focusing on the student's perceived level of functioning (i.e., low functioning versus high functioning) and instead focuses on student abilities and required supports (Jorgensen, McSheehan, & Sonnenmeier, 2002). In addition, the student's Individualized Education Plan will show evidence that the individual with significant cognitive disabilities is pursuing the same outcomes as their general education counterparts and there is never an assumption that the student has reached their maximum potential or will never be able to reach acquisition of an identified skill or knowledge set (Jorgensen et al., 2002). Three studies (Clark, 1997; Rolison & Medway, 1985; Rosenthal & Jacobson, 1968;) demonstrated that a teacher's expectations about a student's ability to learn has a substantial impact on the learning outcomes more than the student's actual perceived abilities

or the instructional practices put into place (Jorgensen, McSheehan, & Sonnenmeier, 2007).

Least dangerous assumption. The first step in teaching students with significant cognitive disabilities is to assume competence and operate under the least dangerous assumption (Donnelan, 1984; Biklen, & Duchan, 1994; Jorgensen, McSheehan, & Sonnenmeier, 2007). "Traditionally, competence has been defined by people's intelligence - how smart they are and how they can use their intelligence - in other words, what they can do" (Jorgensen et al., 2007, p.1). Most people are familiar with the typical IQ test to measure intelligence. However, it is likely that an individual who has significant cognitive disabilities will be unable to perform well on this type of assessment partly because the instrument highlights the disability (non-verbal, apraxia, etc.) itself (Jorgensen et al., 2007). Students who are non-verbal will have incredible difficulties on standardized and normed assessments. Because these tests are not reliable measures of what people with intellectual disabilities can do, Dr. Cheryl Jorgensen stated in her keynote presentation at the 8th Annual Autism Summer Institute "the least dangerous assumption is to presume a student is competent to learn general education curriculum and to design educational programs and supports based upon that assumption" (Jorgensen, 2006).

Students with disabilities often look, behave, sound, and communicate differently, but they are people first. "The key here is that this is a difference and not a deficiency" (Rossetti & Tashie, 2002, p.1). Our way of thinking about individuals with disabilities needs to have a paradigm shift; we must move from individuals with a deficiency that requires special help to a humanistic perspective (Rossetti & Tashie, 2002). Rossetti and Tashie (2002) further explain the concept of "least dangerous assumption" as follows:

In the absence of absolute evidence, it is essential to make the assumption that, if proven to be false, would be least dangerous to the individual. The absence of evidence can

never be absolute evidence of absence, and as such, it is always safest and most

respectful to make the least dangerous assumption (p. 2).

Educators need to ask, what harm would come if we incorporate this placement, curriculum,

strategy, etc. for individuals with significant disabilities? For example, a third grade student is

included within the general education setting and the professionals make the assumption that the

student has potential to learn the curriculum but does not possess the means to communicate

understanding. High expectations and a presumption of competence are evident. If an educator

where to make this assumption and are correct, the result is a student who has been given the

opportunity to have a full learning experience. On the other hand, if an educator makes this

assumption and over the years is unable to determine what the student knows, what harm has

been done? The answer is none. The opposite scenario would be to assume that the deficiencies

are too great and real academic learning cannot take place. The education this child receives

reflects these assumptions. A few outcomes are possible. First, the assumptions are correct and

the student graduates with life skills at best. The second possibility is that the assumption is

incorrect and the individual was never given the opportunities for a true education. The latter

scenario presents a very dangerous assumption being made (Rossetti & Tashie, 2002).

Full membership in age-appropriate general education classes. The Beyond Access

report calls for "…no programs or rooms just for students with significant disabilities and these

students have access to the full range of learning experiences and environments offered to

students without disabilities" (Jorgensen, McSheehan, & Sonnenmeier, 2002, p. 6). This is most

commonly referred to as inclusion. The student attends their home school; i.e., the school he/she

would have attended if they were not impacted by a disability, and all academic and related

services are provided in the general education environment (Jorgensen et al, 2002). It is

important to note that this is more than having the student merely exist in the same classroom as their general education peers. The student with significant disabilities is a full member of the classroom learning environment and culture. He/she participates in all routines, receives the same materials with appropriate adaptions/modifications, and contributes to the learning (e.g., discussions, board work, small group participation, projects) community in similar ways as their peers without disabilities (Jackson, Ryndak, & Billingsley, 2000; Jorgensen et al, 2002 Jorgensen, Schuh, & Nisbet, 2006).

Over thirty years of research pertaining to students with significant cognitive disabilities shows effective educational services can be provided in general education classrooms (Audette & Algozzine, 1997; Jackson, Ryndak, & Weymeyer, 2009; Slavin, Madden, & Leavy, 1984; York, Vandercook, MacDonald, Heise-Neff, & Caughey, 1992). Inclusion leads to better learning outcomes and better learning opportunities at grade level. General education students express better overall attitudes towards those with disabilities and their academic success is not hindered within inclusive classrooms. Greater student engagement is evident when appropriate supports are in place. In addition, functional skills can be incorporated within the general education.

Quality augmentative and alternative communication with appropriate supports. The American Speech-Language-Hearing Association (ASHA) defines augmentative and alternative communication (AAC) in a broad manner, stating that it encompasses any method other than oral language that is used to express ones wants, needs, ideas, etc. (www.asha.org/public/speech/disorders/AAC/). According to ASHA, AAC includes two communication systems: unaided that requires the user's body to express the message (e.g., gestures, body language, sign language) and aided that uses tools outside of the individual's body

to convey the message (e.g., low-tech paper and pencil systems, speech generating devices). Jorgensen, McSheehan, & Sonnenmeier (2002) stated in the Beyond Access Project report that students with significant cognitive disabilities must be "…provided with accurate and reliable augmentative and alternative communication supports and services that enable them to communicate about the content of the academic curriculum and in social situations…" (p. 8).

In Linda Burkhart and Gayle Porter's presentation to the Foundation for Angelman Syndrome Therapeutics' Summit entitled, "Which way to autonomous communication?"(2015), the ultimate goal is to develop autonomous communication that gives the individual the means to communicate anything they choose, at any time, and to whomever they want to speak with. There is a distinction between a communication system that allows a student to make age-appropriate and novel comments across settings and those that focus on choice-making (select from preferences selected by another individual) and answering yes/no questions (forced into only to options: agree/disagree) (Burkhard & Porter, 2015; Jorgensen, McSheehan,& Sonnenmeier, 2002). The later do not support independence but instead rely on another individual to assume the communication intent and desired message.

Curriculum and instruction. Federal policies (IDEA 1997, NCLB, & IDEIA 2004) require that students with disabilities have access to the general education curriculum. In order to truly accomplish the goals of these legislations, schools must design a system that allows for their current curriculum and instruction to meet the needs of a broad range of learners. A school that has met this goal will have a curriculum that is founded on the same content standards for all students, content delivered in a diversified manner based upon individual learner needs and access requirements, individualized performance outcomes developed and based upon research-based strategies (Jorgensen, McSheehan, & Sonnenmeier, 2002). A key factor that has

contributed to poor literacy outcomes is the lack of evidence-based instruction that is adapted to meet the needs of students with disabilities, particularly those who use augmentative communication (Light & McNaughton, 2006). Any functional skills included within the IEP would be addressed through the general education curriculum and designed to be cohesive with the routines and activities naturally occurring within the school environment.

Assessments. An important component of NCLB was the requirement that students with significant cognitive disabilities make adequate yearly progress toward achieving grade level standards as measured by state assessments (U.S. Department of Education, 2004). The Beyond Access Project report advises schools to have authentic, performance-based assessments that take place within learning activities. These assessments should be on-going versus one-time opportunities to demonstrate mastery and help identify strengths, weaknesses, and areas of needed support (Jorgensen, McSheehan, & Sonnenmeier, 2002).

Many states have developed alternative assessments to measure student growth for students with significant cognitive disabilities. In 2010, a consortium of states and supporting professionals began to develop the Dynamic Learning Maps (DLM) project. This group of educators, legislators, researchers, and test developers acknowledged that students with intellectual disabilities do not have opportunities to show their knowledge and skills through traditional testing means. The DLM Alternative Assessment System claims to have both formative and summative assessments that are designed to be aligned with language arts and mathematics standards (http://dynamiclearningmaps.org). The DLM project not only includes the assessment component but also acknowledges the importance of identifying learning outcomes along with instructional practices. The project provides instructional support for teachers through online webinars or instructional modules.

Professional development. There is a link between the quality of a child's education and the quality of the teacher (Nye, Konstantopoulos, & Hedges, 2004). All teachers are expected to update their pedagogical skills based upon needs and research advancements within their field (Donaldson, 2011). School districts often generate professional development programs based upon their school improvement plans. This model allows for teacher professional development opportunities to be a part of a holistic reform effort with "assessments, standards, and professional development seamlessly linked" (Wei, Darling-Hammond, & Adamson, 2010, p. 2). Invariably, school improvement plans are designed to have an impact on student achievement with the hopes of seeing growth. Professional development for general education and special education staff should be linked to improved educational outcomes. Students with disabilities should be explicitly included within the district's professional development plan (Jorgensen, McSheehan, & Sonnenmeier, 2002). The National Staff Development Council reported that in order to be effective, staff development should lead to a collaborative responsibility to improve student achievement (Wei et al., 2010).

Supporting research. A case study conducted by Erickson, Koppenhaver, Yoder, and Nance (1997) examined the communication and literacy progress of a student with severe communication and physical disabilities. The eleven year-old male was a fully-included elementary student with cerebral palsy and was presumed to have moderate to severe cognitive impairments. The student had an education program that allowed him to participate with same-age peers in all academic areas, high expectations, on-going assessments, access to appropriate assistive technology, teachers who were supported with knowledge and training, and consistent use of his AAC device. The study followed the student through two years of education. At the conclusion of the study, the researchers summarized that their subject showed "progressive

improvements in his acquisition of literacy and language skills" (Erickson, Koppenhaver, Yoder, & Nance, 1997, p.149). This student's education program possessed key aspects of the tenets set forth in the Beyond Access report.

Literacy for Students with SCD

Literacy is a fundamental component of the general education curriculum regardless of content area (Erickson, Hanser, Hatch, & Sanders, 2009). Literacy instructional research has seen a shift in pedagogy from skill-based, such as phonics, to holistic learning to a combined approach typically referred to as balanced literacy (Pressly, Roehrig, Bogner, Raphael, Dolezal, 2002). A balanced approach to reading can be "conceptualized as a circle, with reading and writing skills and strategies taught in the context of reading and writing and discussing whole, meaningful texts: books, magazines, newspapers, and various kinds of texts we encounter in our daily environments" (Weaver, 1998, p. 3).

The National Reading Panel (2000) identified five areas of reading instruction that should be included in a school program. The five areas are: "phonemic awareness, phonics, reading fluency, vocabulary development, and comprehension strategies" (Keefe & Copeland, 2011, p. 3). In a 1997 study endorsed by the National Reading Research Center, researchers identified key characteristics of highly effective primary grade literacy programs. The programs had common characteristics: utilization of a balanced approach, instruction had depth, teacher scaffolding was ongoing, literacy goals were imbedded across contexts, students understood the purpose of the learning tasks, and students were held to high expectations (Wharton-McDonald, Rankin, Mistretta, Yokoi, & Ettenberger, 1997). Within the general education setting, students are exposed to comprehensive literacy instruction that is implemented daily and includes the five areas of reading instruction identified by the NRP. In addition, students in the general education

setting receive instruction on a variety of word identification strategies and opportunities to independently read a variety of texts while having multiple opportunities to apply these skills (Erickson, Hanser, Hatch, & Sanders, 2009). While these reports are focused on students without disabilities, they do provide a framework for what is considered best practice and can help educators examine literacy instruction for the 7% of public school students identified as having significant cognitive disabilities.

How one defines literacy has an impact on how it is viewed within the educational setting. Interestingly, the National Reading Panel, which provided foundational framework for NCLB, did not define literacy. Keefe and Copeland (2011) stated there are four different ways to define literacy: literacy is the teaching of basic skills associated with reading and writing, literacy has a purpose of develop thinking skills, literacy is for personal satisfaction, and/or literacy is the key to successful participation in all areas of one's life. If we can shift our thinking to include a broader sense of what it means to be literate, then a clearer path for how to teach this skill to individuals with significant cognitive disabilities begins to emerge.

Literacy is so much more than a prescribed skill set. Literacy is the method in that we access information about the world around us. We interact through communication; we gain independence and self-reliance (Fenlon, McNabb, Pidlypchak, 2010). "Without the ability to read and write, students can learn skills and information across the curriculum, but they cannot learn important lifelong skills that allow them to independently revisit and build upon that information" (Erickson, Hanser, Hatch, & Sanders, 2009, p. 5).

Some researchers have cautioned colleagues and practitioners when considering the assignment of a definition of literacy (Downing, 2005; Koppenhaver, 2000). While educators are certainly encouraged to think outside the box when challenging the instructional implications

of a predetermined course of literacy skill acquisition common in hierarchical systems, it is important to avoid watering-down the definition of literacy. After legislation required students to have access to the general curriculum, many educators and researchers expanded their definition of literacy to encompass instructional practices and outcomes that no longer focused on conventional literacy skills (Downing, 2006). "Unfortunately, our field has often treated emergent literacy as an end goal rather than a starting place. That is, practitioners have been quicker to accept emergent literacy and nonconventional performance than to consider how to move the children on to conventional reading and writing" (Koppenhaver, 2000, p. 273).

What does a literacy-rich instructional program look like for individuals with significant cognitive disabilities? Literature reviews found in several current studies have stated the importance of literacy instruction for students with significant cognitive disabilities (Browder, Wakeman, Spooner, Ahlgrim-Delzell, & Algozzine, 2006; Joseph & Kondrad, 2009; Joseph & Seery, 2004). With this acknowledgement of importance, researchers have been challenged with determining which types of literacy instruction are best suited for this population. Some may be surprised at the conclusion. The same literacy best practices that are used for general education students are also beneficial to those with significant cognitive disabilities (Erickson & Koppenhaver, 2007).

Once we agree that students should have access to the general education curriculum and we accept the research that indicates students with significant cognitive disabilities can learn literacy skills (Hendrick, Katims, & Carr, 1999; Erickson, Koppenhaver, Yoder & Nance, 1997; Browder, Ahlgrim-Delzell, Courtade, Gibbs, & Flowers, 2008), we can then begin to discuss what type of literacy program is best for this particular population of learner. The research suggests that a comprehensive literacy approach that includes emergent literacy, print concepts,

self-selected reading opportunities, phonics and phonemic awareness, vocabulary, guided and shared reading, reading comprehension, and authentic writing activities is appropriate for students with significant cognitive disabilities (Erickson, Hanser, Hatch, Sanders, 2009; Fenlon, McNabb, & Pidlypchak, 2010;).

What educators and researchers know about how to teach typical developing students literacy has not translated to the field of special education research and practices, especially when we consider instructional models for those with significant cognitive disabilities (Saunders, 2007). It is recommended that educators look to the National Reading Panel (2000) and National Early Literacy Panel (2009) reports as a starting point (Erickson, Hanser, Hatch, & Sanders, 2009). The findings within these reports "…drive both policy and standards in general education" (Erickson, et al., 2009, p. 20).

There are two stages of literacy development: emergent and conventional. Emergent is defined as the reading and writing experiences that develop into conventional literacy. This stage is usually found in ages birth to five years in typically developing children (Justice & Pullen, 2003). Conventional literacy are the skills that follow the emergent phase and include reading and writing that follow the form, content, and use of standard conventions (Koppenhaver, 2000). The NRP (2000) provides guidance on conventional literacy while the NELP (2009) provides a framework for emergent literacy instruction.

A large number of individuals with significant cognitive disabilities are just beginning to develop an understanding of reading and writing, hence, they are classified as emergent (Erickson, Hanser, Hatch, & Sanders, 2009). Emergent literacy comes from exposure to print within an individual's natural environment and includes developing letter and sound knowledge, building an understanding of the purposes of reading and writing, beginning to recognize words,

and gaining knowledge of vocabulary (McDonnell, Hawken, Johnston, Kidder, Lynes, &

McDonnell, 2014; Teale & Sulzby, 1992). The average kindergarten student will begin school

with at least one thousand hours of purposeful interactions with print (Heath, 1983). There are

many factors that make the early literacy learning experiences for children with significant

cognitive disabilities fall well below their typical developing counterparts: days filled with

therapies, medical emergencies, physically and emotionally exhausted parents, and a medical

diagnosis that may understandably lead to a subconscious decision to put literacy experiences to

the side (Kliewer, Biklen, & Kasa-Hendrickson, 2006). This set of circumstances

unintentionally presents an additional challenge to overcome.

Developing phonemic awareness, alphabet knowledge, and phonics are recommended

components of early literacy programs for typically developing children, and interventions in

these specific areas have proven positive results and a direct correlation to building conventional

literacy skills (NRP, 2000; NELP, 2009). Children who struggle with obtaining literacy skills,

such as individuals with significant cognitive disabilities, need explicit phonics instruction

(Groff, 1998; Joseph & Seery, 2004). A review of literature conducted covering phonics

instruction for individuals with significant cognitive disabilities concluded, "…that individuals

with mental retardation have capabilities to grasp and generalize phonetic-analysis skills from

one context to another context" (Joseph & Seery, 2004, p. 93). It is important to remember that

phonics instruction is not enough. The National Institute of Child Health and Human

Development stated in their 2000 publication, *Report of the National Reading Panel: Teaching*

Children to Read, that "…emphasizing all of the processes that contribute to growth in reading,

teachers will have the best chance of making every child a reader" (NICHD, 2000, p.2-97).

There were two studies published in 2008 that evaluated the use of literacy programs

implemented with significant cognitive disabilities. Browder, Ahlgrim-Delzell, Courtade, and

Flowers (2008) examined the implementation and effectiveness of the Early Literacy Skill

Builder curriculum with elementary students in a self-contained setting. The program included

sight words, phonics, phonemic awareness, and comprehension. This quantitative study showed

an effect size of $d = 1.15 - 1.57$. Effect sizes compare two groups. In this case the groups were

the control (received the school's traditional instruction of sight word and shared storybook) and

the experimental group (received the Early Literacy Skill Builder curriculum).   An effect size of

0 means the intervention had equal impact as the control group. The effect size in this particular

study was quite large and suggests that the experimental program showed skill growth in the

areas of literacy, vocabulary, and word-identification.

Light, McNaughton, Weyer, & Karg (2008) used a case study format to characterize the

literacy development of an eight year-old student with significant cognitive disabilities. The

student received instruction in letter-sound relationships, decoding, sight word instruction, along

with shared reading and writing opportunities. The students' communication, vision, and

physical impairments were accommodated with assistive technology and augmentative

communication systems. The student showed gains in letter-sound correspondence (from 0 to

20), could read 60 plus words (0 at the start of the intervention), and began to read short stories

and write simple sentences.

Many special education teachers are not prepared to address the needs of students who

are at the emergent literacy level. The preponderance of their training is directed at conventional

literacy instruction for students with high incident disabilities and therefore they do not make the

distinction between emergent and conventional literacy (Erickson, Hanser, Hatch, & Sanders,

2009). Because students with significant cognitive disabilities are not beginning school with the

emergent literacy experiences from the home and pre-school settings, the public school programs need to be familiar with the strategies to begin this process. The opportunity to participate in shared reading; watching adults model interactions with print; exploring books; playing with songs, poetry, rhyming; scribbling; and seeing writing used for a variety of purposes are all recommended components of an emergent literacy comprehensive program (Clay, 1993; Erickson et al., 2009; Heath, 1983; McDonnell, Hawkens, Johnston, Kidder, Lynes, & McDonnell, 2014; NELP, 2009; Teale& Sulzby, 1992). Interventions should also be code focused and include parent/home supports (NELP, 2009).

Pressely, Allington, Wharton-McDonald, Block, and Morrow (2001) stated in their book *Learning to Read: Lessons from Exemplary First-Grade Classrooms*, that the best first grade classrooms have more than 1500 books in their classroom libraries. Early readers need access to a lot of books. The books need to be indestructible, support print concepts, teach good vocabulary and language concepts, and be predictable so that students can be a participant in the reading experience (Hanser & Musselwhite, 2014). Access to books is critical to literacy development. "The surest way to prevent learning to read is to eliminate print experiences from a person's environment" (Koppenhaver, 2016, p. 11).

Despite this knowledge we are missing instruction that is critical to move this population from emergent to conventional literacy due to the prevailing trend to instructionally focus on a single skill, such as letter identification, through means of behaviorism approaches such as least prompts, drill and practice, in isolation of other literacy skills or context (Erickson, Hanser, Hatch, & Sanders, 2000; Erickson, Koppenhaver, & Cunningham, 2006; Katims, 2000). Literacy has traditionally been thought of as a set of linear skills that build upon each other at each level. One cannot move on to the next skill until the previous concept has been mastered

(Kliewer, Fitzgerald, Meyer-Mork, Hartman, English-Sand, & Raschke, D., 2004). "If we continue to measure [literacy] skills in isolation, we are much more likely to underestimate the reading strengths of children who are, or who are perceived to be, less proficient readers" (Weaver, 1998, p. 51).

Most students with significant disabilities will never succeed under this model due to stagnating at the literacy readiness phase and are then moved towards a curriculum void of literacy skills (Argan, 2011; Keefe & Copeland, 2011; Kliewer & Biklen, 2001). The notion of following a hierarchical path and requiring mastery of skills in sequential order is not recommended; research suggests beginning instruction in all literacy areas as soon as possible (Erickson, Hanser, Hatch, & Sanders, 2009; Joseph & Seery, 2004).

A publication in the early 90s examined literacy instruction for students with language and physical impairments. The conclusion was that if an individual were a student with severe disabilities who was exposed to a literacy curriculum it was most likely focused on learning words through reductionist approaches such as drill and kill (Koppenhaver & Yoder, 1993). This method of memorizing a pre-determined list of decontextualized words is commonly referred to as "functional" or "sight word" instruction (Katims, 2000). Sight word instruction is typically delivered in isolation and is teacher driven through drill and practice exercises. (Browder, Ahlgrim-Delzell, Courtade, Gibbs, & Flowers, 2008; Erickson, Hanser, Hatch, & Sanders, 2009). This approach is in contradiction to instructional practices that are found in comprehensive literacy programs that characterize general education programs (Erickson et al., 2009).

The NELP and NRP reviewed countless reading research publications focused on general education students. The findings suggested that students were overwhelmed when they were taught in isolated skills, in isolated settings, using a mastery approach. "…We should think

twice about our special education practice of task analyzing and teaching skills to mastery. If that practice overwhelmed the students without disabilities….why would we think it appropriate for students with significant intellectual disabilities" (Erickson, et al., 2009, p. 55)?

Writing is a component of comprehensive literacy programs for individuals without disabilities. The preponderance of literacy conversations for students with significant cognitive disabilities are centered on reading; writing is often ignored (Light & McNaughton, 2006). For typically developing children, there is a concurrent development of reading, writing, listening, and speaking during the emergent literacy phase (Teale & Sulzby, 1986). The following diagram (*Figure 1*) illustrates the relationship between these components, it suggests that writing should be a component of a comprehensive literacy program for students with significant cognitive disabilities.
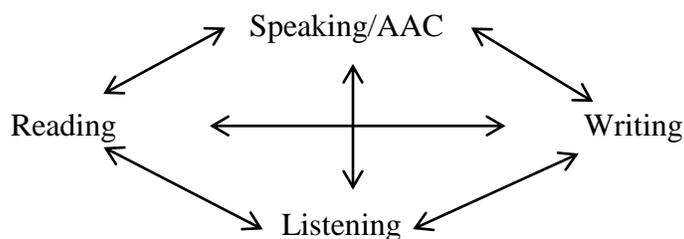
Figure 1: A Concurrent View of Literacy and Language Development
(Koppenhaver, Coleman, Kalman, & Yoder, 1991 as adapted from Teale & Sulzby, 1989)

Individuals with significant cognitive disabilities present a unique challenge in that many have physical limitations that hinder the traditional writing process in combination with the fact that they tend to acquire skills at a lower rate. They also have difficulties with typical writing process skills such as conceptualizing ideas and organizing thoughts (Joseph & Konrad, 2009). Much like reading, research has shown that individuals with significant cognitive disabilities can learn to share their ideas through written expression in many ways (Kahn-Freedman, 2001; Pershey & Gilbert, 2002).

Writing is associated with a product. Educators need to make a shift from product to process (Staples, Edmister, Porter, & Burkhart, 2014). The process, however, is not about the physical mechanics of handwriting but the expression of ideas (Hanser, 2010). Emergent writers need the opportunities to interact with writing much like they need to interact with printed materials. Writing activities should have purpose (e.g., writing a card for a special celebration), and students should be given feedback (Hanser, 2010; Koppenhaver, 2016).

For many students with significant cognitive disabilities, writing requires the use of assistive technology. Many students are unable to hold a traditional pencil; these individuals need the correct tool in order to have meaningful opportunities to write (Hanser, 2014). Created by Hanser (2009) through the Center for Literacy and Disability Studies, an alternative pencil is defined as anything that allows a student to have full access to all 26 letters of the alphabet. Alternative pencils can be used with writers of across the ability spectrum and at any age (Browder & Spooner, 2011). There are no prerequisites to begin using an alternative pencil to explore writing; e.g. physical capabilities, alphabet knowledge, behaviors (Koppenhaver, 2016). Hanser (2014) recommends that students should be given an alternative pencil that "1) is physically easy; 2) results in recognizable print, 3) allows students to focus their brainpower on learning about the and why of writing" (p.1).

Proponents of a functional approach will argue that a school's responsibility to students with significant cognitive disabilities is to prepare them to function independently; however, critiques respond that nothing is more functional that building literacy skills (Ruppar, Dymond, & Gaffney, 2011). Erickson, Hanser, Hatch, & Sanders, (2009) argued, "It is no longer acceptable to offer educational programs to students with significant intellectual disabilities that focus solely on skills that are unrelated to the general curriculum in the name of developing other

life or functional skills" (p. 6). The sight-word approach does not teach word-attach strategies that allow students to read novel words or words with sounds that have not been taught yet (Saunders, 2007). Not providing students an opportunity to learn these skills can have the long-term impact on an individual's overall reading achievement (Stanovich, 2000). If we merge the idea of providing students with significant cognitive disabilities a rich literacy instructional program with the concept of functionality, then neither life nor literacy skills are left behind and functional words and concepts are taught through authentic interactions within the classroom environment and imbedded within the curriculum framework (Erickson et al., 2009).

Influencing Factors Related to Literacy and Students with SCD

> ***Research and evidence-based practices within special education***. "Special education research, because of its complexity, may be the hardest of the hardest-to-do science" (Odom, Brantlinger, Gersten, Horner, Thompson, Harris, 2005, p. 139). Research in the field of special education is difficult for many reasons. Not only does the researcher have to address an essential question/hypothesis; but they must also outline the population being addressed and under what context (Odom, et al., 2005). Experimental design in special education also presents a challenge. The notion of a control and experimental group is not easy to accomplish. Special education students by definition are unique and establishing two groups that are similar in characteristics outside of the proposed experimental treatment can be almost impossible to achieve (Odom, et al. 2005).

Special education research has its own history that tends to mirror the social and legislative trends outlined earlier in Chapter 2. Special education research was initially rooted in medicine. Special education pioneers such as Montessori and Goldstein were physicians. Alas, it is not a coincidence that services for individuals with disabilities followed a medical model

and took place in corresponding facilities. The medical research framework eventually gave way to methods based upon psychology, sociology, and anthropology (Odom, et al., 2005). "Many of the current special education research tools now frequently employed, such as sophisticated multivariate designs, qualitative research designs, and program evaluation designs, have their roots in general education and educational psychology" (Odom et al., 2005, p. 140).

The focus of educational research for individuals with significant cognitive disabilities has also experienced an evolution over the past thirty-five years. In 1976, Brown, Nietupski, and Hamre-Nietupski conducted a review of the content of curriculum for students with moderate and severe intellectual disabilities. They concluded that these students experienced a curriculum driven by developmental stages in the early 1970s that transitioned into a functional skill based curriculum by the mid-1970s (Shurr & Bouch, 2013). Forty-four percent of the published research articles discussing curriculum during this time period were focused on functional life skills (Dymond & Orelove, 2001). The 1980s saw a progression to the concept of inclusion as part of the curriculum lexicon (Shurr & Bouch, 2013). Curricular conversations are now commonly influenced by research related to providing access to the general curriculum (Shurr & Bouch, 2013).

Even though curriculum research is being conducted for individuals with significant cognitive disabilities, the number of publications related to this topic is still statistically low compared to other areas of study. Shurr and Bouch (2013) examined ten special education journals from 1996 to 2010. Only 2% of the articles found during this time frame were focused on curriculum. This was a decrease from the 16% from 1976-1995 reported by Nietupski et al. in 1997. Shurr and Bouch's research found that the majority of the articles were still associated with functional life skills (43%), cognitive and academic followed (19%), and mixed content

(16%). The overall data trends show a marked growth in cognitive and academic related articles with 6% in 1996-2000 to 36% in 2006-2010. Communication and interactions related research articles decreased during these time period while sensory-motor remained relatively the same. Functional life skills showed a slight increase between these two five-year time periods (4%) (Shurr & Bouch, 2013).

Erickson, Hanser, Hatch, & Sanders (2009) conclude that while the importance of literacy education for students with significant cognitive disabilities is being emphasized in the research literature, the field is still lacking research in the areas vocabulary, comprehension, writing, and comprehensive programs. Additional means to measure student acquisition of skills such as fluency are also needed because these students often cannot speak and therefore have little to no method to communicate this skill. Adding to the call for the need for additional research, Collins (2007) highlighted a dilemma facing literacy research for students with intellectual disabilities. The vast majority of the research focuses solely on phonemic awareness. In addition, Collins states that these research studies use instructional methods that are in not in alignment with instructional practices deemed appropriate for general education students.

From research to practice. The Office of Special Education (OSEP) funds the majority of special education research (Gersten, Baker, Smith-Johnson, Flojo, Hagan-Burke, 2004). Funding falls under two categories: directed research; i.e., grants that fall into specific categories, and non-directed research; i.e., topics related to special education and submitted by faculty and students (Gerten et al., 2004). No Child Left Behind set forth requirements that all teachers employ scientifically- based research (SBR) in their daily instruction (NCLB, 2001).

NCLB defines SBR as research involving rigorous, systematic, and objective methods, which includes research that employs systematic, empirical methods; involves rigorous

data analyses that justifies the conclusions; relies on methods that provide reliable data; is

evaluated using experimental or quasi-experimental designs with appropriate controls,

with preference for random- assignment; allows for replication, and is accepted by a

peer-reviewed journal or approved by a panel of independent experts. (Collins and

Salzberg, 2005, p.60).

Educators who work with students with significant cognitive disabilities find it is difficult to find

SBR for instructional practices (Collins & Salzberg, 2005).

Many within the field of special education research feel the lack of research for low-

incidence populations is due in part to the preference for control-group design with students

being randomly assigned (Collins & Salzberg, 2005). SBR standards should also include

experimental and quasi-experimental, single subject, qualitative, and correlational designs

(Odom, et al., 2005). "Single subject experimental designs, because they evaluate the effects of

an intervention on an individual's behavior and the course of those effects over time, seem more

applicable to establish a scientific base for effective practices for students with severe

disabilities…" (Collins & Salzberg, 2005, p. 62).

"Curricular research guides practice, or in other words, the education which students with

moderate and severe intellectual disabilities receive" (Shurr & Bouch, 2013, p. 77). The articles

found in journals outlined by Shurr & Bouch (2013), Nietupski , Hamre-Nietupski, Curtin, &

Shrikanth (1997), along with those that preceded and will ultimately follow, provide the

framework for special education textbooks, drive policy, frame teacher preparation programs,

and aide in establishing evidence-based practices (Matropieri, et al., 2009; Shurr & Bouch,

2013). While the potential impact of special education research is clear, the methods employed

by researchers to disseminate their finding do not lead to change among the special education

practitioners in the field (Cook, B., Cook, Landrum, 2013). Researchers write for other researchers and therefor many of the practices established in their publications do not readily make it to the classroom.

Cook, B., Cook, & Landrum (2013), summarized a marketing model by Heath and Heath (2008) that, when followed, would lead to greater success of translation between research to practice. The principles of this model are: "simple, unexpected, concrete, credible, emotional, and stories" (Cook,B., et al., 2013, p. 165). The message must not be lost in the details and a teacher should be able to take away key concepts that they can use within their context. The content needs to be delivered in a manner that surprises the audience which will instill the desire to want to learn more. Cook et al. (2013) explained a concept introduced by psychologist, D. Berlyne, known as epistemic curiosity. "Epistemic curiosity is the desire for new information and understanding that motivates exploratory thinking in order to close the knowledge gap" (p. 167).

The message must be concrete. In order to accomplish this, the content should be free of the abstract and void of details that may detract from the message (i.e., research specific terminology, abbreviations). When the information pulls on the audience's emotions and creates vivid imagery, then the retention of the message is increased. Research inherently includes statistical data. It is important to remember that teachers and other special education stakeholders typically do not have a background in empirical research and will find it difficult to draw meaning and conclusions from the numbers. To combat this, Cook suggests the use of graphic representations such as pictographs (Cook, B., et al., 2013).

Teachers trust teachers. In order for the research-based best practices to reach practitioners, the researchers must establish credibility. Cook, B., et al. (2013), suggested two

methods to disseminate research using the support of educators in the field: use teachers who

have used the practice in the field as co-authors and spread the information to key influential

practitioners first. Teachers also want information on best practices beyond efficacy when

determining whether to trust the research. Table 1 shows the main attributes to consider when

communicating a new concept to an audience such as teachers.

Table 1

Description of Five Core Attributes of Innovations From Classical Marketing Theory

Attribute	Description
Relative advantage	Practices that are superior to previous/current practices are more likely to be adopted. Relative advantage is not confined to effect size, but refers to other attributes (e.g., complexity) as well.
Compatibility	Practices that are compatible with individual and cultural values and experiences are more likely to be adopted.
Complexity	Practices that are straightforward and easy to implement are more likely to be adopted.
Trialability	Practices that can be implemented on a trial basis (i.e., without full commitment to long-term implementation) are more likely to be adopted.
Observability	Practices resulting in improved outcomes that are clearly visible to observers are more likely to be adopted.

From Cook et al. (2013)

Understanding how individuals respond through emotions will also help researchers

disseminate their findings to practitioners. Research suggests that if you communicate the

impact the findings will have on an individual student versus a group it will help draw upon the

influence of affect when making decisions (Cook, Cook, & Landrum, 2013). Individuals

naturally look at the good and bad associated with an intervention. When you use stories and

examples that are centered around one child then you naturally appeal to desire to want to do

good for the student.   The norm for research dissemination practices seems to be a publish and

hope philosophy (Cook, B., et al., 2013). Researchers publish their finding and hope that they become practice. The field of special education research must take a closer look at their communication practices if they hope to have a meaningful impact on how special educators serve their students.

Moving toward access. Providing access to the general education curriculum has been a major area of debate and research since the inception of least restrictive environment (LRE) outlined in the Educational of All Handicapped Children in 1975 followed by IDEA and IDEIA and the requirement that accountability measures will be in place for all children as established by NCLB (2001). There are two definitions of curriculum, the explicit and the hidden. The explicit refers to the actual goals and objectives that are typically written down in the form of a curriculum guide within a district or school. Some would refer to explicit curriculum as the *what* of teaching. The second definition expands upon the formal concept and moves to include the hidden curriculum that occurs within schools and classrooms. The hidden curriculum is the norms, behaviors, traditions, etc. that are naturally a part of any educational setting (Ryndak, Moore, Orlando, 2008-2009).

Federal policy dictates that students with disabilities participate in state-wide assessments that measure annual individual, school, and district academic progress (Browder, Wakeman, Flowers, Rickelman, & Pugalee, 2007). In 2003, The U.S. Department of Education set forth legislation that allowed districts to administer an alternative assessment to students with significant cognitive disabilities but with the caveat that these assessments "…must be aligned with a state's academic content standards, promote access to the general curriculum, and reflect the highest achievement standards possible (Browder et al., 2007, p. 2). Many districts were left with questions as to how to meet these policy mandates; the majority of publications centered on

teaching students with significant cognitive disabilities focused on functional life skills versus grade level academics (Browder et al., 2007).

One challenge to overcome is the definition of access itself. Depending on whom you ask, access for students with significant disabilities means something quite different. A recent study interviewed high school general and special educators regarding access to the general education curriculum. The outcome showed general educators viewed access as meaning students with significant cognitive disabilities received the same curriculum and materials as general education students while special education teachers saw the term as meaning access to adapted curriculum and materials that met the student's individual needs and goals (Dymond, Renzaglia, Gilson, Slagor, 2007). An important distinction between "access to information" and "access to learning" needs to be made (Rose & Meyer, 2001). Being present in the same classes with nondisabled peers and taking part in the same lessons does not necessarily lead to learning (Dymond et al., 2007). For students with significant cognitive disabilities to have access to learning, carefully crafted challenging goals and the necessary supports must be outlined (Dymond, et al., 2007).

Ryndak, Moore, Orlando, & Delano (2008-2009) identified three interpretations of what it means to provide access to the general education curriculum: context, content, content and context. When access is translated to solely meaning the physical placement of a student we are viewing the definition through a context lens. While these students may be in a setting where the general education curriculum is implemented, the focus is not on addressing the standards or having high expectations for student progress. This is often characterized by the placement of a student within the general education setting in order to gain social skills and not expected to participate academically.

An IEP team may determine that a student will be taught general education curriculum standards in a separate setting than same-age peers. This perspective is based upon access being interpreted as meaning content (Ryndak, Moore, Orlando, & Delano, 2008-2009). Because the student with significant cognitive disabilities is seen as having such a large academic gap in comparison with his or her peers, educators determine that a self-contained setting is most appropriate. The students may be exposed to greater academic expectations but the experience is void of the context of general education that research says is also important (Jackson, Ryndak, & Wehmeyer, 2009).

The final interpretation of access to the general education places emphasis on both content and context. Educators who hold this view believe access cannot be met without a combination of placement with the general education environment where students with significant cognitive disabilities have access to peers, the hidden curriculum, and instructional specialists in conjunction with learning goals tied to general education standards (Ryndak, et al., 2008-2009). An IEP team operating under this definition of access will move towards identifying strategies to meet the individual learning needs of the student with significant disabilities.

Carter and Hughes reported that progress towards providing access and implementing the general education curriculum with fidelity for students with significant cognitive disabilities has been "slow, sporadic, and uneven" (as cited in Ryndak, Moore, Orlando, & Delano, 2008-2009, p. 201). Factors contributing to this lack of advancement are federal mandates put into legislation before research-based best practices can be put into action, teacher and administrator preparation programs are not adequately preparing educators for this challenge, change theory not being taken into consideration as it relates to educational practitioners, overall feeling that

providing access results in watered down curriculum for general education students, concern that students with significant cognitive disabilities will have lower self-esteem due to anxieties related to taking state assessments and participating in general education classes, and inadequate resources to meet the high demands of the supports needed to accomplish access to the general education curriculum (Ryndak, et al., 2008-2009). While these factors may be identified as roadblocks to accessing the general education curriculum, research has shown the benefits of providing access for students with significant cognitive disabilities. Heightened engagement, increased preparedness for participation in society and independent life-skills, and academic growth have all been findings of research associated with students with significant cognitive disabilities gaining access and participating in the general education curriculum (Audette & Algozzine, 1997; Buckley, 2000; Logan & Keefe, 1997; Ryndak, Morrison, & Sommerstein, 1999; Wehmeyer, 2006; York, Vandercook, MacDonald, Heise-Neff, & Caughey, 1992).

Five steps have been identified to promote access to the general curriculum for students with significant cognitive disabilities. This tiered model is outlined in Table 2.

Action Step	Description
Standard Setting and Curriculum Design	Standards are written as open-ended and the curriculum is planned and designed using principles of universal design that ensure that all students can show progress.
Individualized Educational Planning	The individualized planning process ensues that a student's educational program is designed based on the general curriculum, taking into account unique student learning needs.
School-wide Materials and Instruction	There is school-wide use of universally designed curricular materials and high quality instructional methods and strategies that challenge all students
Partial School and Group Instruction	Groups of students who need more intensive instruction are targeted and building and classroom instructional decision making activities focus at the lesson, unit, and classroom level to ensure students can progress in the curriculum.

Individualized Interventions	Additional curricular content and instructional strategies are designed and implemented to ensure progress for students with learning needs not met by school-wide efforts or partial school efforts.

From Wehmeyer, Sands, Knowlton, & Kozlenski (2002)

Table 2

Steps to Gaining Access to General Curriculum for Students with Mental Retardation

      Educator perspectives on access to the general education curriculum. The context and content perspective on meeting the requirement of providing access to the general education curriculum is supported by research (Ryndak, Moore, Orlando, & Delano, 2008-2009; Wehmeyer, 2006; Ryndak, Morrison, & Sommerstein, 1999; Logan & Keefe, 1997). In spite of this research, social and academic inclusion of students with significant cognitive disabilities in the general education setting remains inconsistent which may be a result of individual and institutionalized beliefs about this population as learners (Ryndak et al, 2008-2009).

      Educators express concerns in three main areas when examining access to the general education curriculum (Ryndak, et al., 2008-2009): loss of life skills instruction; decreased individualized supports in the general education setting; failure of a student to participate and gain from general education practices. While research identifies these areas as perceived concerns (Dymond & Orelove, 2001; Soukup, Wehmeyer, Bashinski, & Bovaird, 2007), additional research has offered a response to these apprehensions. Students with significant cognitive disabilities fully participating in the general education curriculum demonstrate greater levels of engagement compared to self-contained counterparts (Logan & Keefe, 1997). Children with cognitive disabilities educated within the general education setting have been found to score higher on literacy measures than students in segregated settings (Buckley, Bird, Saks, & Archer, 2002). In addition, regardless of the instructional strategies utilized within the general education setting, students with significant cognitive disabilities show gains on academic goals (Ryndak,

Morrison, & Sommerstein, 1999). Maybe most surprising to educators is the lack of research

that supports the belief that students with significant disabilities will not leave the school setting

with the necessary life skills needed to be functional in society when they do not receive

specialized instruction due to participation in the general education curriculum (Ryndak et al,

1999).

   Educator preparation. Administrator training programs require little if any formal

course work in the area of special education (Lowe & Bringham, 2000; Mitchell, 2011; Outka,

2010;Thompson, 2010). A 2000 study revealed only 5 states required specialized coursework in

special education in order to obtain an administrative degree and certification (Patterson,

Marshall, & Bowling, 2000). Instructional leadership's goal is to increase instructional

outcomes through best practices for all students (Mitchell, 2011). With the implementation of

IDEA and NCLB, the principal is responsible for making knowledgeable decisions in education

for all students, including those with disabilities (Patterson, et al, 2000). Administrators need a

solid background in special education law, special education programs, and best practices

(Thompson, 2010).

   Principals must have the knowledge, training, and experience to be able to lead the

process of evaluation in addition to the analysis and recommendations of appropriate services to

meet the needs of students with disabilities (Wakeman, Broder, Flower, & Ahlgrim-Delzell,

2006). However, typically, principals rely upon their special education staff to determine

curriculum, instructional and assessment practices, and programming needs (Mitchell, 2011). It

is likely that without knowledgeable and well-prepared special education leadership within

school districts, the implementation of legal mandates under IDEIA and NCLB, and research

best practices will occur with fidelity and literacy instruction will remain subpar for students

with significant cognitive disabilities.

Collectively, teachers do not have the necessary education, training, or knowledge regarding scientifically-based reading instruction as it relates to students with learning disabilities (Lyon & Weiser, 2009; Foorman & Torgesen, 2001). Teacher awareness of research does not guarantee it will translate to practice. Often research is ignored based upon a teachers' own belief and biases that directly results in a substandard education for students who need the best instruction available (Lyon & Weiser, 2009).

Teacher effectiveness is the number one factor in creating positive gains toward student achievement (Marzano, Pickering, & Pollock, 2001). All students benefit from outstanding teaching, but it is the lowest performing students who benefit the most (Allington & Johnston, 2001; Pressley, Allington, Wharton-McDonald, Block, & Morrow, 2001). Classrooms where lower achieving students are not experiencing reading success are typically not spending their days reading appropriate texts (Allington, 1983).Teacher preparation programs do not prepare pre-service teachers for what they will need to know on the job (Joshi, et al., 2009). This is especially true for special education teachers (Stotsky, 2009).

Educator belief systems. Examining educator beliefs are as equally important as evaluating their preparedness to teach students with significant cognitive disabilities. Studies have drawn the same conclusion: a correlation exists between teacher beliefs and what carries over between pre-service preparation programs and what transpires within the classroom (Lyon & Weiser, 2009; Richardson, 2003). Beliefs are more influential on teacher behaviors than their actual knowledge base (Nespor, 1987). A teacher's belief about students with disabilities develops through experiences that often begin before the teacher even enrolls in a preparation program (LePage, Nielsen, & Fearn, 2008). A reliable predictor of the beliefs and sense of

efficacy a teacher will hold regarding students with significant disabilities is their past interactions with disabled individuals (Gething, Wheeler, Cote, Furnham, Hudek-Knezevic, Jaroslaw, 1997).

Current policy dictates that students with disabilities be taught in the least restrictive environment and be presented with an instructional program aligned to state standards. If an educator's beliefs do not align with the policy then it is likely that there will be little carry over to the classroom setting (Eisenhart, Cuthbert, Shrum, & Harding, 1988). For example, a quantitative study conducted through the University of Illinois at Urbana-Champaign concluded that a group of special education teachers who taught students with intellectual disabilities preferred life skills based literacy instruction within self-contained classroom settings (Ruppar, Dymond, & Gaffey, 2011). This study built upon previous research conducted by Dymond, Renzaglia, Gilson, & Slagor (2007) that found that few of today's special educators believed students with significant disabilities should be taught the same curriculum as their general education peers. Another finding of this study was roughly fifty percent of special education teachers felt that the educational program of a student with significant disabilities should be based upon his or her individual needs (Dymond et al, 2007). An additional study conducted by Durando (2008) surveyed special education teachers and found that they believed a student's cognitive ability determined whether they should be taught a literacy curriculum.

A close link has been made between a teacher's sense of efficacy and what translates from research to the classroom (Durando, 2008; Brady & Woolfson, 2008). A teacher's self-efficacy is defined as the "belief or conviction that they can influence how well students learn" (as defined by Gusky and Passaro, 1994, in Ruppar, Gaffney, Dymond, 2015). Teachers who feel confident in their expertise tend to hold themselves accountable for student achievement, are

more likely to spend time to adapt curriculum and strategies to individual student needs, demonstrate greater flexibility, and overall have a positive impact on student outcomes (Brady & Woolfson, 2008). In contrast, teachers who feel ill-prepared in pedagogy will be less motivated and in turn blame the student or the disability for lower student growth measures (Brady & Woolfson, 2008).

Summary

The purpose of public education has evolved throughout history and changes often coincide with societal needs and beliefs. While most would maintain that literacy is a primary goal for students, this does not always hold true for students with significant disabilities. Students with significant cognitive disabilities may or may not be provided a curriculum rich in research-based literacy pedagogy. Although the laws within the United States declare that these students are entitled to be taught in the general education setting and have access to the same curriculum, the research outlined in this chapter depicts a different story for a significant portion of this population. The numerous studies discussed in this review of literature further substantiate that the current instructional practices aligned with the behaviorist approach are not resulting in students with significant cognitive disabilities obtaining literacy skills that can be generalized throughout the individual's life and ultimately allow them to become a more literate citizen. In addition, a growing number of studies outlining a constructivist approach to literacy that have positive outcomes in reading, writing, communication, and comprehension were presented. Other important aspects of special education were discussed in Chapter 2 as they related to the overall research problem: history of special education, theoretical framework, and literacy practices for both special and general education students, efficacy and belief systems, and the nature of our current educator preparation programs for both teachers and administrators.

Chapter 3 will focus on the methodology used to explore the disconnect between special education research and current practices within today's public schools.

Chapter 3- Methodology

This chapter describes the methods used to explore the factors contributing to the gap between recent research regarding teaching students with significant cognitive disabilities literacy skills and the implementation of the research within the public schools who serve this population.   The research perspective, type of research, context of the study, participants involved in the research, methods and instruments, along with data analysis will be outlined in this chapter.

Research Perspective

This researcher attempted to understand, describe, interpret, and evaluate current practices related to teaching literacy skills to students with significant cognitive disabilities. The central question in this study was 'What are the barriers to implementing a balanced literacy approach for students with significant cognitive disabilities? The three research questions that guided this study were,

1. What is the current knowledge base and understandings of administrators and teachers as it relates to teaching literacy skills to students with significant cognitive disabilities and how do they acquire this knowledge and how has this knowledge changed over time?

2. What are the perceived needs that need to be fulfilled in order for a systemic shift from a functional literacy curriculum to a balanced curriculum approach to occur as reported by administrators, teachers, and researchers in the field?

3. How does the efficacy and beliefs held by teachers and administrators impact the translation from research to practice as it relates to literacy instruction?

The study was an exploration of a specific phenomenon and not attempt to make generalizations that are the essence of quantitative research. In addition, the goal of this research is not centered on identifying relationships between variables (Creswell, 2008). The complexity of the problem cannot be addressed through a quantifiable approach and in order to get a holistic perspective, a qualitative approach is favorable (Brown, 2013). For these reasons, the quantitative concept was abandoned for the qualitative approach as it relates to the identified research questions (Bogdan & Bilke, 2007; Leedy & Ormond, 2011).

Qualitative research can vary in design. Case studies focus on a particular individual or situation within a natural context with hopes of understanding that situation in depth. Ethnography utilizes observations and artifacts to gain knowledge of a cultural group. The researcher must gain trust and immerse themselves within that culture. Another qualitative framework is grounded theory. The researcher uses the data collected to derive a novel theory. Finally, a phenomenological design allows for the collection of information regarding the participants' points of view. The data collected is used to identify themes in the hopes of better understanding the phenomenon studied (Leedy & Ormond, 2011).

The research questions guiding this study were explored through a phenomenological approach. This design was appropriate because it allowed this researcher to collect in-depth information regarding the knowledge, needs, perspectives, beliefs, values, behaviors, and social

contexts of the participants in this study in order to better understand the problem (Denzin & Lincoln, 2005). The phenomenological approach was also selected in order to utilize in-depth interviews from three different categories of participants to gain insight into their perspectives (Bogdan & Bilke, 2007; & McMillan, 2008).

Context of the Study

The context of this study was divided between two categories: researchers and educators. The first context within this study is in relation to the specialized researchers who were interviewed. The field of researchers who have devoted significant time exploring education of students with significant cognitive disabilities is limited. The pool narrows considerably when you refine your search to those professionals who specifically research literacy education for this population. The background of each of the researchers proposed to participate in this study is described in Table 3.

Table 3

Researcher Profiles

Researcher	School where doctorate was earned	Primary research emphasis	# of related publications
1	University of Virginia	Assessment and instruction for students with severe developmental disabilities	100+
2	University of North Carolina at Chapel Hill	Access to curriculum and literacy learning for students with severe disabilities. Emphasis on students with complex communication needs (AAC)	53
3	University of New Hampshire	Assistive technology and literacy instruction for students with significant disabilities	8

| 4 | John Hopkins University | Inclusive education; positive behavioral support; language, literacy, & communication | 18 |

Second, this researcher identified six school districts within Illinois and Missouri that were included within the study. An overview of the school districts, according to their 2013 School Report Cards and district websites has been summarized in Table 4.

Table 4

School District Profiles for Administrator and Teacher Participants

School district	Enrollment	Demographics	District structure	Composition of certified special education staff	Composition of support staff
A	963	29% Low-Income 15% IEP $5,353 Instructional Spending	3 Elementary 1 Middle 1 High	28 Special Education Teachers	3SLP OT/PT provided through private contract AT/AAC provided through cooperative
B	743	53% Low-Income 25% IEP $5182 Instructional Spending	1 Elementary (k-8)	10 Special Education Teachers	1SLP OT/PT provided through cooperative 12 Paraprofessionals
C	5875	19% Low-Income 13% IEP $12,000 Instructional Spending	5 Elementary 2 Middle 1 High	41 Special Education Teachers	15 SLP 2 OT 1 PT
D	17700	38 % Low-Income $5783 Instructional Spending	20 Elementary 6 Middle 3 High 1 Alternative HS	148 Special Education Teachers	29 SLP 7 OT 4 PT 154 Paraprofessionals
E	13696	33% Low-Income 14% IEP $5813 Instructional Spending	17 Elementary 4 Middle 2 High 1 Vocational Training Center	115 Special Education Teachers	31 SLP 9 OT 4 PT 99 Paraprofessionals

F	7551	23% Low-Income	10 Elementary	41 Special Education	7 SLP
		14% IEP	2 Middle	Teachers	2 OT
		$4669	1 High		1 PT
		Instructional	2 Alternative		Paraprofessionals not
		Spending			indicated in reports

Study Participants

Purposeful sampling was used to select the participants in this study. This type of sampling allows the researcher to "select those individuals…that will yield the most information about the topic under investigation" (Leedy & Ormond, p. 152). Three categories of participants were identified. Individuals within these categories must meet the criteria outlined below.

Special Education Teachers:

- Must teach in a public school that serves students between the grades K-6

- Must be directly involved with teaching students with significant cognitive disabilities

- Must teach in a nonsegregated building (i.e. the students with significant disabilities are present in the same building as their same-aged typically developing peers)

- Must not teach within the same district as the other participating teachers

Administrators:

- Must lead a public school that serves students between the grades K-6

- Must be responsible for the education program related to students with significant cognitive disabilities

- Must lead a nonsegregated school building as defined above

- Must not be an administrator within the same district as other administrative participants

Special Education Researchers:

- Must conduct qualitative or quantitative research related to educating students with significant cognitive disabilities

- Must study some aspect of literacy instruction for this population of learner

- Must have conducted their research within the past decade

The researcher attempted to avoid selecting more than one administrator or teacher from a given special education cooperative. Many small school districts will collectively form special education cooperatives to pull scarce funds and maximize resources. These cooperatives are often in charge of hiring special education staff, facilitating professional development, and ensuring legal compliance. In addition, by avoiding duplication of interview participants (i.e. more than one administrator from a given district, more than one teacher from a given district), this researcher allowed for a broader perspective within the sample size.

In addition to purposeful sampling, this researcher narrowed down the study scope to focus on school districts within the mid to southern regions of Illinois and Missouri. When possible, the research involved participants who meet the above criteria and were within a two-hour driving radius of the researcher (Merriam, 2009). When interviewing researchers, audio/visual conferences software such as Skype was used with phone conversations being the last option. The colleagues within the researcher's school district were not considered for participation in order to avoid any perceived influence she may have over these individuals.

Sample sizes varied between participant categories within this study. Saturation is the key to determining when you have completed enough sampling (Baler & Edwards, 2012). Saturation is the point when, "the evidence is so repetitive that there is no need to continue" (Baker & Edwards, 2012, p. 5). This makes outlining the sample size more difficult for

qualitative than quantitative studies. Because a researcher can only estimate how many participants will be necessary to reach saturation, it is almost impossible to be specific when outlining the initial research methodology (Baker & Edwards). Interviews were conducted with five special education teachers, four administrators, and four researchers within the field.

Procedures

This study used semi structured interviews with participants from the three categories: special education teacher, school administrator, and researcher within the field of study. Conducting interviews from representatives from these categories provided insight from three different perspectives to increase validity of the study and findings. To further substantiate the validity of the findings of this phenomenological study, member checks were utilized. Member checks allow the participants to review the data and offer additional information or correct the findings collected through the interviews (Lincoln and Guba, 1985). The data collection methods were reviewed and accepted by the Institutional Review Board of McKendree University to ensure the research plan met ethical research standards.

Data collection. The initial step of the data collection process was to identify potential participants using the established criteria. Potential school districts were established first. Initial contact with proposed school districts was made through a formal introductory letter to the superintendent (Appendix A). Four school districts required additional information to be provided through an application to conduct research that was unique to each district. Follow-up phone calls and email communications were placed to superintendents in order to answer questions and concerns. District approval was secured and conversations with district level administration that lead to identification of specific building administrators and classroom teachers as participants. This process was followed with a letter (Appendix B) sent to each

potential teacher and administrator participate. Consent was obtained through the Participant Consent Letter and Form (Appendix C). One district declined to participate. Another district permitted a teacher but not administrator participation. A third school district provided approval but the administrator declined to participate. Additional school districts were identified and secured using the same procedure in order to obtain an adequate number of participants.

Potential special education researcher participants were identified based upon the established criteria. A formal letter was sent to each participant (Appendix A) via their published email address. Five researcher participants were initially invited to participate in the study. Four individuals responded by email indicating their willingness to participate. No response was received by the fifth potential researcher participant. The Participant Consent Leter and Form (Appendix C) was sent to the responding researchers. All completed and returned the document, however, only two responded to attempts to establish an interview time. Three additional potential researcher participants were then identified and the same process was utilized in order to secure participation in the study. Two individuals within this second group responded and were subsequently included within the research. A total of four special education researcher participants were included in the study.

Interview times and locations were determined based upon the preferences provided by each participant. Eight out of thirteen interviews were conducted face-to-face. Three interviews were conducted over the telephone. Two interviews were conducted using Skype video conferencing technology. Each interview began with an explanation of the process and summary of the intent of the study. The Interview Protocols (Appendix D, E, F) were used for each interview. All interviews were audio recorded and field notes were taken and later transcribed.

Semi-structured Interviews

Semi-structured, one-on one, interviews were used to gather data related to the three identified research questions. The interview protocol was a mix of demographic and background questions designed to identify the participants (i.e., years of experience, college attended, self-contained or inclusive setting, etc.) and open-ended questions to gain personal experiences and perspectives (see Appendix A). This qualitative interview structure allowed the interview to have focus but also afforded some flexibility (Bamberger, Rugh, & Mabry, 2006).

The interview questions were the central component of this phenomenological study and must include "good questions, ones that will enhance the discovery of new knowledge" (Corin & Strauss, 2008, p.69). This researcher developed the interview questions based upon the current literature and published research surrounding the education of students with significant cognitive disabilities. In order to address accuracy and reliability, verification of the interview protocol was established through the following:

- Questions were evaluated before use by the dissertation chair and committee members to identify any researcher bias and examine quality related to essential research questions.

- A field test in the form of a pilot study took place prior to the official interviews. Pilot studies are utilized in order to determine whether the actual questions, order of questions, and procedures for collecting data were appropriate for this study (Creswell, 2007). The pilot study was conducted in the summer of 2015 with a population similar to the population in the proposed study. One teacher, one administrator, and one researcher were used in the pilot of the interview protocol. This allowed the researcher to identify any necessary changes prior to conducting the actual interviews (Kvale, 2007).

- During the final one-on-one interviews, this researcher listened to what the participant was saying not only for meaning, but for intent, terminology, and non-verbal cues

(Seidman, 2006). Conversational strategies were a focus in the hopes of establishing a

connection with the participants.   Developing a rapport with each participant increased

the depth and breadth of the responses in addition to generating honest feedback during

the interview.

- The exploration of the participants' backgrounds, knowledge, experiences, and

  perceptions were bracketed, analyzed, and compared according to qualitative

  phenomenological research standards.

Data Analysis

The data analysis spiral described by Creswell (2007) was used to organize, classify, and

synthesize the data. The research questions remained the guide for determining what data should

be considered and what may be extraneous information (Leedy & Ormond, 2007). Following the

completion of the interview transcripts, this researcher contacted each participant to solicit their

feedback on their recorded responses, which is commonly referred to as member checking (Miles

& Huberman, 1994). Once the participant member checks were completed and the researcher

received verification that all participants agreed with the content of their interview transcripts,

then the process of coding began.

Creswell (2007) describes two stages of data analysis applicable to this

phenomenological study. Open coding was used within each set of interviews in order to

organize the data and begin to identify distinct concepts and categories within the data. The

researcher looked for categories that reflect the perspectives and experiences of the participants.

This included similarities and divergent perspectives (Leedy & Ormond, 2007). The data was

scrutinized for key words and/or phrases that routinely appeared across interviews (Bogdan &

Biklen, 2007). This information was recorded in an Excel spreadsheet.

Open coding was followed by axial coding to confirm the themes identified through the initial analysis with the goal of determining relationships between the themes. More definitive categories were created by organizing the open codes. The axial codes were categorized by titled themes that emerged from the collective experiences of the participants (Creswell, 2007). The researcher sought out a colleague in the field of special education research and practice to peer review the data and confirm the results.

Trustworthiness

According to Nutt-Williams and Morrow (2009) there are three areas of trustworthiness that need to be considered in qualitative research: "integrity of the data, balance between reflexivity and subjectivity, and clear communication of findings" (p. 577). This researcher aimed to address these three areas by

- clearly outlining the purpose of this research study and communicating the significance and findings according to the standards outlined by the dissertation committee and McKendree's Institutional Review Board;

- achieving saturation of the data through adequate interview data (Creswell, 2007);

- member checks to verify the accurate representation of the participants responses;

- conducting peer reviews of the study, which will be carried out by the dissertation committee comprised of research experts both within the field of education and qualitative research methods;

- external audit of the study by a researcher in the field of special education who is not directly connected to this dissertation. This individual examined the process and data analysis for accuracy and bias (Miles & Huberman, 1994);

- bracketing of data.

Bracketing is a common method used in qualitative research to avoid personal bias impacting the study and reducing the validity and rigor of the research (Tufford & Newman, 2010). This researcher attempted to bracket all personal experiences related to the perception of teaching students with significant cognitive disabilities literacy skills within elementary public schools. This took place through the form of memo writing throughout the data collection and analysis phases. In addition, through the interview protocol pilot phase, the researcher gathered feedback from the volunteers to identify questions that may uncover bias.

Role of the Researcher

This researcher is an administrator employed in a public middle school that serves students with significant cognitive disabilities within a self-contained setting. In addition, the researcher has personal experience related to students with significant cognitive disabilities. The researcher is a parent to a child with Angelman Syndrome. Individuals with Angelman Syndrome are non-verbal, have learning difficulties, require extensive physical and learning supports, and have health related concerns mainly in the form of seizure activity. As a result of the researcher's family dynamics, a high level of interest was developed related to the methods of how individuals with significant cognitive disabilities learn and how they are taught within the public school setting. The researcher is part of numerous support and research groups related to the field of study. While bracketing allows the researcher to protect the validity of the research data, Tufford and Newman (2010) point out that having a deep personal connection can be advantageous to the process by allowing for, "deeper levels of reflection across all stages of qualitative research…which may enhance the acuity of the research and facilitate a more profound and multi-faceted analysis of the results" (pg. 81).

Summary

The purpose of this phenomenological study was to describe the central phenomenon of special educator, administrator, and key researcher perceptions of literacy education for students with significant cognitive disabilities with the hopes of better understanding why the research to practice gap exists in today's public schools. Three central research questions were explored that allowed the researcher to gather data related to the background, knowledge, beliefs, and practices surrounding literacy instruction for students with SCD. Chapter 3 provided the rational for conducting a qualitative research study following the phenomenological protocol. The context of the study, participants, data collection methods and analysis were all outlined.

Chapter 4: Results

The purpose of this study was to explore the training, beliefs, practices, experiences, and systemic supports of special education teachers and administrators in public schools as it relates to teaching literacy skills to students with significant cognitive disabilities. This information was combined with perceptions of researchers in the field of literacy instruction for students with SCD. This study was guided by the question, what are the perceived barriers to implementing a balanced literacy approach for students with significant cognitive disabilities as reported by teachers, administrators, and researchers within the field of special education? The three research questions that guided this study were the following:

1. What is the current knowledge base and understandings of administrators and teachers as it relates to teaching literacy skills to students with significant cognitive disabilities, how do they acquire this knowledge, and how has this knowledge changed over time?
2. What are the perceived needs that need to be fulfilled in order for a systemic shift from a functional literacy curriculum to a balanced literacy curriculum approach to occur as reported by administrators, teacher, and key researchers in the field?
3. How does efficacy and beliefs held by teachers and administrators relate to the translation from research to practice as it corresponds to literacy instruction?

The results presented in this chapter represent the findings from interviews with thirteen individuals: 4 key researchers, 5 special education teachers, and 4 administrators. The data

analysis of these in-depth interviews yielded the following themes: acquisition of knowledge, current perspectives and understanding of literacy education, factors influencing curriculum decisions, high-quality and relevant resources and supports, and systemic changes. These themes will be discussed in detail with supporting details from the research.

Participant Descriptions

A brief summary has been provided in order to better understand the individuals participating in this study. This information was gathered from the background questions asked during the interview process. The following is a synopsis of the information they provided and includes quotes from the recorded conversations.

Administrator 1. This participant was in her third year as principal at an elementary school within District C. Prior to her current placement, Administrator 1 was an assistant principal for three years. A more direct role with students with significant cognitive disabilities has ensued from her leadership within District C. She has an undergraduate degree in elementary education and a master's degree in administration. Administrator 1 is currently working on her doctoral degree in administration. The school is a member of a special education cooperative and serves students in two resource room and a classroom designated for students with autism that "hosts the neediest elementary students in the entire district." This cooperative is unique because it supplies a full range of staffing and supports. Teachers, paraprofessionals, and related services are all provided through the cooperative. In addition, administrators specializing in special education serve as joint leadership with the local district administration. When asked to describe any general personal experiences with individuals with special needs, Administrator 1 responded, "I always had students with special needs in my own classroom."

Administrator 2. This participant has assumed the role of building principal for District D for one year. Prior to this year, she has been principal and assistant principal of two schools within District D for a combination of twelve years. Administrator 2 also has district level administrative experience as a superintendent/principal of a small K-8 district for three years. Her educational background includes a bachelor's of science in education and advanced degrees in administration. When asked how many years she has had a leadership role involving students with significant cognitive disabilities, Administrator 2 responded, "I would probably have that mostly in my principal, not in my assistant principal time, so I would probably say confidently the last five years, besides LEA and things like that." Her current school contains four special education rooms which are a combination of resource and self-contained classrooms for "students with individual needs." Administrator 2 reported, "I have no really personal experiences with kids with special needs."

Administrator 3. This participant is currently in his first placement as an administrator for District B. He is completing his fourth year as assistant principal of an elementary school. After completing an undergraduate in elementary education, Administrator 3 earned a Masters in educational leadership. This elementary school is a part of a cooperative that provides district level supports through related services personnel and training. Special education students are served through services in either resource or self-contained environments. Students with significant cognitive disabilities receive their education through two self-contained/cross-categorical classrooms and may participate in classes such as art, music, and physical education within the general education setting. Administrator 3 described his interactions with students with significant cognitive disabilities as, "…I do discipline." When discussing previous personal and professional experiences with individuals with significant cognitive disabilities,

Administrator 3 stated, "As far as really severe cognitive classes, not a whole lot of interaction."

Administrator 4. This participant served eight years as an elementary/middle school principal and worked for a special education cooperative for four years before being appointed as principal within District E in 2014. Administrator 4 has three advanced degrees, which includes leadership and social work focus areas. In addition to providing general resource services for students within their attendance area, this elementary school also provides specialized services for students with "…some academic skills, but it takes much longer for them to be able to acquire and master" along with programs for students with behavioral and emotional support needs throughout the district. Administrator 4 did not report any personal experiences with students with significant disabilities but drew upon his social work role within a cooperative when discussing his knowledge of this population of learner. "I would be on, sometimes daily if not weekly basis, doing work with families and work with students to be able to connect to services and things of that nature in the community."

Teacher 1. This participant has served District A in the capacity of special education teacher for seven years. She obtained this position immediately after being awarded her Bachelor's degree. For five years she worked as the high school teacher in a life-skills based program. Teacher 1 currently works with ten students in kindergarten through second grade. She identified five students has being "low-functioning autism." One student utilizes an AAC device. Four classroom aides provide additional program supports. Teacher 1 receives additional program support through related services provided by a cooperative. The students are self-contained throughout the school day. Teacher 1 reported that initially she was only

interested in working with students identified as learning disabled but had a difficult time finding a job. She elaborated, "I interviewed multiple times and the only position I was offered was at [District A's] high school and I thought, 'You know, I can do anything for a year', and it ended up being my first love."

Teacher 2. This participant began his teaching career with District D six years ago. He has a bachelor's degree in Cross-categorical Special Education K-12, "basically serving mild to moderate disabilities."   Teacher 3's classroom typically contains students in grades 3-5 but can encompass other grade levels as the district sees fit. Currently, the classroom has seven students of which, "…three are very clearly cognitively impaired and all of them would be cognitively below the standard curve….I feel a little misleading to analyze, but skillset-wise and rate of acquisition of skills is really slow for us. The communication, I'd say [is] the biggest deficit my class has."   Two students currently use an AAC system and an additional two are being considered for a device. Three paraprofessionals provide classroom support. Teacher 2 described and routinely called-upon his personal experiences throughout the interview. "I did a lot of work doing in-house behavior therapy in college…so that's kind of what drew me to this population and where the majority of my skill set is with kind of lower functioning autism."

Teacher 3. This participant obtained her Bachelor's in Marketing and a Master's in Special Education. The career shift was due to, "I started subbing when I graduated, just for something to do, and I landed a full-time subbing position for a high school level at a classroom just like this. I think I spent like three weeks and I was like, 'Oh, Gosh!'…Then I got back in school." Teacher 3 has spent 5 years teaching special education all within District B. Her program consists of eight students in grades two to four. When asked the questions, "Would they all be considered to have significant cognitive disabilities?" Teacher 3 responded, "Yes.

Ranging anywhere from a toddler-ish level to first grade at best, academically." The students are self-contained throughout the day. Two personal aides and one classroom aide provide support.

Teacher 4. This participant is currently a special education teacher within District E and works directly with students with significant cognitive disabilities within a self-contained program. Teacher 4 describes her program as, "…you're gonna see more language-based programs…We see a lot of communication disabilities and I also have a great deal of behaviors due to the lack of being able to communicate…" This year, Teacher 4 serves seven students with the support of four paraprofessionals. All of her students require some level of AAC. Teacher 4 currently has her undergraduate degree in special education and is pursuing a master's degree with an emphasis on behaviors. When asked to explain how she came to be a teacher of students with significant cognitive disabilities, Teacher 1 shared, "My little brother has autism. I grew up around him. I come from a family of teachers; I always wanted to be a teacher. Once I started volunteering in the peer tutoring program at my high school, I just really fell in love with the significant disabilities, and I know that's where I wanted to be."

Teacher 5. This partiicpant spent six years in a special education resource program before obtaining his current position working with students with significant cognitive disabilities three years ago for District F. Students within his program are in grades 3 through 5. Teacher 2 describes his program, "It's more like…self-contained. They're with me for all subjects all day with math, reading, science, social studies. I will have a few students, some of the higher students, that will push out for content and specialists such as art, music, those types of things. But I see students for math and reading all the time." One student requires AAC due to motor and vision impairments. The students have the support of one classroom assistant and three individual aides. Teacher 2 explained how he came to be a special education teacher, "My mom

was a teacher. So, I was kind of like, 'well let's see what that's like.' So, then I did our two-hour internship with the special education program in our high school. I mean, you kind of recognize, but you don't really get to work with them. But it's going into those classrooms and working in that environment, I just fell in love, and so that's kind of how I got into it."

Researcher 1. This participant is currently a researcher and university professor. In addition, she is provides professional development to districts and has marketed several educational products that include literacy resources for teachers working with students with significant cognitive disabilities. Researcher 1 described her motivation to become more actively involved in research for individuals with severe disabilities. "I had experience working in institutions. My career goes back to when people with the most severe disabilities were served in institutions….I was assigned to implement a research study that I felt was inhumane and I had no credibility to challenge or question it and I think that planted the seed...I realized that researchers had the power and influence in voice and it could be used to benefit the students with disabilities or used to perpetuate really bad practices. That's when I decided I wanted to be a part of that change."

Researcher 2. This participant has a background in education and coaching. He pursued advanced degrees in literacy. Researcher 2 teaches literacy courses at a university, conducts research, and offers workshops on literacy instruction for students with significant cognitive disabilities. He has also coauthored reference materials for teachers. Researcher 2 summarized how he began his career in literacy for students with significant cognitive disabilities, "I guess what got me into what I do is an interest in literacy, a fortuitous meeting with David Yoder, an interest in language, a meeting with Yoder at a time when he needed a reading person to collaborate with because he didn't know reading and I didn't know the populations. And, so, that

led from that to everything else...I really have two mentors, Jim Cunningham was the other. Jim and one of his colleagues sat me down at about the same time and very seriously told me that I should reconsider doing literacy in severe disabilities, that that would make me unemployable because reading people don't look at kids who have severe disabilities."

Researcher 3. This participant has worked in the field of assistive technology and literacy for students with significant disabilities for over 20 years. She is an educator and an occupational therapist. Researcher 3 has worked in a variety of educational settings developing model classrooms, developing school- based assistive technology centers, providing teacher and related service provider trainings, participating in assistive technology assessment teams and working directly with students and staff in the classroom. Her primary focus has been on augmentative and alternative communication and literacy for students with the most significant disabilities. After listening to Karen Erickson, an expert in the field of education for students with significant disabilities, speak she pursued a PhD in education.

Researcher 4. This participant reports his primary research interests lie, "largely in the areas of inclusive education, literacy, communication, and then I do a lot of work in the area of behavior as well." He began his career in the mid-seventies while working in institutions, "…when people with severe disabilities were all in institutions…and I became interested in the learning process and how they form, how they develop, what were the issues in helping someone learn that has very significant disabilities." For the past ten years, Researcher 4 has being conducting significant reviews of language acquisition and literacy because, "I don't think [the existing theories of language] are adequate for explaining how language occurs and what it means." In addition to research, he is currently a member of the special education department at a university and consults with families and school districts on inclusion.

Findings

Creswell (2005) identified six steps to analyze and interpret qualitative data. These steps were used in preparing, organizing, coding, forming themes, representing and interpreting findings, and validating the findings from this study. Thirteen interviews were transcribed into 203 pages of verbatim text. After several readings and writing initial reflections, 309 significant statements were extracted from the transcribed texts. Further reduction of the data through the coding process resulted in five emergent themes: acquisition of knowledge, current perspectives and understanding of literacy education, factors influencing curriculum decisions, high quality and relevant resources and supports, and systemic shifts.

Theme 1: acquisition of knowledge. Study participants expressed how educators in the field of teaching students with significant cognitive disabilities acquire knowledge related to their profession. Through examining the descriptions of the participants, it was evident that educators acquire knowledge through university programs, collaborative relationships, professional resources, professional development and continuing education, and web-based resources. In addition to gaining knowledge through these means, all participants identified areas of need within these same categories.

Administrators reported having some undergraduate and graduate courses related to students with disabilities. Three specifically made comments related to these experiences. One administrator shared, "I remember just having one class as an undergraduate." This participant elaborated, "Nothing stands out with [any classes that discussed SCD]." The principal from District D stated, "I remember an undergraduate class of the exceptional child." In relationship to their leadership classes, the administrators had responses ranging from, "None, never

observed, never happened, zero" to recollections of classes centered on legal matters, "In ed admin we had a couple [of classes] that were more legally related than they were necessarily disabling condition related." One administrator voiced that the program was about, "a child has special needs and that was about it. Not what that looked like in a school."

Teachers recalled more details in their college programs and commented specifically on preparing to teach literacy skills to students with significant cognitive disabilities. Teacher 1 commented,

I remember we did a lot with AAC stuff in one class and I feel like there is so much you get in for two years that looking back now, [I think to myself], 'How do they do that in two years and get us through the program?' The whole reading block, it was very academic. Not a whole lot of the semester of the reading curriculum did we talk a whole lot with cognitive. We had a functional class but that was for transition for older kids. We did have an assistive technology class.

Teacher 3 said, "None at all [literacy instructional training]. I got most of my, any sort of math, reading, anything, how to teach, was more so based on LD students. I loved my experiences at [my university] but I was not prepared for this classroom." Other teachers recalled specific programs they were introduced to such as Wilson Language Training. "We did training. I think Wilson's was definitely the big like hot topic when I was in college for decoding." When elaborating on their teacher preparation programs, one teacher stated, "I just don't think there is enough time to teach that [instruction for students with significant cognitive disabilities.]" Another teacher added in regards to how prepared he felt to teach literacy skills, "I'd say 75%."

The research participants were asked to comment on the nature of special education teacher preparation programs as they relate to teaching literacy to students with significant

cognitive disabilities. These participants repeatedly made comments that identified deficits and needs with our preparation programs. "Most teachers have zero training in reading…it's not required by most states." In order to correct this problem the researchers suggested that universities and colleges offer more clinical experiences and solid course work in reading that are cotaught by a special education professor partnered with a reading professor. This was coupled with remarks related to learning theory.

> They [university professors] just teach regular reading and expect the kids and the students to make the connections between I want to work with kids with autism and you're teaching me how to teach guided reading. But, what do I do if they [students] can't talk? Or, what do I do if they come out of a behaviorism background and they won't do anything unless I give them an M & M?...There is no clinical experience on complicated kids.

Another researcher added, "I think the whole thing with special education preparation, it's way more behaviorist based. You know, it's like kind of an applied behaviorist type of approach where they're doing the time delays and those different things."

A second method in which participants reported they acquired knowledge regarding students with significant cognitive disabilities was through collaborative relationships. Teachers predominately made comments about talking to their fellow special education teachers within the district to discuss methods, strategies, and programs. The teachers with the least amount of classroom experience mentioned viewing veteran teachers and speech therapists as experts and sources of support. For example, one teacher stated, "Our junior high teacher, that's who you should be interviewing, not me. She's brilliant and I want to be just like her when I grow up. I soak up anything I can find from her." When asked how he gains knowledge regarding current

best practices and research involving students with significant cognitive disabilities, Teacher 5 responded, "I think collaborating with other people…some kind of talking with others."

Administrator responses to acquisition of knowledge were heavily centered on collegial supports. Building administrators, i.e. principals and assistant principals, all viewed the teachers and district level coordinators as the experts on special education. One administrator stated, "I rely a lot on—I have a really fabulous special ed. chairperson here, and between that person and our school psychologist, our diagnostician, and our process coordinator [to help make decisions]." Another administrator made a comment regarding how he would make literacy curriculum decisions related to special education, "I would go straight to the teachers, straight to the superintendent or special education director, just because they're what I would call experts and leaders in their field." Other administrators expanded their peer network to include individuals outside of their district. Administrator 4 shared, "I have a number of colleagues that I touch base with pretty regularly just to kind of see what they're doing, and what's up and running in other districts, just to see, kind of compare and contrast."

Researchers recognized the importance of peer supports for teachers as a method to gain current knowledge within their field of expertise. In addition, peers were seen as a valuable resource for getting information from the researchers into the hands of the teachers. For example, Researcher 3 asserted,

> Peers are very important. Sometimes it [research information] because one person, I can think of one of our teachers who learned how to do this whole balanced literacy approach and got excited about it an trained all the special education teachers of students with disabilities in our whole district. There are the cases where a peer gets excited and trains and I think that's one of the most powerful ways because if somebody says, 'Let

me show you how I did it with my students....People have to see it and not just hear it.'

Professional resources such as research publications, journals, and professional organizations were discussed throughout the interviews. All three participant groups were asked to report which professional resources were utilized by practitioners. It was widely reported by all participants that the information from these sources was not widely accessed by teachers and administrators. One teacher out five reported that they are currently a part of a professional organization outside of their local union. When asked to expand on why they were not using this particular resource, one teacher responded,

> I was a member of the CEC [Council for Exceptional Children]. I did that for maybe my first years of teaching and just kind of realized I wasn't actually getting anything out of it…I felt that it just took too much sitting on my computer and reading. It just seemed to take too much time. But I do like, they send out, maybe a monthly or something, tips, it's like a page.

Another teacher shared that, while they do not read the publications of the CEC, they have attended the organization's state conferences. One teacher explained that he utilizes a state resource called the Missouri Autism Guidelines Initiative. "It's got a website with research-based interventions that go by domains." One administrator asked if I could give an example of a professional organization or publication related to students with significant cognitive disabilities. When given the information on the Council for Exceptional Children, the administrator said, "I didn't even know that was a journal." A second administrator shared comments on how he viewed the nature of the research published concerning students with significant cognitive disabilities:

> More often than not we're working with psychologists who really focus on the inner
>
> workings of the brain as opposed to these are some of the instructional strategies that are
>
> going along [with teaching students with significant cognitive disabilities].

The researcher participants within this study felt the current research is not reaching

practitioners. This is supported by Researcher 2's assertion,

> That to me is a bigger problem or an equal problem to the textbook and the
>
> graduate/undergraduate preparation, and that is, by and large, special educators, teachers
>
> in general, don't read much research, don't even get the teacher-friendly journals.

All participants were asked to discuss the role of professional development for

administrators and teachers of students with significant cognitive disabilities. Only one

administrator discussed personal attempts to further their education and knowledge in order to

support teachers and students. All of the administrators discussed methods regarding the district

and building leadership attempting to meet the continuing education needs of their teachers.

Combining the comments from each participant group, it was evident that the majority of

professional development for teachers is provided through in-house resources. An administrator

stated, "It's always coming from people within our school district teaching others." A teacher

remarked, "I know a lot of people are just doing like the in-house trainings or maybe there's

someone that's an expert in one area in the district." Two teachers commented on recent

opportunities to talk about lessons, vocabulary articulation, and visit other classrooms within the

district "just to see what is going on."

Several participants commented on the current approach to professional development and

potential opportunities for improvements. While both administrators and teachers mentioned

that all teachers are welcome to participate in any district or building level professional

development opportunity, each group also commented on the value of these meetings, workshops, etc. This can be characterized by Teacher 2's comment,

> [We need] meaningful trainings because you know, we get our PD hours but boy, I have sat through many a PD, well-intentioned that just really is not meaningful to me. It's that active engagement for me, it was missing for those trainings because it was talking about skill sets that my guys are way far away from getting to pacing-wise and such high language that I'd have to spend like all summer modifying one lesson plan, it feels like.

In order to address this need, administrators thought that a more direct and organized approach to professional development was necessary. Administrator 4 felt that his district had a "buckshot approach" to professional development. Another administrator summarized her feelings with, "I think [we need] a long-range plan of implementation. I think very specific goals in mind that scaffold from one thing to the next that increases your teachers' knowledge." However, a potential roadblock to change was articulated by Administrator 1, "I just think it's a lack of— sometimes, I think it seems—I don't believe this, but I think it seems less important or the districts don't focus on things [education for students with significant cognitive disabilities] like that. It's just not a priority."

Each participant group discussed outside workshops teachers may attend in order to gain knowledge. Funding and lack of availability of relevant workshops were sighted as problems by teachers and administrators. The researcher participant group had a different take on workshops. Researcher 2 addressed the quality of presenters leading workshops that are being offered to practitioners,

> Most of the folks who are providing the support for these teachers aren't terribly informed themselves. They read some…but there's a fair amount of misunderstanding….Somebody

is going to have to get out better information in families' hands, in teachers' hands. I

don't know how to do that when people don't read.

Researcher 1 felt that teachers need to have visuals and modeling of the practices in workshops.

This was supported by Researcher 3 suggesting that teachers need to see videos of the strategies

in action with kids like those in the teachers' classrooms. Workshops that just present

information are not efficient because, "They [teachers] just don't know how to do it…It is

[implementing strategies] is beyond their skill level."

The final category of knowledge acquisition identified by the participants was electronic

resources. Primarily the teachers commented on utilizing websites, blogs, and online resources

that may be utilized to purchase prepared curriculum materials from other teachers. The teachers

frequently made comments about obtaining knowledge within their field by, "just researching,

kind of online." The world of social media is also impacting how educators gain knowledge in

their field. "Get on Facebook and look at some of the family groups, and there's a whole lot

more awareness."

Professional educators acquire information related to the field of educational leadership

and teaching students with significant cognitive disabilities through a variety of methods. Based

upon the interviews conducted with all three participant groups, it is evident that some means of

gaining knowledge are more accessed than others and all components discussed have downfalls .

In addition, each participant group mentioned intrinsic motivation to learn as a contributing

factor to ongoing knowledge acquisition. It was reported that administrators, but more

importantly teachers, must have the desire to seek out the research, the strategies, and the

professional development opportunities. "It's teachers hunting around, who are really, really

motivated to try to find out more information."

Theme 2: current understanding of literacy education. This theme captured the essence of administrator and teacher current understanding of the nature of literacy education for students with significant cognitive disabilities. This theme encompasses defining literacy context, perspectives on balanced literacy for students with significant cognitive disabilities, curriculum and programs taking place within the classrooms, and knowledge and application of strategies. Data collected from all three participant groups supported this theme.

Study participants expressed their perceptions and experiences in response to the following question: How do you define literacy? In discussing what literacy means, 11 out of 13 (85%) participants included the idea of reading within their definition, 8 out of 13 (62%) mentioned writing as a component of literacy, 4 out of 13 (31%) believed communication was a part of defining literacy, 5 out of 13 (38%) participants used the term "speaking" within their definition, 5 out of 13 (38%) discussed comprehension as part of their definition, and 2 out of 13 (15%) felt "accessing materials" was part of the definition of literacy. No two definitions were identical. Some definitions were broad, "I think literacy encompasses a lot of things. Reading, comprehension, being able to express what we're doing and reading, being about to hear stories and talk about it. I encompass writing in literacy." Other definitions were succinct, "I use literacy to mean reading and writing for meaning, not a synonym for competence." Two definitions provided by teachers describe a functional definition such as,

> I would think to be able to access just the written materials around you whether that'd be, again, I teach functional life skills as my focus, whether that'd be for enjoyment or just reading an exit sign or going to a store and reading like what different groceries are without looking at the picture, newspaper, being able to find out like the bus situation. Like, literacy for me is those functional things.

When discussing the definition of literacy, two participants added stipulations to their definitions when they went on to discuss how this related to the population of students with significant cognitive disabilities. Administrator 1 elaborated,

> I would say this is literacy/skill based, but they participate in a calendar activity every morning, all students. They're saying hi to each other and making use of the talker to say hello, and they push that student's picture to say hello, and then the other student says hello back to whoever was speaking to them. They are also looking at the calendar and having to look at what specials that they have for the day. It's not necessarily an instructional method, but it is, I think, an important piece of literacy that they're doing some listening and responding every day.

Teacher 4 defined literacy as "an ability to understand what print is." She went on to relate this definition to her students by adding,

> I also think, just being in such a communication-based program that it's also that the kids are understanding that it communicates something. When they go press the button that says, "good morning", they know they're saying, "good morning" to me, that's literacy, that's their speaking, that's their communicating.

The three participant groups discussed their perceptions on balanced literacy instruction for students with significant cognitive disabilities. The three research participants were asked to discuss what balanced literacy meant in terms of students with significant cognitive disabilities. Researchers 2 commented,

> We [some researchers] stopped using that because so many people started using it [the term balanced literacy] as a way of blasting what they viewed as not skills-based bottom-up good instruction. So, people who ought to know better, who do research in the

field of literacy in severe disabilities used it as a political tool to say, 'That's a synonym

for whole language', and then to bash approaches to balanced literacy. So we stopped

using that term and the term we use is comprehensive literacy. It's no different than when

we talk about balanced literacy.

Researcher 1 shared her perceptions with the following statement,

However you do it [balanced literacy instruction], what's exciting is once teachers learn

how to present information, then assess understanding and get teacher and students

engaged with the meaning of that information…it's what opens the door to the whole

academic learning. It opened the door because it showed how to set up academic

learning. It has set up all the learning across all the content.

Administrators and teachers provided their perceptions on their current practices and

reported on their experiences to identify potential areas of need in order to fully implement a

balanced literacy program with the public school setting. Administrators felt that it would be

challenging to have students with significant cognitive disabilities engaged in balanced literacy

instruction. Administrator 2 said, "I think there are a lot of people who would say it would be a

really difficult thing to accomplish. I would hope that they would say, what are the ways we can

do that? What can we do to think outside of the box?" When discussing the idea of moving their

building towards a more comprehensive literacy approach, administrators expressed willingness

to implement but mentioned some reservations. One administrator commented, "We have a

scope and sequence from our school district that you have to be following." Another principal

stated, "We would need to take it slow, get comfortable with some things, and then add

complexity layers as we go. Yea, I think that would be something we need to continue to

develop here."

Teachers expressed their perceptions as they answered questions related to their current understanding of balanced literacy, how they viewed their current literacy practices in relation to balanced literacy instructional methods, and how they would respond if their administrator would direct them to move towards a balanced literacy program for their students. Two out of five (40%) teachers reported that they felt their program was in alignment with the components of a balanced literacy program. However both of these teachers acknowledged that aspects of a comprehensive literacy program were missing, most noticeably, the writing component. "Writing is not something at this level, that in special ed, that gets a lot of focus." A teacher commented on the writing program as a fine motor skill of copying and/or tracing letters, words, and sentences. Three teachers incorporated the concept of ability to describe when balanced literacy instruction was appropriate. One teacher stated,

> With my higher learners, with my lower learners, we are just left to right, we are just matching. But with my kids who are actually capable of doing some of the gen ed curriculum, I would say, I really try to. We try to spell the words out, we try to cut the sentences up and place them back. We read the story, we find the word within the sentence, and maybe that's just because I don't know how to do it any other way, but it might be balanced.

The other two teachers described their understanding of balanced literacy as being a more unstructured approach that would make it difficult for their students to learn. The following is a comment by Teacher 2, "I'd say it's [current literacy program] probably farther on the drilly side by nature of my students. Open-ended stuff is really tough for them. They are kids who really need a lot of structure. So we do our Wilson's modified…sight words…group readings." Teacher 5 said, "I like [balanced literacy]. I think it's a great idea to be able to do all of those

things, but then again, I think it's harder to focus necessarily on being able to run around and to those different activities…I know going into it that it's going to take a little longer up front to teach those activities." All teachers responded that they would be willing to undertake a more comprehensive literacy approach with their students if directed to do so by their administration. Two teachers added humorous comments of, "Oh, kill me now!" and "I would need someone to block my door when try are trying to run away from me because they [the students] don't want to do it."

Teachers were asked to discuss their current reading curriculum. Through this discussion this researcher was able to better understand how teachers classify and view curriculum. Curriculum is defined as, "all of the experiences that individual learners have in a program of education whose purpose is to achieve broad goals and related specific objectives, which is planned in terms of a framework of theory and research or past and present professional practice" (Parkay & Hass, 2000, p. 3). Typically, the main components of a written curriculum include: alignment with/of standards and objectives, sequence/pacing, student learning experiences, assessments, and supporting resources (Glatthorn, Boschee, Whitehead, & Boschee, 2015). Based upon the data, it was evident that teachers identify curriculum as a synonym for programs, more specifically, marketed products.

> The only curriculum I have is Edmark…Then we have tons of supplemental things that we've created, or I found on Teachers-Pay-Teachers that they do along with it…I might pull up a story on Reading A to Z (Teacher 3).

> We don't have a whole ton of curriculum. We really, pretty much everything that I have, I have made. I do have News 2 You, which is an awesome log-in that we have been given by the district which is great and unique. We like that. I do use Edmark reading

instruction for sight words. I will try to take things like Words Their Way and adapt them to make them Velcro or easier to manipulate for my students. (Teacher 4)

We don't have a particular reading curriculum. It's like reading language intervention. We started using that. It's focused for students with Down syndrome. We pull things from there. I mean, it's all sorts of Edmark sight words because a lot of the students, we focus on sight words as opposed to the whole phonics. (Teacher 5)

I do direct instruction approach. It's Reading Mastery and Connecting Math Concepts for kiddos accessing that program. If for some reason, they are not testing in there, I develop their own curriculum based on their IEP goals. For my student that has an AAC device for Nova Chat, we strictly work on therapy type things with her, crossing over what she's working on in therapies to here. We have tactile cards that she works with, with her ABCs, non-verbal/low vision. (Teacher 1)

All teachers mentioned the Edmark sight word program and 3 out of 5 (60%) mentioned News 2 You as part of their curriculum. Three out of five (60%) mentioned purchasing materials from the website, Teachers-Pay-Teachers, to use as a source of curriculum. There were some comments that were unique to certain teachers such as Teacher 2's comment, "I feel like when you've got those low skill sets, the best curriculum I've found has been via the VB MAPP for what skill set my kids need to work on."

Another component of curriculum that surfaced during the interviews with the teachers was the autonomy of decision making regarding what is occurring within the classroom. While two teachers mentioned having some type of district provided scope and sequence, all teachers stated it was up to them to determine the curriculum. Teacher 5 said,

There's a guide book like functional life skills curriculum, but it's based on the Illinois

Learning Standards and that has been updated at times…but we really have a lot of

autonomy with kind of what we do in there [classroom], which is nice. It's not structured

as other classes.

Through the semi-structured conversations with teacher and researcher participants, the

final component of Theme 2, knowledge and application of strategies, emerged. Educators have

the responsibility to apply the most appropriate and effective research-based strategies in the

classroom. This expectation is not just for general education teachers; special education teachers

have the same expectancy. An examination of the data revealed the nature of instruction

currently taking place in the represented schools. In addition, the analysis of the researcher

comments shed light on national trends within this component.

The strategies utilized by the teachers within the five districts had commonalities. All of

the teachers described one-on-one instruction to be the best method of delivery. Sight word

instruction was heavily relied upon by 4 out of 5 (80%) of the teachers. The sight words were

selected either using the Edmark program or the Dolch word list. 3 out of 5 (60%) of the

teachers reported some form of reading to their students with subsequent follow-up activities

such as sequencing. 3 out of 5 (60%) discussed writing strategies though copying and tracing.

All of the teachers mentioned using behaviorist methods of discrete trials within their

classrooms. Often this was related to labeling objects or pictures. All of the teachers responded

that they had students with AAC within their classrooms. Each teacher was asked to describe

their instructional approach to literacy with their students with AAC as compared to the rest of

their class. 4 out of 5 (80%) of the teachers used different teaching strategies for these students

than their verbal peers. Teacher 1 uses primarily Reading Mastery in her classroom. When asked about her student who uses AAC, Teacher 1 responded,

Her literacy looks a little different. She's got tactile cards. They're big because of her vision...ABC cards with a letter and a picture and puff paint on the letter so she can feel and we say the letter. That's what we've worked on all year with her, she's got D and T and we just started C today. That's her literacy and we also incorporate her talker with those language skills.

Teacher 3 described her approach to teaching literacy to her students as using thematic books, sequencing, read alouds, and some journaling in addition to sight words. She described approaching literacy for her student with and AAC device as follows, "He works on literacy where he's on discrete trials to learn the name of common objects...then we hope to use pictures and hope to teach him identifying those words on his device."

Teachers also reported their experiences with incorporating sight word instruction into their lessons. They had mixed feelings on the efficacy of this instructional strategy. For example, Teacher 3 reported she uses Edmark and Dolch words for fluency instruction. She further explained what she viewed as a negative aspect to this approach. "Like they know the letter sounds, a little boy can sound out mmm, aaaa, tttt, mmm-aaa-ttt, and then they say, 'me', because he knows how to read the word against the letter 'm' so it's 'me'." Another example Teacher 3 shared, "The hardest thing is I've watched those boys do the lessons at the back, I would literally pull the exact same words and make it look different in the lessons in the [front] and then it's gone. That's sad and frustrating to see that breakdown." She then added, "If I saw a breakdown in every single kid that I worked with, we wouldn't use it." Teacher 4 said,

We fly through Edmark, and they understand that when it reads, 'find the blue fish', they

find the picture of the blue fish and put it there, and they get that and it's great….But then

the majority of my kids, they see the word, they know the word, but they have no idea

what the word means. Comprehension is out the window when you are only teaching

word instruction…What's the point of memorizing that word if it means nothing to them?

Researchers were asked to comment on their experiences and perceptions related to

today's public school approach to teaching literacy. Three phrases were used to describe teacher

current practices and instructional strategy implementation: inconsistent, extremely poor, and

non-existent. Researcher 2 shared, "Non-existent to not very good…You don't walk into a

school and expect to see good instruction. I'm surprised when I do. But, I get surprised more

often now then I used to." Researcher 3 reported, "Hit or miss, right; totally depends on the

teacher and like one school might have a teacher doing really awesome things and the other

teachers might just not get it. I would say that it's still a rarity where teachers really get it and

are doing it in a meaningful way…" Researcher 4 added, "Extremely poor application of

research in the classrooms." Researcher 1 stated, "We have a lot of research on a lot of strategies

right now. We just need to get the teachers using them." All of the researchers reported that the

vast majority of today's literacy programs for students with significant cognitive disabilities are

centered on sight word instruction. Researcher 2 said, "I see sight word instruction using

Edmark, or flash cards, or Dolch lists. I see alphabet instruction in isolation; I can tell you more

about what I don't see than what I do see." Researcher 4 asserted,

So, you'll see second graders working with flashcards of community signs. You'll see

work with phonemic awareness or phonics with kids where they will keep working on it,

keep working on it, keep working on it, and there is no reading. It's like learning to use a camera but never having any film in the camera.

The researchers elaborated on the drawbacks to sight word instruction. All of the researchers felt that, while sight word instruction has a strong research base, it is not a solid or comprehensive approach to implementing literacy instruction for any student. Researcher 2 expressed, "It's an approach to teaching one literacy skill that there are actually better ways to teach more efficiently…Both of those [Edmark and flashcards] are memorization approaches that are, for most kids who are beginners, developmentally inappropriate and don't take them anywhere even if they learn them." Researcher 1 reported,

> …The whole word approach is inefficient for people with memory problems. You're introducing an approach where you have to memorize every word you're ever going to read and still become fluent readers. They need strategies to decode and go in and use text in other ways.

Three researchers discussed what they believed was important to add to or change with our existing approaches to literacy instruction for students with significant cognitive disabilities. Teachers need direct and specific literacy training. "The [special education teachers] are trying to help these kids-well intentioned- trying to help these kids [with] a near absence of understating about how people learn to read and write, and so they grasp the existing materials." 3 of the 4 (75%) researchers made statements about the need to draw upon strategies that are used for general education students. Researcher 4 explained,

> Good instruction is good instruction. Kids with severe disabilities can learn just like the other kids and sometimes we just have to augment that learning. We augment materials, we augment with additional trials, we may use some pre-teaching…

Researcher 3 highlighted, "Everything we're going to do for kids without disabilities is pretty much the same for our guys [students with SCD] except it's going to have a tweak on it so they can access it." 100% of the researchers felt that students with significant cognitive disabilities need lots of access to books, contextualized use of print, and opportunities for meaningful writing.

Theme 3: factors influencing curriculum decisions. Data collected from the thirteen in-depth interviews lead to a third theme encompassing the factors influencing curriculum decisions for students with significant cognitive disabilities. The experiences and perspectives reported by the participants revealed five factors: the role of education for students with significant cognitive disabilities, expectations, individualization, and context of access to the general education curriculum. Each of these factors will be discussed in detail with related data from the interviews.

Arguably, the reported purpose of education has changed through the course of history and can differ between individuals regardless of their background. "Education should be a means to empower children and adults alike to become active participants in the transformation of their societies. Learning should also focus on the values, attitudes, and behaviors that enable individuals to learn to live together in a world characterized by diversity and pluralism" (United Nations Educational, Scientific, and Cultural Organization, n.d.). Each of the individuals interviewed made comments within the conversations that demonstrated their views on the purpose of education for students with significant cognitive disabilities. These comments often were within the context of discussing curriculum and instructional decisions.

Teachers and administrators held strong opinions regarding the purpose of education for students with cognitive disabilities. Four out of five (80%) of the teachers mentioned one or a

combination of the terms socialization, behaviors, and functional, when discussing the role of education for their students. In addition, the term independence was mentioned by both teachers and administrators. Teacher 3 stated that students with significant cognitive disabilities should be, "learning how to work independently." Administrator 3 replied, "Something basic that can meet their needs….Giving kids opportunities to take care of their own learning and doing things on their own, so independent types of things too." Teacher 4 said, "their behavior is the most important thing in this classroom" but later added, "literacy creates independence for them, where they don't always have independence." Teacher 5 mentioned,

> So it's kind of do we focus on the full functional skills of getting ready? I mean those really basic functional skills which we need as well or the academics of science, social studies which, again, a lot of them are not picking up 100% of that,…I'd be nice for me if it's a functional life skills class.

Administrator 2 felt there was a balance between academics and social that needed to be met, "….I feel they are both equally tied together because if you can't function in the world, then what good is that, but then, you have to be able to do something too, in the process."

The researchers discussed the argument against functionality as the purpose of education for students with significant cognitive disabilities. Researcher 5 asserted,

> It is unethical to keep doing this. I mean there's no-the concept of function is one of the most ridiculous ideas that's ever been out there. When you work in inclusive schools, as I do, you see functionality just emerging as a result of being with peers and being part of their lives.

This notion was supported by Researcher 1's response, "We just don't even think sometimes, we get off on these tangents of what's functional and it's not even functional. We have enough time

in school to do it all."

Expectations related to perceived student ability were identified by the participants as a component of determining the appropriate literacy program for students with significant cognitive disabilities. 6 out of 13 (46 %) of the participants mentioned the concept of using a student's perceived level of cognitive ability to determine the appropriate literacy program for students with SCD. Teacher 4 stated, "With my higher learners [we do balanced literacy], with my lower learners, we are just left to right, we are just matching. I don't really do a whole lot of alphabet stuff for my kids that are right there [identified lower level]. Maybe I should, but I need to, you just need to look at what's going to be functional for these kids." Another teacher responded, "We have a really good book room. This year, we haven't been using it as much but again, because skill set-wise, but in the years past, I've had kids that I have reading from bookroom books and able to do stuff." Teacher 3 used the following scenario to explain her expectations,

> For a kiddo that I'm working on, solely, or not solely, but mostly potty training and how
> to sit in a chair, or how to walk appropriately in the hallway, he still gets those things
> [academics]…but if you can't walk in the hallway, but he knows how to read, then
> what's the payoff there? But, the other kids, I think it's extremely important.

The second focus on expectations appeared in comments about student communication abilities. Three participants made statements in relation to this belief. Administrator 4 discussed his district's philosophy, "In the Level 2 program, some are beginning to take basic literacy. There's a lot more communication. In Level 3, there's limited to no communication, and we are looking at more of that life skills type of approach. So we have a blend of life skills and academics, whereas the academic piece is significantly less of a focus in Level 3." Teacher 5

described, "One of my students, she has Rett syndrome and how she communicates is kind of by just looking. She has no hand function, non-verbal…I think her focus could be spent somewhere else. The reading is not helping necessarily with her." This teacher shared that he did not believe literacy instruction was appropriate for this particular student since she could not use her hands and couldn't speak.

The participants highlighted the notion of individualization when speaking about curriculum and instructional strategies for students with significant cognitive disabilities. This concept was discussed in regard to learning styles, student needs, and learning outcomes. In addition, all of the teachers mentioned that there would be no single curriculum that would meet all of their students' needs. Administrator 4 expressed,

I think it has to be personalized…it depends on where the student is and what their needs are, what some of the outcomes we're expecting are, and what we can do to be able to support them along the way in order to move them towards those outcomes.

Researcher 4 indicated,

It's all individualized based on the teacher that's in that particular room and the kind of ways she does instruction and the materials that are already available in that room and the other students that are in that room and the lesson that is being taught...It's more a process of predicting one step ahead. You have a goal you know you have an overall goal of where you're going. But you move forward in terms of changing how you teach in relationship to what just happened rather than reading a book and trying to find five techniques that might work. A good teacher simply works with what they've got right then and they move forward with that process.

The final concept related to Theme 3 is the beliefs held by the participants in relation to providing access to the general education curriculum. These beliefs can influence the instructional experiences offered to a student with significant cognitive disabilities. Ryndak, Moore, Orlando, & Delano (2008-2009) identified three interpretations of what it means to provide access to the general education curriculum: context, content, content, and context. Eight participants remarked about their notions of the purpose and value of access to the general education curriculum. Two out of eight (25%) interpreted access in terms of context. One administrator commented,

> I think the key word is 'access'. So, if they are getting the exposure, I'm all about
> having kids with peers that are setting a good example for them, or showing them just the
> peer modeling and having kids with their age-appropriate peers whenever that's possible.
> We try to include our [students with significant cognitive disabilities]; they come to our
> assemblies. The do our celebrations with us.

A teacher simply stated access meant, "being able to see normal behaviors in the hallway, having appropriate models." Three out of eight (38%) discussed access in terms of content. One participant said, "I think it's [access to the general education curriculum] is a good idea. I think the more that we expose students to different types of literacy, different types of stimulus, different types of things that they need to be able to consume the better." Another participant articulated,

> We struggle with that [district scope and sequence] because we are so far removed from
> the general education curriculum…It's difficult [providing access]. We've really had to
> go on an alternative curriculum. We've done gen. ed. curriculum in the past and they

made so little progress off of it that we started working towards an alternative curriculum

for that very purpose.

Two out of eight (25%) described access in terms of both context and content. Both of these

participants were researchers. Researcher 4 explained,

I think kids are being exposed to rich content and people are finding that these kids are

fascinated and interested with certain things they never would have had access to before.

One of the kids I work with, he was still included in the 5th grade and they were doing

this book about the civil rights movement called, "The Watsons Go to Birmingham". It's

like a mini chapter book--he never would have had that in a self-contained classroom.

And he was absolutely fascinated with it. Any time anybody would walk into the

classroom, he'd hold the book up just to whomever and say, "Read, read."...And people

were floored. But because he is in a gen-ed classroom he gets exposed to that rich

content, he's learning in ways that he wouldn't have been if he was in another classroom.

Getting exposed to...vocabulary words, concepts, building background knowledge...

One participant, a teacher, made separate comments in regards to access that demonstrated

conflicting beliefs in regards to the idea. His first comment was in alignment with the content

definition, "Science and social studies, I pull from the textbooks. I kind of look at the grade

level textbooks for the students…" He later added, "I think the environment is kind of being

exposed to it, just kind of getting that exposure and trying to be in a peer-mentor program, which

helps, but, I mean, whole parts of the day is just kind of sitting and listening [in the general

education setting].

Theme 4: high quality and relevant resources and supports. Through examining the

descriptions of the participants' experiences and responses to interview questions, it was evident

that the participants believed specific resources and supports were necessary in order to fully implement a comprehensive literacy program for students with significant disabilities. The data revealed that the two main reported needs were staffing and materials. Members from each participant group identified these areas as critical needs.

Teachers and administrators discussed the need for an adequate number of highly-trained paraprofessionals within the classroom that serve students with significant cognitive disabilities. Administrator 1 expressed,

> You have to have enough support and I think those people also need to be trained. Quite often, paras are hired that don't necessarily have degrees. They're just trained, but a lot of times I feel like we should have people with degrees working with these students. I don't think this is just something they can ever hire anyone off the street to do.

All of the teachers discussed the significant role paraprofessionals play within their daily instruction. 100% of the teachers use paraprofessionals to deliver content and assess student understanding. Teacher 3 offered a current problem with this arrangement, "Sometimes I'll see a difference between who is offering the lesson, between what's acceptable and maybe it's not right. Sometimes I'll step in and do it, and see where they're having a little bit of trouble." Teachers also described using aides as a means to control student behaviors. In order to effectively implement a balanced literacy program, teachers claimed they would need more paraprofessional support in order to manage the classroom. One teacher asserted, "1:1 in a perfect world…because you are managing difficult behaviors and trying to take data."

In addition to paraprofessionals, the data revealed that the participants viewed a need of more of a team approach to addressing literacy goals. A statement that supports this assertion came from Teacher 5,

We have so many students that go out for speech, social work, OT, PT,…to get them [related services staff] involved more as well, especially speech…Sometimes there's a disconnect. They have their goals, we have our goals. If we can kind of focus those goals together when it comes to the IEP. Time to work together and talk about those things designated just for that [literacy education].

Administrator 1 summarized, "It's about the relationships that you have to make sure students are successful. Then I think you can learn the literacy and the comprehensive approach to that after you have the right people on board."

Eighteen separate comments were identified by this researcher as being related to the need of high quality, relevant, and appropriate instructional materials. As previously mentioned, all of the teachers stated they played a heavy role in developing instructional materials for their classroom. In addition, teachers reported finding many of these materials on the internet. These materials have no guarantee that they are based upon sound theory or research based. One teacher acknowledged that the resources she utilizes are specific to students with autism even though not all her students have this diagnosis. She has yet to find a resource that meets the needs of all of her students.

Teachers would like prepared curriculum materials that address the diversity of their students. Teacher 4 stated, "If some sort of curriculum was leveled, I think that it would be a little easier." Teacher 5 said, "…age appropriate but easier" in regards to curriculum material needs. There are drawbacks to prepared instructional materials. They are not a curriculum and they will never meet the needs of every child with significant cognitive disabilities. Researcher 1 explained,

I really like to teach people to cook from scratch. I love making up lesson plans and I

love to train teachers how to do that and I think that's ideal. I also think in today's role,

just as people can't cook from scratch even if they love it like I do every day, because in

today's world, you have to have some things that are ready for you, already prepared.

Researcher 1 added, "I think they [teachers] have to see it [balanced literacy] and I think they

have to be given samples on materials that they can use in their classrooms tomorrow.

Teacher training on implementing the materials and related strategies is critical. One

teacher exclaimed, "I have all these materials that people dump on me and I don't know what

they are or how to use them!" Both researcher 2 and 3 discuss the importance of modeling and

more specifically having teachers watch videos of the implementation in action. Researcher 2

elaborated, "Seeing more examples of things other than a behaviorist approach…if you look at

the DLM videos, there's not much behaviorism in that."

The instructional products mentioned and used by the majority of the teachers; e.g.

Edmark and Reading Mastery, are prescriptive programs based upon a behaviorist theory of

learning. Researcher 3 cautioned,

Those programs [prescriptive] are the ones that are getting out there. The ones that are

prescriptive like that where they have lessons, I mean really scripted, with data forms and

that's all like based on applied behavior analysis. But people just don't understand the

different approaches to teaching literacy they just like that...administrators see these great

boxes...They look really appealing. But, you know, like with the behavior based

approaches, kids are going to gain like the mechanical skills quickly. You check the box,

they did it, they did it, they did it. But, they don't own it in the big picture, right.

Two researchers had advice to pay close attention to marketing claims of products being research

based. "If you look of the research [on] like Herbert Gillingham and Correct Reading and those

old programs, the research is not good on those…The sample sizes are really small and they got not so favorable reviews. I was shocked because, well, everybody uses this so it must be good, but it's not."

Theme 5: systemic changes. In order for change in instructional practices to occur within public schools for students with significant disabilities, systemic changes need to occur. Systemic change is comprehensive and recognizes that changes in one aspect of the system require changes in other areas (Banathy, 1992). Throughout the thirteen transcribed interviews, data emerged indicating that the participants' lived experiences and reported perspectives supported this theme. Four components of Theme 5 were identified: perpetuation of practices, role of instructional leadership, educational partnerships, and societal lens in that we view individuals with significant cognitive disabilities.

The functional curriculum design for students with significant cognitive disabilities replaced the developmental model in the 1980s. The data collected in this research study supports the finding of previous researchers who concluded many teachers today still employ these practices within their classrooms on a daily basis. Students are not regularly receiving access to the general education curriculum in terms of context and content that includes comprehensive literacy instruction. A systematic perpetuation of practices was revealed through the interviews with all participant groups. Teacher preparation programs need change. All of the researchers described the university and college education programs as being behind the research. Researcher 1 shared,

> We have an aging faculty in special education…In fact, most of us were educated in the late 70s and early 80s and that, of course, for us functional skills were new then...we were the generation that convinced people to stop doing the old developmental

model/mental age teaching skills. That took a lot of advocacy and a lot of hard work.

And I think that generation feels like if we are losing those gains because those were hard

fought gains and we are going to lose them now. ..I think that's the problem. Books and

professors have come from a generation of people who had one type of focus and have

not shifted very well.

Researcher 3 said, "They're [university professors] from the tradition from eons ago where it

was just functional based. They're just hanging on to it and I don't think they understand

literacy instruction." Researcher 4 contributed, "Many of the professors that I work with; they're

not there. They don't grasp it. Andy they came out of programs where they were taught

that….those kids have serious disabilities and you do something different." He later added,

Most professors are still--they're still locked into the old way of thinking. So, [pre-

service] teachers hear that with kids with more severe disabilities you have to work on

functional skills and you teach sight words. And they are like three year olds or like five

year olds or like one year olds or whatever. And so they go out with that and then they

go into schools where everything is segregated, where everything is still functional skills.

They're handed a curriculum. They're told this is what you're going to be doing. And

that's what they do. So, at that point, there is no change in the people or the school. It

goes on. It continues itself.

Teachers rely on building administrators to be resources for information related to

instructional best practices, effective assessments, and knowledgeable on current education

research and trends. This need does not change for teachers of students with significant

cognitive disabilities. None of the teachers interviewed described their current building

administration as actively involved in their curriculum, instruction, assessments, or professional

development. All of the teachers were hesitant to mention the lack of administrative involvement. Two of the teachers paused and clarified that the interview data would remain anonymous.   Two teachers added qualifying statements, "This is just a different world" and "I don't know if that's really their job." The teachers described the support they did receive as behavior management, approving resources for purchase, or answering questions.

Each of the participating districts had administrative structures that included district level administration with an expertise in special education. All of the administrators commented on these higher-level educational leaders having more of an active role in the placement and instructional programming for students with significant cognitive disabilities than those within the buildings. Two of the administrators stated they had a role within the IEP process. Two administrators stated their role was more behavioral supports. "Understanding when you have a discipline situation, what to do with kids who have special needs." When asked to describe his role related to the instructional program for students with significant cognitive disabilities, Administrator 3 said, "I really don't have any involvement. I don't make decisions for that. Not really my job." All of the administrators were asked to describe their sense of efficacy if they had to be the instructional leader related to literacy for students with significant cognitive disabilities. Two of the administrators replied with firm "not prepared" responses. The remaining administrators discussed calling upon their understanding of general education literacy practices to help guide them in addition to calling upon district-level leadership for support.

Researchers, university faculty, practitioners, and product developers need to work together to build educational partnerships. The current research on literacy education is not making it to the classrooms. Researcher 1 said "It's just sad that some of the strategies that have come out [of the research] still have not permeated some areas the way I wish they would."

Researcher 2 stated, "What we need is more collaborations that are interdisciplinary; this is a complex population." Researcher 4 contributed to data to this theme when he stated, "The researchers themselves are not attending to what could be happening in schools. And those people in school are not attending to that really forward thinking research that's coming out of a few people…" Partnerships between the schools and universities are important but Researcher 1 said the problem was, "there just aren't enough of us to go around. That's the problem you get, there are just large pockets of people who don't have a professor anywhere near them who has one foot in the schools as well as knowing the research."

Finally, a change in how society views individuals with significant cognitive disabilities is required in order to make the shift from a functional curriculum to a more comprehensive learning experience for these students. Researcher 4 made the following statement,

> I think most people in special education, probably throughout the world, and the communities are still--if you were to say to them, 'do you think a person with severe disabilities is human?' they would say yes. But the reality is they don't treat them that way....They treat them as different. And so, it's until people recognize that there's a fundamental humanity that's associated with everybody and that you can't make distinctions based on labels that would say this person belongs in this program and this person does not. You know that that entire distinction is a false one. But I would say 90% of the people thing you can make those distinctions.

Researcher 2 shared, "Difference is scary to people and difference is what people highlight as opposed to, okay this kid can't talk or walk, but you know what, they all learn to read and write like anybody else."

When we alter the discussion to directly speak about literacy instruction the conversation still places emphasis on differences and perceptions of ability. Researcher 3 said when we start discussing literacy, "the whole lens of how we look at kids without disabilities is gone." Distinctions are also made between those individuals labeled as being mild to moderately disabled compared to those students classified as having significant cognitive disabilities. Researcher 4 explained that society sees the first group of individuals as being able to learn to read but those in the perceived lower ability level aren't approached with the same expectations; they need a different placement and they have different expectations. The importance of this shift can be summed up with a parent statement as reported by Researcher 4. This child was one year fully included within the general education setting and had full access to the general education curriculum. The following year her placement changed to self-contained. Researcher 4 attended the annual IEP meeting with the mother as the child's advocate. The mother cried at the conclusion of the meeting and said, "Last year my child was a reader, this year she's a child with Down syndrome."

Summary

The purpose of this phenomenological study was to explore the perceptions and lived experiences of building administrators, special education teachers, and researchers who study literacy education for students with significant cognitive disabilities in order to better understand the potential barriers to implementing a balanced literacy approach for students with significant cognitive disabilities. Three research questions guided this study are as follows:

1. What is the current knowledge base and understandings of administrators and teachers as it relates to teaching literacy skills to students with significant cognitive disabilities? How do they acquire this knowledge, and how has this knowledge changed over time?

2. What are the perceived needs that need to be fulfilled in order for a systemic shift from a functional literacy curriculum to a balanced literacy curriculum approach to occur as reported by administrators, teacher, and key researchers in the field?

3. How does efficacy and beliefs held by teachers and administrators relate to the translation from research to practice as it corresponds to literacy instruction?

Data was collected through thirteen in-depth semi-structured interviews. After using qualitative data analysis as described by Cresswell, five themes emerged from the participant conversations: (a) acquisition of knowledge, (b) current perspectives and understanding of literacy education, (c) factors influencing curriculum decisions, (d) high quality and relevant resources and supports, and (e) systemic changes.

Research question one was designed to get a better under understanding of the current knowledge level of public school practitioners in regards to literacy for students with significant cognitive disabilities. In addition the research aimed to determine how educators learn about current special education pedagogy. The themes 1 and 2 emerged from the collected interview data. Participants mentioned comments related to perspectives and understanding of literacy 82 times and statements pertaining to acquisition of knowledge were mentioned 79 times. Today's educators gain knowledge through many sources. University programs seem to play less of a role of the knowledge base related to teaching students with significant cognitive disabilities. Peer relationships, professional development, and electronic resources were predominately discussed by participants as means to acquire understanding of pedagogy. The definition of literacy varied between individual participants and between participant groups. Current understandings of research and pedagogy by teacher and administrators was dominated by behaviorist methods and appeared to be rooted within a functional curriculum framework. This

was not consistent with the statements presented by the majority of the researchers.

Each portion of the interview aimed to identify perceived needs in order to shift from a behaviorist functional approach to literacy education to a more comprehensive constructivist design that was the intention of research question 2. Each of the five themes included collected participant statements that reflected needs directly declared or were indirectly ascertained through comments or lack of comments made by the participant groups. Participant responses identified needs within each theme and their related components.

Research question 3 was intended to gain an understanding of how educator beliefs and sense of efficacy related to teaching students with significant cognitive disabilities and how this translated to literacy instruction. This researcher was listening to statements that captured the essence of each individuals believes throughout each interview. In addition, specific interview questions were asked in order to elicit responses that would capture participant beliefs and sense of efficacy. The answers for this research question contributed to the emergence of each of the five themes identified through the data analysis process. Beliefs and efficacy transcended every area of the interview with each participant with the most emphasis appearing in themes two and four.

This chapter focused on the results of the study and provided a detailed analysis of each participant responses to interview questions. It was clear from the emergent themes that each participant group perceives barriers to implementing balanced literacy instruction for students with significant cognitive disabilities. Chapter 5 provides further discussion on this topic, including limitations of the research, implications of the results for practice, and concludes with suggestions for future research.

Chapter 5: Summary and Discussion

This researcher conducted this study to explore the barriers to implementing a balanced literacy approach for students with significant cognitive disabilities as reported by administrators, teachers, and researchers within the field of special education. This final chapter of the dissertation restates the research problem and reviews the major methods of the study. The remaining sections of this chapter summarize the results and discuss their implications.

Summary

This purpose of this qualitative phenomenological study was to explore the formal training, beliefs, practices, experiences, and systemic supports of special education teachers and administrators in public school as it relates to teaching literacy skills to students with significant cognitive disabilities. This information was combined with the perceptions of key researchers in the field of literacy instruction for students with SCD as related to these same focus areas.

The focus of this study was to explore teacher, administrator, and researcher experiences and perceptions of literacy instruction for students with significant cognitive disabilities. The central question guiding this study was 'What are the barriers to implementing a balanced literacy approach for students with significant cognitive disabilities?' The central question was supported by three research questions:

1. What is the current knowledge base and understandings of administrators and teachers as it relates to teaching literacy skills to students with significant cognitive disabilities and how do they acquire this knowledge and how has this knowledge changed over time?

2. What are the perceived needs that need to be fulfilled in order for a systemic shift from a functional literacy curriculum to a balanced curriculum approach to occur as reported by administrators, teachers, and researchers in the field?

3. How does efficacy and beliefs held by teachers and administrators impact the translation from research to practice as it relates to literacy instruction?

A qualitative research design was selected by this researcher in order to capture the essence of the phenomenon. Semi structured interviews were conducted with thirteen individuals selected using purposeful sampling methods. Five teachers, four administrators, and four researchers participated in the research interview process.

The interview protocol addressed participant background along with perceptions and beliefs regarding training, professional development, knowledge of literacy and related research and pedagogy, in addition to personal and system needs. The findings of the interview data yielded five emergent themes of acquisition of knowledge, current perspectives and understanding of literacy education, factors influencing curriculum decisions, high quality and relevant resources and supports, and systemic changes. Many of the outcomes were in alignment with existing literature. Clear conclusions emerged about participant perceptions of literacy education for students with significant cognitive disabilities and potential barriers to implementing a balanced literacy approach with this population of students.

Discussion

Current perspectives and understanding of literacy instruction was the theme that was most prominent within the interviews. Participants mentioned comments related to perspectives and understanding of literacy 82 times within the semi-structured interviews. Current perspective and understanding of literacy is a theme inclusive of definitions of literacy,

perspectives on balanced literacy for students with significant cognitive disabilities, curriculum and programs taking place within the classrooms, and knowledge and application of strategies.

The participants had widely varying definitions of literacy; however, the majority of the participants included reading and writing as part of their definitions. The narrowest definition was stated, "literacy is reading." The broadest definition asserted, "literacy is the ability to read and write with comprehension; to enjoy a book; to enjoy writing. To know that with literacy you can connect with other people and that you can share what's in your head, to make your opinions known and then to be able to express yourself." The participant comments also showed a wide range of understanding of the concept of balanced literacy instruction. The broad range of definitions from all of the participants serves to substantiate Keefe and Copeland's (2011) statement that there are four different ways to define literacy: literacy is the teaching of basic skills associated with reading and writing, literacy is necessary to develop thinking skills, literacy is for personal satisfaction, and/or literacy is the key to successful participation in all areas of one's life. The data also supports Downing's (2006) claim that many educators and researchers have expanded their definition of literacy to encompass instructional practices and outcomes that no longer focus on conventional literacy skills.

Many of the teachers felt balanced literacy was an unstructured approach and a combination of teachers and administrators did not feel a comprehensive approach to literacy instruction would fit into their current curriculum and instruction frameworks. None of the administrative or teacher participants mentioned being familiar with current research related to balanced literacy instruction for students with significant cognitive disabilities. The importance of keeping abreast of current pedagogy was listed as professional responsibility and cited as a best practice by the University of New Hampshire's Institute on Disability (Jorgensen,

McSheehan, & Sonnenmeier, 2002). All of the researchers were versed in the components of balanced literacy program and cited the approach as a counterpoint to a functional curriculum and described it as best practice.

All teachers and administrators mentioned some level of reluctance to implementing a balanced literacy approach within their schools. An educator's sense of efficacy related to their ability to implement an educational program contributes to the educational decisions within their classrooms. A teacher is more likely to carry out a particular behavior if they have a high level of confidence and believe there will be successful outcomes (Bandura, 1997). The practitioners interviewed appeared to have little confidence in their ability to translate balanced literacy research and related strategies into practice. All of the researchers cited balanced literacy as a counterpoint to a functional curriculum and described it as best practice.

All of the teacher participants used names of programs and the concept of curriculum and strategies interchangeably. Every teacher described sight word instruction and prescriptive approaches to literacy instructional delivery. This approach is in contradiction to instructional practices that are found in comprehensive literacy programs that characterize general education programs (Erickson, Hanser, Hatch, & Sanders, 2009). Some teachers included components of emergent literacy components such as shared readings, journal writing, and access to self-selected reading materials but these were not portrayed as the dominant focus of daily lessons. Writing as a whole was noticeably absent from the curriculum that follows the findings of Light & McNaughton (2006) that found writing is often ignored in literacy conversations for students with significant cognitive disabilities. How administrators reported their perceptions of what transpires within daily literacy instruction for students with significant cognitive disabilities was in contradiction to what the teachers stated. This data coincides with the practice and knowledge

barriers identified by the research conducted by Zascavage and Keefe (2004).

Acquisition of knowledge was mentioned 79 times within the participant interview statements. This theme included university programs, collaborative relationships, professional resources, professional development and continuing education, and web-based resources. Administrators and teachers discussed their pre-service experiences at the university level. Current administrator preparation programs require little to no formal coursework in the area of special education (Mitchell, 2001; Thompson, 2010, Outka, 2010; Patterson, Marshall, & Bowling, 2000). This was substantiated by the administrative participants who consistently sited either having legal-based or no classes related to special education and none reported having any class that discussed significant cognitive disabilities. Both administrators and teachers recalled having basic level courses related to disabilities. Overall, the practitioners reported that the university programs did not prepare them to work with students with significant cognitive disabilities. This was supported by the researchers reported experiences and beliefs that current university programs are not adequately preparing special education teachers to either teacher literacy or students with significant cognitive disabilities. These findings substantiate the assertion made by Cole, Furnham, Hudek-Knezevic, and Jaroslaw (1997) that, collectively, teachers do not have the necessary education or training regarding scientifically-based instruction related to students with learning disabilities

All participants stated that their superiors, colleagues, and peers were the main source of knowledge acquisition regarding instruction for students with significant disabilities. This was viewed as a valuable resource for all participants. These results correspond to Cook, Cook, & Landrum's (2013) suggestions to disseminate research using the supports of educators in the field by using knowledgeable teachers in the field to develop materials and spread information to

influential practitioners.

All participants reflected upon professional development for teachers of students with significant cognitive disabilities. Teachers stated that administrators did attempt to provide professional development but it was often rare, unrelated to their students, or they couldn't translate it to action within the classroom. Administrators sited poor funding, lack of knowledge of available professional development opportunities, and an unfocused approach to professional development as barriers to quality continuing education for special education teachers. The researchers substantiated the claims of the teacher and administrators and called for greater access to high quality professional development. The participants' collective statements seemed to portray that students with disabilities are not explicitly included within the districts' professional development plan as recommended (Jorgensen, McSheehan, & Sonnenmeier, 2002).

Electronic sources of information appeared to be favored by teachers and they often consulted blogs, websites, and crowdsourcing sites such as Teachers-Pay-Teachers. Researchers acknowledged the positive aspects of electronic sources of information, such as ease of access, but cautioned a close examination of the quality of those sources. Jorgensen, McSheehan & Sonnenmeier (2002) describe the essential components of a curriculum and include research-based strategies. The resources published on the internet do not guarantee this requirement.

Seventy-nine statements were relevant to the theme of factors influencing curriculum decisions. This theme included the factors of: the role of education for students with significant cognitive disabilities, expectations, individualization, and context of access to the general education curriculum. This theme validated the attitude barriers identified by Zascavae & Keefe (2004).

How the participants viewed the role or purpose of education for students with significant disabilities was tied to their discussions regarding the type of literacy instruction that took place within the classrooms. Society's response to educating students with disabilities has changed over time. The teacher responses seemed to depict a purpose and approach to education in alignment with the characteristics of a functional model that manifested in the late 1970's.

All of the teachers clearly stated they were ultimately in control of the curriculum and instructional strategies employed within their programs. All of the teachers mentioned terminology associated with characteristics of a functional curriculum: behaviors, socialization, independence skills, and sight words. Teachers and administrators discussed finding the balance between developing good behaviors and independency with academics. All of the teachers felt the behaviors were the top priority. The beliefs and perceptions reported by the practitioners give the impression that the represented districts are not utilizing current legal requirements and research related to curriculum for students with significant cognitive disabilities. "It's no longer acceptable to offer educational programs to students with significant intellectual disabilities that focus solely on skills that are unrelated to the general curriculum in the name of developing other life or functional skills" (Erickson, Hanser, Hatch, & Sanders, p.6). Expectations of student ability seemed to be based upon IQ, motor skills, verbal skills, and behaviors. In 1985, Ferguson conducted a study examining teacher curriculum decisions. Ferguson concluded that teachers make curriculum decisions based upon stereotypes of their students and their perceived idea of what the children would be able to do as adults. The statements collected from administrators and teachers seemed to support Ferguson's findings.

All of the researchers discussed their experiences in terms of their personal research and work within public schools. Each researcher shared their observations of scenarios that

demonstrated students will obtain functional skills and gain literacy skills through academic programs that are inclusive, provide access to the general education curriculum, and access to quality literacy instructional practices. The researchers made comments related to the current state of literacy instruction for students with significant cognitive disabilities and described our current implementation as inadequate.

All of the participants mentioned the notion of individualization when it comes to curriculum and instruction for students with significant cognitive disabilities; however, their interpretation of this varied. School personnel described individualization as each student needing a different literacy program; whereas, researchers described individualization as finding methods for students with disabilities to gain access to the same curriculum dependent upon the students' strengths and challenges. Participants had different opinions on what access to the general education curriculum meant and its importance to students. The inconsistency of understanding what "access to the general education curriculum" means and its impact on curriculum and instruction has been studied by several researchers (Dymond, Renzaglia, Gilson, Slagor, 2007; Rose& Meyer, 2001; & Ryndak, Moore, Orlando, & Delano, 2008-2009). The participant's definition of access was in alignment with their views on the purpose of education and expectations for learning.

Participants contributed 37 significant statements related to the theme high quality and relevant resources and supports. Two main components surfaced within these statements: staffing and materials. Teachers placed the most emphasis on needing more and highly qualified paraprofessionals within their classrooms. From the teacher comments, it was clear that paraprofessionals are providing direct instruction to students with significant cognitive disabilities. Teachers and administrators made statements that alluded to the need to obtain

highly trained and educated individuals to fulfill the role of paraprofessional. In addition, teachers reported that in order for balanced literacy instruction to occur, they would need support staff to monitor the increased behaviors they predicted would take place upon implementing this approach.

Each participant group felt that materials would be necessary in order to implement a balanced literacy curriculum for students with significant cognitive disabilities. The current materials used with the classroom were either in alignment with a functional curriculum or were based upon the behaviorist learning theory. Well-developed materials with accompanying training would assist teachers in making the transition within the classroom. The teachers mentioned needing a curriculum that was already leveled as a primary need. Researchers recognized that teachers do not have the necessary literacy training to make the materials and would need a starting point in order to begin to change their instructional practices.

Finally, 58 statements were collected under the theme of systemic change. A universal change in educational practices in regard to teaching literacy to students with significant cognitive disabilities would require changes in our perpetuation of ineffective practices, the current role of administrators as instructional leaders for all teachers, educators and researchers working in isolation, and societal views regarding individuals with significant cognitive disabilities. Research or knowledge of the outcomes of research related to instructional strategies related to a balanced literacy for students with significant cognitive disabilities were not mentioned by teachers or administrators during interviews. Some administrators were aware of instructional strategies related to comprehensive literacy instruction for general education students but rarely made the connection to students with significant cognitive disabilities. The literacy instructional programs represented by the participants relied heavily upon behaviorist

strategies and functional curriculum components.

A researcher pointed out that the majority of today's current university professors are from the era in which education for students with significant cognitive disabilities was based upon the functional model. Based upon the comments of all participant groups, it would appear that a barrier could be that the special education professors that are charged with preparing our future teachers are not imparting knowledge related to the most recent research. From the data, it then seems novice teachers are then in the schools using antiquated information that is further reinforced by fellow teachers who have been using these methods for years. A conclusion may be that no new information is making its way to the classrooms unless a teacher independently seeks it out.

The administrators interviewed predominately viewed their role as a member of the IEP team and behavioral support. With the implementation of IDEA and NCLB, the principal is responsible for making knowledgeable decisions in education for all students, including those with disabilities (Patterson, Marshall, & Bowling, 2000). Administrators need a solid background in special education law, special education programs, and best practices (Thompson, 2010). All of the building administrators relied upon district-level administrators as their source of instructional leadership for programs servicing students with significant cognitive disabilities. The majority of the administrators did not feel they had enough knowledge to lead an instruction change in literacy for these classrooms. Teachers did utilize building administration for instructional guidance and even reported that district level administration supported their instructional autonomy.

Based upon the conversations with all three participant groups, it appears information on research related to students with significant cognitive disabilities is not reaching every

schoolhouse. The purpose of curricular research is to guide practice (Shurr & Bouch, 2013). The

participants reported that the nature of research from journals is not known or useful as a source

of information. The data supported the need for universities, researchers, and practitioners to

develop partnerships in order to develop meaningful research, disseminate the information, and

provide feedback.

Finally, how society views individuals with significant disabilities was identified through

the data as a potential barrier to changes in how educators provide services. In spite of the

research, social and academic inclusion of students with significant cognitive disabilities remains

inconsistent; this may be a result of individual and institutionalized beliefs about students with

disabilities (Ryndak, Moore, Orlando, & Delano, 2008-2009). The teachers and administrators

made comments related to perceptions of ability and used these perceptions to guide instructional

decisions. All of the practitioner participants made statements that corroborated the research of

Durando (2008) and Ruppar, Dymond, & Gaffey (2011) that concluded special educators who

teach students with intellectual disabilities prefer life skills based literacy instruction within a

self-contained setting; furthermore, the child's IQ determines whether a child should be taught

literacy skills. The researchers made statements countering the idea of perceived intelligence as a

means to select whether a child is offered an opportunity to not only learn comprehensive

literacy skills but access to quality programs in general.

On the basis of this study alone, it is difficult to account for all the potential barriers to

implementing a balanced literacy instructional approach when working with students with

significant cognitive disabilities.   The data collected through these 13 interviews identify

knowledge acquisition, knowledge of literacy and related pedagogy, processes for making

instructional decisions for students with significant cognitive disabilities, supporting resources,

instructional leadership, perpetuation of institutionalized practices, and belief systems as possible contributing factors to the apparently slow shift from a behaviorist functional model to a constructivist comprehensive model of literacy instruction within public schools.   The results of this study are in alignment with the previous research and literature. In particular, potential barriers identified through this study add further validity to the results of Zascavage & Keefe (2004).

Limitations

There were limitations to this study. First, the number of participants within this study may be viewed as a possible limitation. Although, only thirteen individuals completed the interview process, saturation of the data took place. The researcher made an attempt to build a rapport with each participant. The possibility that the participants were reluctant to fully or truthfully answer certain questions or topics may have impacted the results of the study. All of the school districts and corresponding participants were focused within a specific geographical location; therefore, it is possible that the findings may not be generalized to educators in other areas of the United States. Finally, accessing individuals to participate in the study was an unexpected challenge. The policies and procedures established by the school districts were cumbersome and delayed the data collection process. In addition, approval to conduct research was granted by several school districts but when soliciting practitioners, many declined to participate in the study. Several researchers within the field of significant cognitive disabilities signed consent forms but stopped responding to correspondences to arrange interviews.

Recommendations for Practice

Although a single phenomenological study cannot provide a sound basis for practice recommendations, the combined results of this study and other related research would suggest

that changes are needed within the area of literacy education for students with significant cognitive disabilities. First, the methods post-secondary institutions use to prepare future administrators and teachers to work with students with disabilities, including those individuals with significant cognitive disabilities, should be analyzed and reflected upon. Universities should be staffed with the most knowledgeable individuals who are capable of understanding research literature and, in turn, can develop courses and related clinical experiences that translate research into practice. In addition, revisiting the requirements of teachers and administrators should be evaluated. Administrators within the school building are instructional leaders for all teachers and all students. Preparation programs need to include opportunities to for future school leaders to build a solid special education background. Repeatedly teachers have stated they were not prepared to work with students with significant cognitive disabilities due to their courses and clinical experiences being directed towards students with general learning disabilities. Licensure requirements may need to be examined to determine if returning to specialized certifications would be advantageous.

Continuing education is a critical component of being an effective educator. The school improvement and corresponding professional development plans created by districts need to be written to include the needs of special education students and an understanding of how adults learn. Partnerships between researchers, universities, practitioners, and product developers are necessary to create sound curriculum and instructional practices that are transferable to the classroom in a timely manner. Education and disability organizations are not currently being widely accessed by practitioners. This is partially due to the cost of membership and the applicability of the accompanying resources such as journals. If the purpose of these

organizations is to support educators within the field, then changes will need to be made in order to reach a broader audience and disseminate accurate, meaningful, and actionable information.

Recommendations for Further Research

Additional research seems to be necessary as a result of reviewing the findings of this study. This qualitative study had a limited demographic focus and further exploration of the research questions outside of the mid to southern sections of Missouri and Illinois in addition to the inclusion of middle and high school educators would shed more light on the essence of the identified research problem. The teachers and administrators within this study referred to district level administration; e.g. special education directors, assistant superintendents, as the experts and decision makers when it comes to education for students with significant cognitive disabilities. Expanding the research to include the experiences and perceptions of these individuals in regard to literacy education for students with significant cognitive disabilities may help to identify additional barriers to implementation of research-based curriculum and instruction for this population of students. Finally, the data collected in this study came twelve years after the study conducted by Zascavage and Keefe (2004). It seems that significant changes to educator and researcher beliefs have not occurred in this time span. A study that would closely examine the apparent slow rate of change and the contributing factors would be beneficial. These recommended areas of future research would add data and information to an area of special education that is much needed and could potentially lead to positive changes for students with significant cognitive disabilities.

Summary

This purpose of this study was to explore the barriers to implementing a balanced literacy instructional approach for students with significant cognitive disabilities within the public

elementary school setting. Chapter 5 reiterated the established research problem and

corresponding questions. An overview of the methods utilized to conduct this study was

described. Next, a summary of the results was presented that included limitations of the study.

This chapter concluded with recommendations for practice and future research.

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Appendix A

Courtney L. Castelli
Doctoral Candidate
McKendree University
Lebanon, IL

August 1, 2015

Dr./Mr./Mrs._____
Superintendent
_____ School District
Street Address
City, State Zip Code

Dear_____:

I am a doctoral student at McKendree University seeking a degree in Curriculum and Instruction. In addition, I am currently an Assistant Principal within the Columbia Community Unit School District in Illinois. The focus of my study is literacy education and students with significant cognitive disabilities. I will be examining barriers to implementing balanced literacy instruction with this population of learner as perceived by building level administrators, special education teachers, and researchers within the field.

Your school district has been selected, along with other districts within the bi-state area, to be included in this study. The success of my study depends greatly upon your agreement to allow administrator(s) and teacher(s) within your school district to participate.

With your approval, I will contact a pre-selected elementary building principal and special education teacher who currently serve students with significant cognitive disabilities via a formal letter and invitation to participate in one semi-structured interview. The interview procedure and resulting data will be kept confidential and will be used solely for the purpose of this study.

I will be contacting your office in two weeks to answer any questions you may have and seek your approval/disapproval of your district's participation in the study. In the interim, if you require additional information, please do not hesitate to contact me. You can reach me via electronic mail at XXXXXXXXX or by telephone at XXXXXXXXXX.

Respectfully,

Courtney L. Castelli

Appendix B

Courtney L. Castelli
Doctoral Candidate
McKendree University
Lebanon, IL

August 31, 2015

Dear _____:

I am a doctoral candidate at McKendree University seeking a degree in Curriculum and Instruction. In addition, I am an Assistant Principal with the Columbia Community Unit School District in Illinois. My dissertation is focused on determining the barriers to implementing balanced literacy instruction to students with significant cognitive disabilities.

Your superintendent as agreed to allow me to reach out to in the hopes of obtaining your consent to participate within my study. Your participation would include one semi-structured interview that would take approximately 45-60 minutes to complete. The interview would be conducted by me and would take place at a mutually agreed upon location. The information gained from our conversation would be kept strictly confidential and will be used solely for the purpose of this study.

I realize your time is valuable. In exchange for participating in my study, your name would be submitted in a random drawing, which will include all participants (10-15 individuals), for a chance to win a $100 Amazon gift card at the conclusion of the study.

If you require additional information, please do not hesitate to contact me at XXXXXXXX. I have included a self-addressed and pre-paid envelope along with a response form to be returned to me at your earliest convenience.   I look forward to the possibility of working with you and I thank you in advance for making this project successful.

Respectfully,

Courtney L. Castelli

Appendix C

Participant Consent Letter

You are invited to participate in a research project on barriers to implementing balanced literacy instruction to students with significant cognitive disabilities. This project will be conducted by McKendree University doctoral candidate Courtney Castelli.

In this project, you will be asked to participate in one 45 to 60 minute interview which will be conducted by Mrs. Castelli during the fall of 2015. The interview will take place at mutually agreed upon location. In the interview, you will be asked to discuss your experiences about teaching literacy to students with significant cognitive disabilities. The interviews will be audio-recorded with your permission. The audio files and all other information obtained during this research project will be kept secure. The audio files will be kept in a locked file within a locked office and will be accessible only to Mrs. Castelli. The audio files will be transcribed and coded to remove individuals' names and will be erased after the project is completed and disseminated. You will have the opportunity to review the transcripts of your interview prior to use within the study.

There are no foreseeable risks to participating in this study greater than normal life. There are no direct benefits to you from participating in this study other than the potential to be randomly selected from the pool of participants to win a $100 Amazon gift card. However, I anticipate the results will increase our understanding of how educators currently view literacy instruction for students with significant cognitive disabilities and how these professionals acquire knowledge regarding instructional best practices. The information gained through this study will also help identify perceived needs of educators in order to provide literacy instruction to these students. The results of this study will be used for a dissertation and may also contribute to a scholarly report, journal article, and/or conference presentation. In any publication or public presentation, pseudonyms will be substituted for any identifying information.

Your participation in this project is completely voluntary, and you are free to withdraw at any time and for any reason without penalty. Your choice to participate or not will not impact your job status at your school or institution. You are also free to refuse to answer any questions you do not wish to answer.

If you have any questions about this research project, please contact Mrs. Castelli by telephone at XXXXXXXXX or by electronic mail at XXXXXXXX.

Respectfully,

Courtney L. Castelli

Participant Consent Form

I have read and understand contained in the Participant Consent Letter and voluntarily agree to participate in the research project described within. I have been given a copy of the Participant Consent Letter and the consent form.

_____yes _____no   I agree to be interviewed by Mrs. Castelli and have my responses

audio-recorded for the purposes of analysis and transcription.

_____

Signature   Date

If you have any questions about your rights as a research participant, please contact McKendree University Institutional Review Board at

Appendix D

Administrator Interview Protocol

Background/Building Organization Questions:

Name:

School:

Grades:

Program organization for students with significant cognitive disabilities:

Number of teachers involved with daily instruction for students with significant cognitive disabilities:

Number of support personnel involved with assisting students with significant cognitive disabilities:

University Attended/Degrees Awarded/When:

Number of years as an administrator:

Number of years directly leading programs servicing students with significant cognitive disabilities:

What was is your involvement with the organization of programming that serves students with significant cognitive disabilities?

Curriculum/Instruction Questions:

Define Terms: significant cognitive disabilities, literacy, functional skills/curriculum, balanced literacy

What has been your experience with students with special needs? Significant cognitive disabilities? Professionally and personally

What classes did you take while pursuing your undergraduate work that was related to instructing students with special learning needs? Significant cognitive disabilities?

What course administrative coursework helped prepare you to be an instructional leader for students with significant cognitive disabilities? What do you think was missing?

Describe any additional professional development or experiences that have assisted you in making decisions related to students with significant cognitive disabilities?

What sources of information do you use to gain knowledge and keep abreast of current trends and best practices related to students with learning disabilities?

What role do you play in the curriculum and instructional practices related to educating students with significant cognitive disabilities?

What type of curriculum do you feel is most appropriate for students with significant cognitive disabilities and why?

What does the term literacy mean to you *(provide definition we will use in rest of interview after response)*?

What are your thoughts on students with significant cognitive disabilities gaining access to the general education curriculum as current law prescribes?

How has your school approached the concept of students with SCD accessing the general education curriculum?

Who makes these decisions? Is there a formalized process? Describe.

What does the term student engagement mean to you? How important is it within your classrooms? In what ways do you support this vision? Does the definition of engagement change when you speak of teaching students with significant cognitive disabilities? Why/Why not?

How would you describe your schools current approach to teaching literacy skills to students with significant cognitive disabilities?

Describe your sense of efficacy as it relates to assessing current literacy curriculum and instruction within your school? Does this sense of efficacy change when you add for students with significant cognitive disabilities?

What value do you see in teaching students with significant disabilities literacy skills? What do you feel is the best way to teach students with SCD reading, writing, and comprehension skills?

If current research states that students with SCD can and do learn literacy skills what would be your response?

Are you familiar with the concept of balanced literacy*? If yes, please explain. If not, note and describe for them.* Is a balanced literacy approach used within your school? Specifically for students with significant cognitive disabilities?

If a teacher stated they wanted to incorporate a balanced literacy approach with their students with SCD, what would be your response? How would you support them?

Outline your district's/school's approach to professional development?

How do you support the development needs of special education teachers and staff?

Do you feel that your school currently uses the most current research based practices as they relate to this population? Why/Why not?

What do you feel are the top reasons why published research based best practices for students with significant disabilities are slow to catch on in the public school settings?

In your opinions, what supports, services, etc. would increase the likelihood and success of schools/individuals implementing balanced literacy instruction with fidelity?

Appendix E

Special Education Teacher Interview Protocol

Background Information:

Name:

Universities Attended/ Degrees Awarded/When:

How many years have you worked in special education?/ students with significant cognitive

disabilities?

Current Position:

Age of students currently teach:

How many students:

Number of students with significant cognitive disabilities:

Number of students who use AAC:

Setting for literacy instruction:

Aides?:

Other support personnel?:

Curriculum/Instruction Questions:

Define: Significant Cognitive Disabilities, Literacy, Functional Literacy Instruction, Balanced

Literacy Instruction for purposes of interview

How did you become a teacher of students with significant cognitive disabilities?

Tell me about the curriculum for students with significant cognitive disabilities? Who determines this curriculum?

What constitutes a desirable curriculum for this population? What supports are necessary to effect one?

Where should the instructional program take place for students with significant cognitive disabilities?

How do you define access to the general curriculum?

What value do you see in students with significant disabilities participating in the general curriculum? Literacy?

How do you/the school provide students with significant disabilities access to the general education curriculum? Where do you provide this access? When?

How do you define literacy?

What is it like for you to instruct literacy to your students? What is your current literacy curriculum for your students?

Can you describe any situation in which you have felt teaching a student literacy skills was not appropriate?

If you were to define cognitive engagement for students with significant disabilities, what would it be? How would you compare your students' current literacy curriculum to this definition?

What influences your approach to literacy instruction?

What do you value most in literacy instruction?

What challenges to you face in teaching literacy and how do you attempt to overcome these challenges?

How do you differentiate literacy instruction for children with varied abilities (reading and writing) within your classroom?

What has been your experience with functional literacy curriculum?

How do you define balanced literacy (curriculum & instruction)?

What is your experience with balanced literacy? What is your viewpoint on balanced literacy for students with significant cognitive disabilities?

What access to printed material do your students have? How is reading material selected for your students?

How do you currently assess your students' reading, writing, and comprehension skills?

Some researchers point to a "hierarchy of skills" when discussing reading and writing instruction for students (must recognize alphabet first, then sounds, etc.). What are your thoughts on this philosophy?

What role does Assistive Technology play within your daily instruction? Literacy instruction? How do you decide what AT to use and when?

How do support personnel play a role in your literacy instruction?

Describe a typical literacy lesson for student with significant cognitive disabilities who also uses AAC.

What training did your college experiences provide regarding teaching literacy to students with significant cognitive disabilities?

How do you currently gain knowledge and training regarding current research involving teaching students with significant cognitive disabilities?

When is the last time you have participated in professional development related to literacy instruction for students with significant cognitive disabilities? Where was this at and who facilitated? What was useful/not useful? Were you able to implement any aspects into your teaching? Why/Why not?

What role does building and district level administration play in your daily instruction? Literacy? What support do they provide?

If you administration told you that this year you will be following a balanced literacy curriculum for all special education students, what would be your reaction?

In your opinion, what supports, services, etc. would increase the likelihood and success of schools/individuals implementing balanced literacy instruction with fidelity?

Appendix F

Researcher in the Field Interview Protocol

What lead you to a career in which you conduct research related to individuals with significant cognitive disabilities?

How do you define literacy? Do you think this definition is different for those with significant cognitive disabilities and those who are considered "more able"?

Based upon your experiences, how would you characterize the nature of literacy education for students with significant cognitive disabilities as it exists today in the majority of our public schools?

Do you believe these practices described above are in alignment with the most current research related to best practices for teaching students with significant cognitive disabilities? Explain.

How do you feel research in balanced literacy for students with significant disabilities has impacted the learning experiences for this population?

How do you feel the requirement that all students have access to the general education curriculum/accountability testing has impacted research aimed at educating students with significant cognitive disabilities?

The majority of textbooks used in today's teacher preparation programs place emphasis on a functional curriculum for students with significant cognitive disabilities. Why do you think this is the case? What needs to take place in order for teacher preparation programs to include a more balanced approach to educating students with significant cognitive disabilities?

How do current education practitioners learn about the research you and your colleagues conduct?

What methods do you use to get the "word out" on the research you have conducted?

Stoltz (1981) speaks about a "publish and hope" approach to dissemination within the world of academics. What are your thoughts? Do you think this rings true in the field of special education research?

Green (2008) summated that many researchers engage in the "empty-vessel" fallacy, meaning that there is an assumption made that the practitioner is an empty vessel and is waiting for the information to be given to them so that they can become full of knowledge and this will ultimately spill over into action. Do you agree with Green's position?

Do you believe a research to practice gap exists within the field of special education and more specifically those with significant cognitive disabilities? Explain.

If we agree that the majority of the strategies used within the educational setting of students with significant cognitive disabilities remain rooted in a behaviorist approach, what needs to take place in order for a shift to a more constructivist approach to occur with fidelity?

Legislation states that teachers need to use research based strategies within their classrooms. Some argue that this is very difficult to do for the field of special education and more specifically for student with significant cognitive disabilities. Do you agree? If no, why not? If yes, How do we address this?

Curriculum Vita

Education

- McKendree University, 2016

    Doctoral Candidate in Curriculum and Instruction

- Southern Illinois University – Edwardsville, 2011

    Specialist in Education -Administration

- University of Missouri- St. Louis, 2005

    Master of Education –Administration

- University of Missouri- Columbia, 1997

    Bachelor of Science- Education

Professional Experience

- Columbia Community Unit School District # 4, 2008- Present

    Administrator

- Ritenour School District, 2005-2008

    Administrator

- Hazelwood School District, 2001-2005

    High School Teacher

- Shiner's Hospital for Children, 2000-2001

    K-12 Teacher

- San Leandro Unified School District, 1998-2000

    High School Teacher