

THE BRAIN PROGRAM AND PROMOTION OF
SELF-REGULATION FOR STUDENTS WITH
EMOTIONAL AND BEHAVIORAL DISORDERS: A
CASE STUDY

By

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I have truly enjoyed every part of this study. I continue to be profoundly interested in understanding how to make education attainable for all children. I believe as educators we have the power to truly help children who face so much adversity have a chance at finding productive lives that bring them happiness.

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Abstract: The purpose of this qualitative case study is to explore, through the lens of self-regulated learning theory, the interrelationship of the BRAIN program and the development of positive classroom behaviors for students with emotional and behavioral disorders in a selected Midwestern school district. This study used purposeful sampling to select five school sites implementing the BRAIN program. The study participants were principals and BRAIN teachers at the five school sites. Data were collected through interviews of four principals, five BRAIN teachers, observations, and documents. Identification of self-regulated learning theory espoused by Zimmerman and Campillo (2003), Zimmerman (2000), and Pintrich and Zusho (2002) occurred prior to conducting the study, providing a lens through which to present and analyze the implementation of the BRAIN program at the five school sites. Findings indicated the BRAIN program is a district-led program implemented with consistency at five school sites for grade levels K-8. The BRAIN team at each site has autonomy in flexing the program to meet the needs of students with support from the district BRAIN team. Self-regulated learning theory helps to explain the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors. Through the cycle of forethought, performance or practice, and self-reflection, students learn to self-regulate behaviors and gain control in the general education classrooms. As this cycle continues, students become more confident in their abilities and are intrinsically motivated toward greater autonomy in controlling the behaviors. Additional research could focus on BRAIN students as they progress and exit the program to better understand their perceptions on their ability to self-regulate behaviors.

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CHAPTER I

INTRODUCTION

Each school year, approximately half a million students receiving special education services under the Individuals with Disabilities Education Improvement Act (IDEIA) have emotional and behavioral disorders (EBD) (U.S. Department of Education's National Center for Education Statistics, 2015). Educating students with EBD can be challenging for even those teachers who are highly trained and experienced in classroom management. The least tolerated behaviors among teachers are those that challenge the teacher's authority and ability to effectively manage the classroom. In almost every case, these behaviors are externalizing behaviors including non-compliance, verbal and physical aggression, and disruption (Gresham & Kern, 2004). Moreover, for students with EBD, these behaviors contribute to learning difficulties in reading, mathematics, written language achievement and functional areas (Benner, Allor, & Mooney, 2008; Nelson, Benner, Lane, & Smith, 2004). Compared to other disability groups, students with EBD have lower graduation rates and are less likely to attend postsecondary school (Bullis & Cheney, 1999; Kauffman, 2001). A review of the literature addressing students with EBD reveals numerous likely negative outcomes (Wagner, 2014).

Without appropriate intervention children and adolescents with EBD are at increased risk for school failure, serious mental illness, substance abuse, and adult crime (Quinn & Poirier, 2004). Alarming statistics describe the educational future of students categorized as having EBD. Research has shown that about 50% of these students will drop out of school (Wagner, et al., 1991). The lack of a high school diploma may also be the reason most students with EBD are likely to have multiple short-term jobs during their lives (Wagner, D'Amico, Marder, Newman, & Blackorby, 1992). This erratic employment profile means that these students will earn less than students categorized in any other disability category (Frank & Sitlington, 1997). Research has also shown that children and adolescents with EBD are at a greater risk for involvement in the juvenile justice system; within three years of dropping out of school, approximately 70% of students with EBD are arrested (Jay & Padilla, 1987). The proportion of students with EBD is eight times higher in detention and correctional facilities than in the general school-age population (Quinn & Poirier, 2004). Further, the effects of ongoing patterns of EBD and the resulting antisocial behaviors are likely to continue for generations. Robins, West, and Herjanic (1975) found that "antisocial" grandparents had significantly more children who were arrested and significantly more grandchildren who were delinquent than did grandparents not exhibiting antisocial behavior (Quinn & Poirier, 2004).

Problem Statement

Research supports the notion that children and adolescents with EBD who are not appropriately supported will face lifelong challenges (Kendziora, 2004). There have been a number of programs created and funded at national and state levels that focus on providing an appropriate education for students with emotional and behavioral disorders through inclusion in the general education classroom. These programs are designed to support positive behaviors for these students. However, these programs have been effective in supporting students with severe EBD in

some contexts (Goh & Bambara, 2012) but have been ineffective in others (Lane, Wehby, Little, & Cooley, 2005; Smith, Katsiyannis, & Ryan, 2011).

One reason for this discrepancy may be because some contexts have severe EBD cases that require comprehensive intervention program models to address the often multifaceted and complex issues contributing to the struggles of students with severe EBD (Kern, Hilt-Panahon, & Sokol, 2009; Lane, Wehby, Little, & Cooley, 2005; Maggin, Wehby, Farmer, & Brooks, 2016). The Behavioral Response and Intervention Navigation (BRAIN) program was designed to better serve students with severe EBD who require placement in alternative, more restrictive, classroom settings in a selected Midwestern school district. The BRAIN program is an example of a level system, aimed at improving positive classroom behaviors through self-regulation. Further, a theory that helps explain the management of multifaceted emotional behavior issues is self-regulated learning theory, which postulates that self-regulation includes a three-phase process of forethought, performance, and self-reflection that can assist the development of goal attainment for students with severe EBD.

Purpose Statement

This qualitative case study explored, through the lens of self-regulated learning theory, the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD in a selected Midwestern school district.

Research Questions

This study was guided by the following research questions:

1. How is the BRAIN program implemented and sustained in a selected Midwestern school district?

2. What is the interrelationship, if any, of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD?
3. How does self-regulated learning theory explain this interrelationship?

Theoretical Framework

This study focused on the perspectives and experiences of educators through the development and implementation of the BRAIN program in a Midwestern school district. Therefore, this study is grounded in the theory of social constructionism. Social constructionists hold assumptions that individuals seek understanding of the world in which they live and work. Individuals develop subjective meanings of those experiences or meanings directed toward certain objects or things. Individuals believe that all knowledge is contingent upon human practices being constructed in and out of interaction between human beings and the world (Creswell, 2009; Crotty, 1998). In this study, knowledge was constructed by administrators, teachers, parents, and students through interactions with one another.

This study explored the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD in a selected Midwestern school district. Self-regulated learning theory provided a lens or framework from which to view this study. Zimmerman's self-regulated learning theory has foundations in Albert Bandura's social-cognitive theory which views human functioning as reciprocal interactions between behaviors, environmental variables, cognitions, and other personal factors (Bandura, 1991). An important assumption of social-cognitive theory is that pure intention and willpower is not sufficient for self-regulating of behaviors. According to Bandura (1991), humans have the capacity to proactively control and manage the triadic influences through the use of various regulatory sub processes: observation, judgment, reaction. These components are interrelated, each having an effect on motivation and

goal attainment (Schunk, 2001). These sub processes also do not operate independently of the learning environment; environmental influences can assist the development of self-regulation. This point is important because educators are increasingly advocating that students be trained to self-regulate academic performances (Zimmerman, 1985).

In expanding upon Bandura's definition of self-regulated learning, Zimmerman (2008) proposed a more process-oriented definition of self-regulated learning: self-generated thoughts, feelings, and behaviors that are planned and cyclically adapted based on performance feedback in order to attain self-set goals. Zimmerman depicts self-regulation as a three-phase process of thought, action, and self-reflection. From this perspective, self-regulation occurs in three sequential phases: forethought, performance control and self-reflection. These phases are interdependent so that changes in forethought processes impact performance control, which in turn influence self-reflection phase processes. In general, a self-regulatory cycle is completed when self-reflection processes influence forethought beliefs and behaviors prior to subsequent performance or learning (Zimmerman, 2008).

Figure 1. A Cyclic Phase Model of Self-Regulated Learning

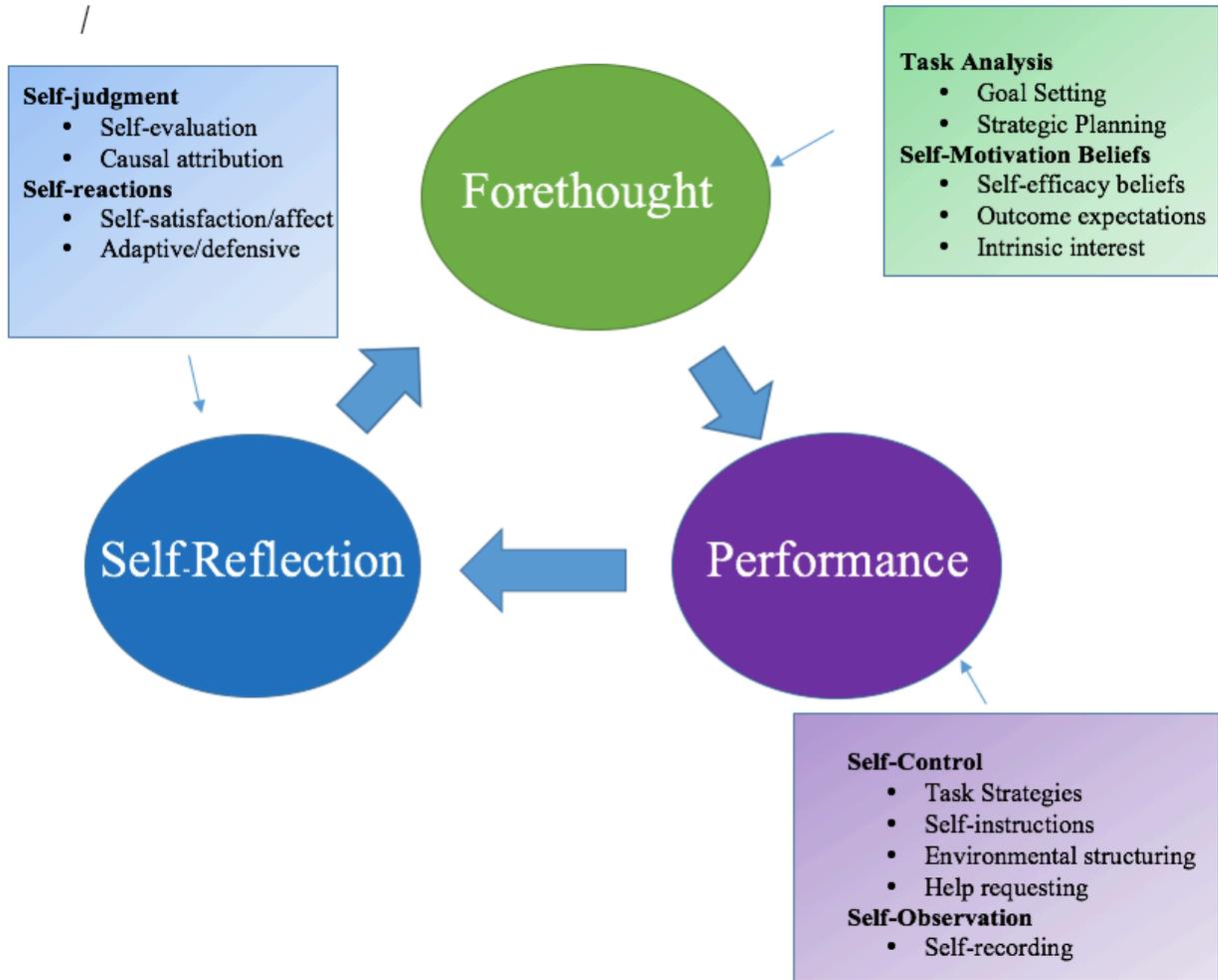


Figure 1. A cyclic phase model of self-regulated learning. Adapted from *Motivating Self-Regulated Problem Solvers* (p. 239), by B.J. Zimmerman and M. Campillo, 2003, New York, NY: Cambridge University Press. Copyright 2003 by Cambridge University Press. Adapted with permission.

Forethought Phase

Self-regulated learning theory posits that actions taking place in the forethought phase are centered on task analysis and self-motivation beliefs (Zimmerman, 2008). Self-regulated learning incorporates planning strategies for a particular learning task. One such planning strategy is goal setting. Before engaging in a task, students set goals to be accomplished during a learning event.

Another aspect of task analysis is strategic planning, which refers to anticipatory actions taken to attain goals that include managing the environment and selecting effective learning strategies. Planning is influenced by self-motivational beliefs, and one's belief in the likelihood of goal completion can be motivating in itself (Van de Bijl & Shortridge-Baggett, 2002). Self-efficacy refers to people's judgments about the capability to perform particular tasks. Task-related self-efficacy increases the effort and persistence toward challenging tasks, which increase the likelihood that they will be completed (Schunk & Zimmerman, 1994). A student with a high sense of self-efficacy, outcome expectations, and task interest is motivated to successfully complete an academic task. Conversely, a student with a low sense of self-efficacy and little interest and expectation of success is much less likely to be successful on the same task (Spruce & Bol, 2015).

Performance Phase

The next phase, performance consists of actions undertaken and beliefs about those actions while immersed in a learning activity. The two major categories in this phase are self-control and self-observation. Self-control involves employing task strategies to maintain concentration and promote on-going learning. Self-observation pertains to tracking one's performance through metacognitive monitoring or formal record keeping. Learners keep track of how well the task is being accomplished during the performance phase, which in turn improves self-monitoring (Spruce & Bol, 2015).

Self-Reflection Phase

Self-reflection takes place after the learning event is completed. Self-judgment entails evaluating whether learning was achieved and determining the reasons for the success or failure of the event (Spruce & Bol, 2015). Self-judgment compares an individual's current performance with a desired performance or goal and is affected by the standards set and the importance of the goals. Goals must be specific and important; therefore, goals such as *Do your best* are vague and will not

motivate. Schunk and Zimmerman (1994) state that specific goals specify the amount of effort required for success and boost self-efficacy because progress is easy to gauge. If one has little regard for a goal, there will be no performance evaluation. Self- reactions to the experience can be satisfying or frustrating. People gain satisfaction when valued goals are achieved. As these valued goals are achieved, individuals are more likely to continue to exert a high level of effort since substandard performance will no longer provide satisfaction (Bandura, 1991). Self-reaction also allows a person to re-evaluate goals in conjunction with personal attainments (Bandura, 1991). Reactions to one's performance can be motivating. If the progress made is deemed acceptable, then one will have a feeling of self-efficacy with regard to continuing and will be motivated toward the achievement of the goal. A negative self-evaluation might also be motivating in that one may desire to work harder, provided the goal is considered to be valuable (Schunk & Zimmerman, 1994).

Procedures

In a qualitative study the researcher is seeking to understand, to describe experiences, or to explore a process (Creswell, 2009; Patton, 2002). I explored through the lens of self-regulated learning theory the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD in a selected Midwestern school district. By using a case study design strategy, the researcher explores in depth a program, event, activity, process, or one or more individuals (Merriam, 1998; Yin, 2012). The goal of qualitative research is to rely as much as possible on the participants' views of the situation being studied (Creswell, 2009).

Setting and Participants

Purposeful sampling was used in this study to select the five sites implementing the BRAIN program during the 2018-2019 school year. This program is unique to this district and has not been implemented in any other district to the researcher's knowledge.

The participants of the study included the behavior specialist responsible for the development and implementation of the BRAIN program at the district level; four building principals; and five teachers at each of the sites who are responsible for implementing the BRAIN program. Using case study research methodology, the focus of this study was on the perceptions and experiences of the participants during the 2018-2019 school year.

Data Collection

Data collection occurred through semi-structured, open-ended interviews of four principals and five teachers at each of the sites implementing the program. Other data included observations of BRAIN classrooms and documents related to the development and implementation of the BRAIN program.

Data Analysis

In order to establish credibility in this study, data was collected from a variety of sources, through prolonged engagement, and persistent observation. Because qualitative research is descriptive research, with the researcher typically involved in a sustained and intensive experience with the participants (Creswell, 2009), it is important to communicate the researcher's biases, values and personal background.

This case study was conducted in the school district in which I work. I have worked in the district for five years and have assisted with the development and implementation of the BRAIN program. These experiences can be useful and helpful rather than detrimental to this study. Because of these experiences I have an intimate view of internal processes of the culture and climate, as well as the internal processes employed in the development and implementation of the program district wide. It was critical to openly communicate the objectives of this study and to

ensure that all participants understood my role as observer as participant. In this role, my participation in this group was secondary to my role as information gatherer (Merriam, 1998). As I engaged with the participants of this study, it was important I remained as objective as possible during observations and interactions.

Trustworthiness was ensured through establishing credibility, transferability, confirmability and dependability. A thick, rich description of the case supports its transferability to similar contexts. All data collected for this study is readily available for an audit.

Significance of the Study

Approximately half a million students receiving special education services each school year under IDEIA are students with emotional and behavioral disorders (EBD) (U.S. Department of Education's National Center for Education Statistics, 2015). Adolescents with EBD that are not appropriately supported will face lifelong challenges (Kendziora, 2004). The ability of school districts to create environments in which students with the severest cases of EBD can learn to regulate academic and social behaviors is critical to overcoming these lifelong challenges. The findings of this study may influence practices at the district and school level while contributing to the larger body of research regarding programs aimed at providing appropriate supports for students with EBD and self-regulated learning theory.

To Practice

This study explored the relationships between the implementation of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD. The findings may assist other educators in creating similar programs in an effort to address the challenging issues of educating students with the severest forms of EBD in the least-restrictive environment. It should provide findings that can be explored in other districts and

recommendations for further research that will be needed in the creation and implementation of programs to address students with EBD. Because school safety remains an important issue, it is imperative that school districts address the needs of students with EBD through programs aimed at self-regulation rather than exclusion from the school environment.

To Research

This study added to the literature regarding self-regulated learning theory in the field of education. There are a number of studies applying self-regulated learning theory to specific academic activities such as writing, mathematics, and overall academic achievement; however, there are few studies applying this theory to behavioral goals for students diagnosed with EBD. This study added to the existing body of research in self-regulated learning theory and supports educators who are currently working with EBD students in creating programs to help students regulate behaviors that model appropriate academic and behavioral goals.

To Theory

This study contributed to self-regulated learning theory by focusing on how students with EBD can learn to control their behaviors through the process of goal setting, practice, and self-reflection, which had not been explored previously. This study showed how the theory can be useful in explaining motivation for students with severe EBD in learning to self-regulate behaviors.

Limitations

This qualitative study focused on a selected Midwestern school district. Due to the nature of the research, the findings are relevant to this particular district and cannot be generalized across an entire population. Additionally, this case study only captured the experiences of those school administrators and district personnel involved in the creation and implementation of the BRAIN program. There were two elementary schools, two intermediate schools, and one middle school that chose to implement the program; therefore, the findings of this study could be skewed due to such a

limited number of participants. However, the findings, conclusions, and recommendations of this study may be of use to school districts in this state and across the country.

Definition of Terms

BRAIN (Behavior Response and Intervention Navigation) – **BRAIN** is an example of a point and level systems program in a Midwestern school district provided to students from kindergarten through eighth grade who have emotional and behavioral disorders and demonstrate a need for focused instruction on behaviors that will promote academic success.

EBD (Emotional Behavioral Disorders)/Severe EBD – The 2004 revisions to IDEIA uses the term *emotional disturbance* to describe students with EBD. According to IDEIA, an emotional disturbance exists when a student exhibits one or more of the following five characteristics over a long period of time and to a marked degree that adversely impacts his or her educational performance: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors, (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers, (c) inappropriate types of behavior or feelings under normal circumstances, (d) a general pervasive mood of unhappiness or depression, and (e) a tendency to develop physical symptoms or fears associated with personal or school problems. Severe EBD is defined in this study as that the behaviors listed above are so severe that students have been suspended for extended periods of time or have been in and out of treatment facilities. In order to be placed in the BRAIN program, a student with EBD must have been served with Tier I and Tier II interventions, yet these interventions have failed to change the behaviors.

General Education Classroom – General Education is the program of education that typically developing children should receive, based on state standards and evaluated by the annual state educational standards test.

IDEA/IDEIA – The Individual with Disabilities Education Act was signed into law in 1997 and ensures students with a disability are provided with Free Appropriate Public Education (FAPE) that is tailored to the individual’s needs. This legislation was re-authorized in 2004 and was renamed Individual with Disabilities Education and Improvement Act (IDEIA).

Inclusion – An inclusion classroom is a general education classroom that has students who receive special education. *Inclusion* is a teaching approach that focuses on including students with special education needs in the general education classroom and school community.

Least-restrictive environment- In the U.S. Individuals with Disabilities Education Improvement Act (IDEIA), least restrictive environment (LRE) means that a student who has a disability should have the opportunity to be educated with non-disabled peers to the greatest extent appropriate.

Point and level systems – Point and level systems are a behavioral management approach that have been commonly recommended by educators; the programs are used for students that exhibit challenging behavior and are discussed in the literature. These programs are designed to be an organizational framework for managing student behavior where students access greater independence and more privileges as the students demonstrate increased self-control over the behaviors (Heward, 2003). Students learn appropriate behavior through clearly defined behavioral expectations and rewards, privileges, and consequences linked to those expectations. This requires specific criteria for advancement to the next level where the student enjoys more desirable contingencies. It is intended that students who proceed through the levels will self-manage and handle increased responsibility, leading to greater independence. There are four main goals of point and level systems: 1) increasing appropriate behavior, 2) promoting academic achievement, 3) fostering a student’s improvement through self-management, and 4) developing personal responsibility for social, emotional, and academic performance (Farrell, Smith, & Brownell, 1998).

Positive Classroom Behaviors – Positive classroom behaviors are those behaviors that allow students and those around them to learn, including accepting consequences appropriately, avoiding acting impulsively, being in control of emotions, disagreeing appropriately, following directions promptly, getting attention appropriately, interacting safely with others, making effective and appropriate transitions, managing aggressive feelings appropriately, respecting property and belongings of others, respecting the personal space of others, having a positive work ethic, considering the contribution of others, and being trustworthy, honest, and ethical.

Self-Contained Classroom/School – A self-contained classroom is composed of children who would benefit from special services within a structured classroom composed solely of children having special needs. In a self-contained classroom, students share similar academic and behavioral requirements. A self-contained school is a school that is dedicated to serving only the needs of students who receive special education services for academics or behavior.

Self-Regulation – Self-regulation is when a person or group governs or polices itself without outside assistance or influence. Self regulated learners control the learning environment by directing and regulating personal actions towards learning goals.

Summary and Organization of the Study

This study is organized into six chapters. Chapter I introduces the study, including the statement of the problem, purpose of the study, and the identification of three research questions. Case study methodology is used to understand the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD. The theoretical framework informing this study is self-regulated learning theory.

Chapter II offers an in depth review of the literature to better understand the research topic. The following topics are addressed: identification of students with EBD and their characteristics, a

summary of programs available with evidence of their effectiveness, the current placement of students with EBD and their appropriateness, and the development and evolution of the BRAIN program.

Chapter III provides a detailed explanation of the research methods and procedures implemented in this study, including participant selection, data collection, and data analysis techniques. The researcher's background and biases are discussed as well as the procedures used to gain entry to the sites. The chapter ends with discussion of trustworthiness of findings and limitations of the study.

Chapter IV presents the data and full descriptions of the sites and participants selected. All data collected through interviews, observations, and document review is presented in detail. Chapter V analyzes the data through the lens of self-regulated learning theory.

Chapter VI sums up the study with conclusions, interpretations, and implications. Implications include the significance of the study to practice, to research, and to theory. Finally, recommendations for future research are provided

CHAPTER II

LITERATURE REVIEW

The purpose of this qualitative case study was to explore the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD. Prior to discussing the supports for these students, it is important first to understand who these students are and the challenges that students with severe forms of EBD present in public schools. Additionally, it is necessary to examine current interventions and programs available for students with EBD, providing the context necessary for understanding the role and evidence-base for implementation of the BRAIN program.

The review of the literature offers a summary of current knowledge pertaining to: 1) the identification of students with EBD, 2) a summary of characteristics of students with EBD, 3) a summary of programs available for students with EBD, 4) evidence of program effectiveness for students with EBD, 5) where students with EBD are currently served, 6) setting type and school performance, 7) a case for more restrictive environments, 8) a review of the key components and strategies included in the BRAIN program, and 9) the evolution of the BRAIN program in a selected Midwestern school district. Each of these topics is important in understanding EBD student populations and the context relevant to the current study.

Identification of Students with EBD

The Individuals with Disabilities Education Improvement Act (IDEIA) directs state education administrators to ensure that students identified for special education qualify under one of the U.S. Department of Education categories of educational disability. The most common category under which students with EBD are identified is emotional disturbance (ED). As stated under section 300.8(a)(4)(i) of the IDEIA amendments of 2004, an emotional disturbance exists when a student exhibits one or more of the following five characteristics over a long period of time and to a marked degree that adversely impacts his or her educational performance:

- (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors,
- (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers,
- (c) inappropriate types of behavior or feelings under normal circumstances,
- (d) a general pervasive mood of unhappiness or depression, and
- (e) a tendency to develop physical symptoms or fears associated with personal or school problems (IDEIA, 2004).

However, there is much research to suggest that many students with EBD are never identified (Bruhn, Lane, & Hirsch, 2014; Roberts, Attkisson, & Rosenblatt, 1998). Lack of identification of students with EBD is problematic as approximately 12% of school-age children have one or more EBD at a particular point in time and 25% meet criteria for having an EBD at some point in their lifetime (Forness, Kim, & Walker, 2012). Despite these numbers, less than 1% of K-12 students meet eligibility criteria for special education services under the category of ED delineated by IDEIA(2004) (Merikangas, et al., 2010). This discrepancy in under-identification can be attributed to the lack of screening in public schools for students with EBD and a lack of

training for teachers in identifying students with EBD due to internalizing behaviors (Bruhn, Woods-Groves, & Huddle, 2014).

Characteristics of Students with EBD

Research has previously delineated the characteristics that are prevalent among students with EBD. The following provides a brief summary of these characteristics, including internalizing and externalizing behaviors, social skills, academic performance, home and school relationships, and long term outcomes.

Internalizing and Externalizing Behaviors

The behavior patterns of children and adolescents with EBD can be classified as either internalizing, externalizing, or a combination of both (Furlong, Morrison, & Jimerson, 2004; Gresham & Kern, 2004). Internalizing behaviors are those that are directed inwardly toward the individual and are most commonly categorized as mood disorders (Kovacs & Devlin, 1998). These behaviors include social withdrawal, depression, anxiety, insomnia, obsessive-compulsive disorder, and suicidal ideation (Gresham & Kern, 2004). Internalizing behaviors are sometimes difficult for teachers to identify because they may be dismissed as the student being shy or socially awkward. However, the lack of identification of these behaviors can be detrimental to the continued development of the child (Marchant, et al., 2007). In contrast, externalizing behaviors are typically more visible and disruptive to the learning environment. Externalizing behaviors are overt and can be described as disruptive, hyperactive, and aggressive (White & Renk, 2012). The most common externalizing behaviors are conduct disorder, oppositional defiant disorder, and attention problems (Hopwood & Grilo, 2010). Whether a student with EBD displays externalizing behaviors or experiences internalizing behaviors, without appropriate

supports and interventions the impact on the child will often be negative in school and in society.

Social Skills Deficits

Social skills are defined as a set of behaviors that allow individuals to initiate and maintain positive social relationships, contribute to peer acceptance and to satisfactory school adjustment and allow an individual to cope effectively and adaptively with larger and more demanding social environments (Kavale & Mostert, 2004). One of the most important aspects of a student's development is the ability to interact successfully with peers and adults. The degree to which students are able to establish and maintain positive interpersonal relationships and terminate negative relationships defines social competence and predicts long term social adjustment (Gresham, Sugai, & Horner, 2001). Although many students have the ability to interact with peers and adults in socially appropriate ways, some find it very difficult and lack the natural capacity to do so. This problem is exacerbated for students with disabilities. According to the U.S. Department of Education's National Longitudinal Transition Study-2 (NLTS2), over 70% of youths with disabilities have significant social skills deficits (Wagner, Newman, Cameto, Levine, & Garza, 2006).

Students with EBD have even greater deficits in social skills. Indeed, it can be argued that two of the five criteria established in IDEIA for identifying students with EBD involves social skills, including an inability to build or maintain satisfactory interpersonal relationships and the expression of inappropriate behavior or feelings under normal circumstances (Gresham, Van, & Cook, 2006). Explicit instruction in social skills is necessary for students with EBD as it is not enough just to expose students to social situations and hope for learning (Sugai, Horner, & Gresham, 2002). Researchers have developed structured, explicit ways of teaching social skills.

The purpose of social skills training is to promote the overall social effectiveness in students with EBD by teaching acceptable social behaviors and skills (Kavale & Mostert, 2004).

Interventions for improving social skills include identifying target goals, modeling, coaching, providing feedback, and practicing in real life situations while being coached (Kavale & Mostert, 2004).

Academic Deficits

Students with EBD earn lower grades in school, are less likely to pass classes, and experience higher rates of dropout than typical students and students with other disabilities (Lane, Barton-Arwood, Nelson, & Wehby, 2008). Multiple studies suggest that students with EBD perform one to two years below grade level, with significant differences in achievement as compared to students without disabilities (Kauffman, 2001; Reid, Gonzalez, Nordness, Trout, & Epstein, 2004; Trout, Nordness, Pierce, & Epstein, 2003). Broad deficits in the areas of math, reading, reading comprehension, vocabulary, and written language are common for students with EBD (Lane et al., 2008). Unfortunately, the literature consistently indicates that students with EBD and academic deficits do not improve over time (Anderson, Kutash, & Duchnowski, 2001; Nelson et al., 2004). Additionally, some research suggests that for some students, academic deficits become worse as students age. For example, a cross sectional study of 155 students with EBD in grades K-12 found even though reading and written language levels remained stable for younger and older students, there were significant differences between adolescents and children in math (Nelson et al., 2004).

A student's placement does not seem to mediate the adverse academic outcomes of students with EBD. A meta-analysis conducted by Reid et al (2004) reported that across all placements, including general education, resource, self-contained, and special school

placement, students with EBD continued to exhibit significant academic delays. In another study, Lane et al. (2005) compared the academic profiles of students with EBD in self-contained classrooms and self-contained schools and found that although students in both settings demonstrated significant academic deficits, students in self-contained schools had lower academic achievement than students in self-contained classrooms.

Disconnect Between Home and School

Research indicates parental involvement in a child's education is associated with better academic achievement and mental health (Pomerantz, Moorman, & Litwack, 2007). Several important federal laws and policies concerning the education and development of children have promoted the role of parents becoming involved in children's schooling. Among these many federal initiatives are the No Child Left Behind Act (2001), IDEIA (2004) and the President's New Freedom Commission on Mental Health (2003). Parent involvement activities that are associated with improved academic achievement include attending parent-teacher conferences and open house events, helping with homework, reading to children, and taking part in workshops and training aimed at improving parenting skills.

Despite the positive effects of parental involvement, students with EBD are less likely to have families involved in education than peers with or without disabilities (Newman, 2005; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005; Wagner, Newman, Cameto, Javitz, & Valdez, 2012). Parents of students with EBD may attend conferences, but typically these conferences involve discipline infractions and suspensions rather than positive interactions aimed at academic success at school (Duchnowski & Kutash, 2011). Additionally, parents of students with EBD are less actively involved in the development of the IEP for academic remediation and transition (Duchnowski, et al., 2012; Wagner et al., 2012). Therefore, it is not

surprising that the research also indicates that parents of students with EBD report higher levels of dissatisfaction with their children's education (Wagner et al., 2012).

Long-term Consequences

The educational and post-school outcomes for students with EBD have been and continue to be concerning as data has shown little improvement since the early 1980s (Bradley, Doolittle, & Bartolotta, 2008). Compared to students in other disability groups, students with EBD experience the poorest outcomes overall (Unruh & Murray, 2014). According to the National Longitudinal Transition Study (NLTS), students with EBD earned the lowest grade point averages compared to students in all other disability categories (Sutherland & Wehby, 2001). As reported by the National Adolescent and Child Treatment Study (NACTS), approximately 40% of students with EBD did not earn a high school diploma (Greenbaum, et al., 1996). When looking at dropout rates by disability category, figures have fluctuated across time, but students with EBD have been found to be consistently higher than any other group of students (Reschly & Christenson, 2006). Data from the NLTS2 revealed that over half of students with EBD dropped out of school, a rate that was double that of general education students (Bradley et al., 2008).

Few students with EBD pursue postsecondary education (Bradley, et al., 2008). Employment outcomes are also bleak as indicated in the NLTS and NLTS2 studies. The NLTS showed that merely half of these students were employed within three years of leaving the school system. This figure has decreased as the later study NLTS2 reported an unemployment rate of only 30%. For those who are employed, the majority worked in low paying jobs that did not require a high school diploma or GED and would change jobs frequently (Bradley et al., 2008; Wagner et al., 2005).

Socially, students with EBD typically have dysfunctional relationships with family members, teachers, and employers (Greenbaum et al., 1996). While participation in prosocial community activities such as volunteer work and participation in extracurricular activities notably increased between the NLTS and NLTS2, so did the arrest rate for young adults with EBD (Wagner et al., 2005). Within two years of leaving secondary school, nearly nine out of ten youths with EBD have experienced at least one of the following: disciplinary trouble in school, loss of employment, and legal arrest (Wagner et al., 2005).

Programs Available for Students with EBD

Research supports the notion that children and adolescents with EBD that are not appropriately supported will face lifelong challenges (Kendziora, 2004). There have been a number of programs created and funded at national and state levels that focus on providing an appropriate education for students with emotional and behavioral disorders through inclusion in the general education classroom. A review of the literature identifies three popular interventions for students with EBD, including Positive Behavior Intervention and Support (PBIS), Comprehensive Classroom Management, and Social Emotional Learning (SEL). These programs, when implemented with fidelity, support positive behaviors for students with emotional and behavioral challenges.

Positive Behavior Intervention and Support (PBIS)

PBIS has been defined as a broad range of systemic and individualized strategies for achieving important social and learning outcomes while preventing problem behaviors in all students (Sugai, et al., 2000). PBIS interventions are designed to prevent problem behaviors by altering the environment, thus reducing the occurrence of problematic behaviors, while concurrently teaching appropriate alternate or replacement behaviors (Carr, et al., 1999). In

schools, PBIS is organized into three levels of support that increase with intensity, from tier to tier, depending on the behavioral responses of the students. Because of this tiered approach, PBIS is often referred to as the 'RTI for behavior' (Bradley, Doolittle, & Bartolotta, 2008; Gresham, Sugai, & Horner, 2001). The first or primary level of prevention focuses on decreasing the number of problem behaviors by ensuring and maintaining the use of the most effective practices for all students (Sugai & Horner, 2002). These include school-wide discipline procedures, classroom-wide behavior management, and effective instructional practices aimed at keeping students engaged. The goal of the secondary level of prevention is to reduce the number of existing problem behaviors by providing additional instructional and behavioral supports for the relatively smaller number of students who are at a more significant risk of school failure and who need more specialized supports than those provided at Tier I (Sugai & Horner, 2002). These supports include the teaching of problem-solving skills and anger management training. Tertiary prevention focuses on reducing the number of existing cases of complex, intense behaviors displayed by students who are at risk for significant emotional, behavioral, and social failure (Sugai & Horner, 2002). The use of specially designed and individualized interventions addresses and decreases the frequency of the problem behaviors. These supports include functional behavior assessments as well as the development of behavior intervention plans. Successful implementation of PBIS programs requires a collaborative team of school-based professionals including teachers, administrators, and other service providers to plan and execute the program as well as evaluate effectiveness (Sugai, et al., 2000).

Comprehensive Classroom Management

This model emphasizes the importance of positive teacher-student and peer relationships in managing student behavior. This model includes many of the components of

PBIS: development of general behavior standards, development of clear classroom procedures and rules, systematic response to rule and procedural violations, and the designing of individual behavior intervention plans for students with significant behavioral difficulties (Jones, Dohrn, & Dunn, 2004). Central to the model is a focus on instructional excellence, active student involvement in creating and learning classroom and school behavioral norms and procedures, problem solving skills, working with parents, and the creation of a community of caring and support. Jones et al. (2004) states that any comprehensive program addressing the needs of students with EBD must effectively implement the components of PBIS and the creation of a positive school-wide climate through using the comprehensive classroom management model.

Social Emotional Learning (SEL)

The focus of SEL programs is to promote and support social and emotional skills in adolescents such as managing negative emotions, being calm and focused, following directions, and navigating relationships with peers and adults. These programs are based on the premise that children need to not only learn academic subjects in school but also develop the ability to get along, regulate emotions, and successfully manage social dilemmas in order to be successful in life (Jones & Bouffard, 2012). The core domains of SEL skills can be grouped into three conceptual categories: emotional processes, social/interpersonal skills, and cognitive regulation. Emotional processes include emotional knowledge and expression, emotional and behavioral regulation, and empathy and perspective-taking. Social/interpersonal skills include understanding social cues, interpreting others' behaviors, navigating social situations, and interacting positively with peers and adults. Finally, cognitive regulation includes maintaining attention, controlling inappropriate responses, working memory, and cognitive flexibility (Jones & Bouffard, 2012). Research linking specific SEL program components to outcomes has been

limited; however, meta-analyses and reviews have identified a set of important issues. One meta-analysis found that the most effective programs were those that incorporated four elements represented by the acronym SAFE: (1) sequenced activities that led in a coordinated and connected way to skills, (2) active forms of learning, (3) focused on developing one or more social skills, and (4) explicit about targeting specific skills (Durlak, Weissbert, Dymnicki, Taylor, & Schellinger, 2011). Research also indicates that SEL skills like academic skills must be integrated into classroom instruction on a daily basis in order to be effective (Jones & Bouffard, 2012).

Evidence of Effectiveness for Students with EBD

Of the three program models, PBIS has the greatest amount of support in the literature, followed by SEL. Comprehensive Classroom Management is described by its authors as a model consisting of research-based supports, but no empirical evidence in the research literature is available at this time to support its efficacy with any student population. Research and meta-analyses on SEL programming is fairly recent in the field, but indications are that SEL programs implemented by school staff members improve children's behavior, attitudes toward school, and academic achievement (Payton, et al., 2008). However, there is little research addressing the outcomes of SEL strategies on students with EBD.

PBIS has become widely recognized as a research-based alternative to traditional reactive disciplinary practices. With extensive data supporting its effectiveness in reducing incidents of problem behaviors in students with EBD, it continues to be endorsed as a best practice in federal legislation (IDEIA). Multiple studies at the school level have found significant reductions in the number of office referrals for those schools who have implemented PBIS (Scott & Barrett, 2004; Taylor-Greene, et al., 1997). A recent meta-analysis conducted by Goh and Bambara (2010) reviewed eighty-three studies and concluded that individualized PBIS does yield

positive outcomes for students with and without disabilities. While these findings are promising, few studies investigating the effectiveness of PBIS focus on or even include students with EBD. For example, only one of the eighty-three studies in the meta-analysis conducted by Goh and Bambara (2010) targeted students with EBD; this study had a sample size of one student (Smith & Sugai, 2000).

PBIS, Comprehensive Classroom Management, and SEL are programs created to address behavioral issues and are intended to be delivered in the general education classroom as school and classroom-wide systems of support (Curtis, Galbreath, & Curtis, 2005). These programs are all aimed at teaching students to manage behaviors by altering interactions with the environment (Carr, et al., 1999). However, evidence suggests that while these programs are effective for some students, some students with EBD do not benefit from these programs as evidenced by the rates at which these students are subject to exclusionary disciplinary practices (Wagner, Newman, Cameto, Levine, & Garza, 2006). Because of these students' externalizing, disruptive behaviors, suspension rates for this category of students is significantly higher (Achilles, McLaughlin, & Croninger, 2007).

This exclusionary discipline is disproportionately applied to students with disabilities relative to students who do not have disabilities. Estimates of suspension rates for students with disabilities are above 15% and upward of 44% for students identified under the IDEIA category of emotional disturbance (Achilles, McLaughlin, & Croninger, 2007). Furthermore, out of school suspension of students with disabilities has increased over time (Krezmien, Leone, & Achilles, 2006). Suspension rates for secondary students identified as ED have risen nearly 50% since the 1980s (Wagner, Newman, Cameto, Levine, & Garza, 2006).

This evidence is alarming because suspension is ineffective for reducing inappropriate behavior (Hemphill, Toumbourou, Herrenkohl, McMorris, & Catalano, 2006). Suspension is also

associated with a variety of negative educational and social outcomes, including future disciplinary infractions, repeated suspension, academic failure, school disengagement, and dropout (Arcia, 2006; Scott, Nelson, & Liaupsin, 2001; Skiba, 2002). Suspension also removes students from the educational environment, which causes them to miss instruction. Students with EBD already have significant gaps in academic achievement, and missing instruction only exacerbates those problems.

Current Placement of Students with EBD

There has been much debate regarding the ability of public schools to support students with EBD in general education settings. However, exclusionary practices and restrictive school environments have also been questioned (Place, Wilson, Martin, & Hulsmeier, 2000). The Individuals with Disabilities Education Act (IDEIA) of 1975 required public schools to provide students with EBD a free and appropriate public education (FAPE) in the least restrictive environment (LRE). The law states:

To the maximum extent appropriate, children with disabilities including children in public or private institutions or care facilities, are educated with children who are nondisabled; and special classes, separate schooling or other removal of children with disabilities from regular educational environment occurs only if the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (IDEIA 2004, sec. 612 (a)(5))

The language addressing students with disabilities being educated in the least restrictive environment has not changed. IDEIA places significant value on the importance of educating students with disabilities alongside students without disabilities as much as possible. However, if there is recognition that a student with EBD would not receive any meaningful educational

benefit from being fully included in general education settings, a more restrictive environment may be warranted. It is important the school district attempts to educate students with EBD in the general education classroom as much as possible, but if these attempts have failed, it may be more appropriate to place the student in a more restrictive setting.

For students with EBD, a number of individuals may be involved in the discussion of appropriate placement. These individuals could include parents, teachers, administrators, counselors, or other school personnel, including school psychologists, behavior specialists, and speech and language pathologists. This group of individuals would comprise the individualized education placement or IEP team (IDEIA, 2004). This team would determine the most appropriate placement for the student with EBD, considering the academic, social-emotional and behavioral needs. The team would consider various settings and work to match the student's needs with the appropriate programs or supports. Placement decisions can occur at various times, including when the student first becomes eligible for special education services under the category of emotionally disturbed and when the student transitions from one school to another (IDEIA, 2004). A student may also be placed in a more restrictive setting if he has been identified as having problem behaviors in the classroom that interfere with academic achievement (Mathur & Jolivette, 2012). In some cases, these students may be categorized under another disability under IDEIA.

There have been notable changes in placement practices for students with EBD over the last thirty years. For instance, from 1990-2007, a 27% decrease was seen in the percentage of students with EBD placed in separate classrooms or separate schools (McLeskey, Landers, Williamson, & Hoppey, 2012). From 1990-2007, a 105% increase was seen in the percentage of students with EBD spending at least 80% of their school day in general education settings (McLeskey et al., 2012). A study of changes of placement trends for students ages 6-17 across

the fifty states and the District of Columbia from 1990-1991 through 2007-2008 found that both elementary and secondary students with EBD have generally experienced movement toward less restrictive placements. However, only 58% of students with EBD spent most of the time in general education classrooms, while 42% were placed in separate classrooms or separate schools (McLeskey et al., 2012). This compares to 89% of students under the category of learning disabled (LD) who are educated in general education settings for some or most of the school day while only 11% were placed in separate classrooms or separate schools (McLeskey et al., 2012). One possible explanation for the the prevalence of EBD students being served in more restrictive environments is teachers and researchers seem to agree that the needs of many of these students are complex and difficult to address in general education settings (Kauffman, Mock, & Simpson, 2007). This likely results in the placement of a higher proportion of students with EBD in more restrictive, separate settings, which are assumed to be designed to deliver more specialized programs aimed at improving students' behavior and assuring academic progress (Kauffman, Bantz, & McCullough, 2002).

Setting Type and School Performance

In considering the range of contexts in which students with EBD are served, research has examined how the performance of students with EBD compares across different educational placements. In a meta-analysis conducted by Reid and colleagues (2004), the academic performance of students with EBD was examined across four different instructional settings: general education classrooms, resource classrooms, self-contained classrooms and self-contained special schools. Findings revealed that across all placements, students with EBD continued to exhibit significant academic delays.

There is other evidence to suggest that the performance of students with EBD varies depending on the placement of the instructional setting. One study compared the behavioral

characteristics of students with EBD across four special education placements: resource classrooms, special classrooms, special schools, and residential schools (Muscott, 1997). In this study a self-report rating scale measuring teachers' perceptions of student behaviors was administered to special education teachers in each of the four settings. Results of the study indicated that elementary students with EBD in residential schools exhibited significantly higher rates of problem behaviors compared to peers in resource or special classrooms. One possible explanation for this discrepancy could be the severity of the behaviors for the students in residential treatment. More recently, Lane et al. (2005) compared the academic, social, and behavioral profiles of students with EBD in self-contained classrooms located within general education school sites and students with EBD in self-contained schools. In this study, researchers assessed the progress of seventy-two students with high-incidence disabilities such as emotionally disturbed (ED), learning disabled (LD), and attention deficit hyperactivity disorder (ADHD), using a combination of behavior rating scales, curriculum-based measures for reading, and standardized achievement tests and cognitive abilities. Results indicated that students with EBD placed in self-contained classrooms scored significantly higher in academic skills, specifically reading fluency, reading comprehension, oral expression, written language, and mathematics, compared to peers placed in self-contained schools. The study also found that students with EBD in self-contained classrooms experienced higher levels of internalizing problem behaviors compared to those in self-contained schools.

The Case for More Restrictive Settings

For many students with EBD, the general education setting is simply not adequately equipped to provide the supports necessary to facilitate school success (Kauffman, Mock, & Simpson, 2007; McLeskey, Landers, Williamson, & Hoppey, 2012). Not all students with EBD require placement in restrictive settings, but many continue to be served in restrictive settings.

Many students with EBD benefit from specialized settings taught by highly trained educators that can provide them with individualized attention needed for academic behavioral success (Landrum, Tankersley, & Kauffman, 2003).

There have been several court cases in recent years that have been influential in considering the most appropriate placement for students with EBD (Jones, Dohrn, & Dunn, 2004; Yell, 1994). Federal courts in many of these cases have favored full inclusion of students with disabilities into the general education classroom. However, the majority of these cases involved students with mild to moderate disabilities who did not present significant behavior management problems to teachers, being less disruptive to classmates (Jones, Dohrn, & Dunn, 2004). For students with EBD, the courts have departed from this philosophy.

Two such cases, *MR v. Lincolnwood Board of Education and Clyde K. and Sheila K. v. Puyallup School District* in 1994, have supported the need for placement in more restrictive settings (Jones, Dohrn, & Dunn, 2004; Yell, 1994). In the case of *MR v. Lincolnwood Board of Education* (1994), parents of a student with EBD sought full inclusion for their child despite the school's recommendation of placement in a therapeutic day school. In this case, the court ruled in favor of the school as findings from the court proceedings indicated that the student's 'bizarre' and disruptive behavior did not make clear that his education could be satisfactorily achieved in the mainstream setting. The court ruled that a more structured program with additional support services required for the child's education was more appropriate than leaving the child in the public school setting.

The decision in the *Clyde K. and Sheila K. v. Puyallup School District* in 1994 involved the inclusion of a student with emotional and behavioral disorders in the general education classroom. The court ruled in favor of the school district, indicating that a significant factor in making placement decisions for students with EBD is the effect of the student's behavior on

classmates and the educational environment (Yell, 1994).

Therefore, despite the accomplishments of programs such as PBIS, Comprehensive Classroom Management and SEL for students who struggle with academic, social and emotional behaviors, scholars have recently argued for the need to develop more comprehensive intervention program models to address the complex issues associated with educating students with severe EBD (Kern, Hilt-Panahon, & Sokol, 2009; Maggin, Wehby, Farmer, & Brooks, 2016).

The BRAIN Program

The Behavior Response and Intervention Navigation (BRAIN) program was designed by Park Public Schools to be a Tier III behavior support and was developed in response to the identified need to provide for students whose extreme behaviors had become a major detrimental barrier to academic success. In this program, students with EBD could learn to self-regulate behaviors in order to gain self-control. Students throughout the district were in need of something more than removal from school for disruptive behaviors, as suspensions were not effective. Teachers were struggling to address these extreme behaviors in the classroom and were frustrated at the lack of systemic support and training to address disruptive behaviors that kept them from teaching. Parents of these students had become disengaged and frustrated with the school system and were struggling with how to address disruptive behaviors at home. All trust in the school had been lost, and the perception of parents was the school was doing nothing to help children but instead was sending students home, denying opportunities to learn.

Although the BRAIN program has not been rigorously tested and lacks empirical evidence of its effectiveness, the practices that constitute the BRAIN program have been individually found to improve outcomes for students with EBD in the research literature. The BRAIN program is an example of a level system that organizes interventions across a tiered continuum, providing multiple levels of emotional and behavioral support at varying levels of

intensity that is matched to the individual student's needs. Embedded within this model is a problem-solving process where educators are continuously engaged in ongoing communication among school staff to identify, analyze, and address problem behaviors. Teachers and administrators work to implement individualized plans to address the problems and then evaluate the effectiveness of those plans. Data is collected on every student in the program, and this data is used to guide decisions on whether to maintain or change the intensity of supports. The issue of implementation fidelity is also an important consideration when reviewing student progression toward goal attainment.

Because the BRAIN program is designed to be implemented in a more-restrictive environment, the classroom setting and staffing are greatly restricted. The BRAIN program has a reduced class size with a maximum of seven students. There is one special education teacher and one para-professional assigned to the BRAIN program. With the smaller class sizes and higher staff to student ratio, students receive individualized support and have a higher number of opportunities to engage with teachers in learning. The staff has the opportunity to better monitor student behavior and reinforce positive classroom behaviors, inside and outside the BRAIN classroom. Core elements for effective practices in programs serving students with EBD have been well documented in the research (Lewis, Hudson, Richter, & Johnson, 2004; Simpson, Peterson, & Smith, 2011).

Core Elements of the BRAIN Program

In total, the BRAIN program consists of thirteen core elements and are as follows: qualified and committed professionals trained in de-escalation techniques, establishment of behavioral expectations, functional behavior assessment and behavior support plan, behavior contracting and setting goals, proactive classroom management strategies, points and level systems, Morning Meeting, re-focus room, social skills instruction, effective academic

instruction, relentless outreach to parents, progress monitoring and data-driven decision making for students not responding to the program. Each of these elements and the related literature are discussed below.

Qualified and Committed Professionals

Research supports the importance of well-trained and qualified teachers and support personnel in creating successful programs for students with EBD (Blood & Neel, 2007; Morse, 1994). Teachers of students with EBD should have skills and knowledge which include a foundation of basic general and special education skills and specialty skills associated with an understanding of the characteristics of students with EBD (Simpson, Peterson, & Smith, 2011). The BRAIN program is designed to have a special-education teacher and at least one para-professional assigned to the program who are trained in the processes of the program with a focus on de-escalation training. This training is conducted by school administration, including the Coordinator of Special Education, Coordinator of Student Services, and the school district's Behavior Specialist. It is recommended for principals to train all general education teachers as well as support in de-escalation training for any school site implementing the BRAIN program.

Additionally, positive teacher-student relationships have been linked to positive school outcomes. Higher quality relationships, as characterized by high degrees of warmth and trust and low conflict and dependence (Birch & Ladd, 1997), have been shown to be associated with increased school engagement and fewer disciplinary referrals (Bergin & Bergin, 2009). While the majority of studies examining teacher-student relationships have been conducted in the general education setting, some research on the impact of student-teacher relationships for students with disabilities has emerged. For example, Marray and Malmgren (2005) implemented a teacher-student intervention program for high school students with EBD which lasted five months. Results of the study found that students who participated in the intervention program

earned higher grade point averages than those students who did not. Research findings indicate that teacher-student relationships are important and predictive correlates of students' academic and behavioral adjustment in school (Murray & Malmgren, 2005).

In the BRAIN program, positive relationships with students need to be built, maintained, and restored if damaged. Many of these students enter the program having had negative interactions with teachers and school staff and must learn to trust again. The BRAIN team builds these relationships with students by spending time with the student, listening to what they have to say, and learning about the student's home life, likes, and dislikes to build stronger relationships. The team constantly works to provide positive interactions with students by attending to positive behaviors with verbal comments or physical gestures such as high-fives. These relationships experience challenges almost daily, and in order to restore relationships, the BRAIN team follows a process that includes communication to the student about starting over, acknowledgment by the student of the mistakes made, the student taking responsibility for actions and making amends, the staff communicating to the student they are still cared for, and finally, forgiving the student or asking for forgiveness.

Behavior Management Systems

The majority of school-age students identified with EBD have conduct disorders and antisocial behavior patterns. As a result, these learners have a long history of exposure to punishment-based strategies (Sugai, Horner, & Gresham, 2002). There is evidence, however, that punishment-based methods are generally ineffective, especially if the punishment is used as the primary or exclusive intervention strategy (Sugai, et al., 2000). An organized and structured environment based on effective methods that consider both group and individualized management needs is a fundamental feature of effective programs for children and youth with EBD (Simpson, Peterson, & Smith, 2011). Such programs should be created individually in

accordance with functional behavior analysis findings and geared to consider multifaceted approaches that mirror the unique and complex needs of students with EBD (Simpson, Peterson, & Smith, 2011). Knowledge and skill in designing, implementing, and evaluating reinforcement-oriented programs such as the BRAIN program that can be used to increase appropriate behaviors, cognitive-behavior modification, and self-regulation are indispensable.

Self-regulated learning theory will be used as a lens for viewing the creation and implementation of the BRAIN program. The definition of self-regulated learning is self-generated thoughts, feelings, and behaviors that are planned and cyclically adapted based on performance feedback in order to attain self-goals. Self-regulation occurs in three phases that are interdependent: forethought, performance control, and self-reflection. Each component of the BRAIN program can be viewed through this lens of self-regulated learning.

Establishing behavioral expectations. In the BRAIN program, behavioral expectations are clear and are stated in a positive manner, such as be responsible, be respectful, be engaged. In addition to ensuring that expectations are stated positively, positive consequences for following rules are well communicated as are negative consequences for violating the rules. Rules are posted in the classroom, explicitly taught, and regularly reviewed. Praise is used frequently to model and increase positive behaviors.

Functional behavior assessment/behavior support plan. Before students are accepted into the BRAIN program, a functional behavior assessment (FBA) is conducted to gather information about the contextual factors surrounding a problem behavior (Crone & Horner, 2003). More specifically, the FBA is conducted to determine the range of behaviors exhibited by a student, the antecedent conditions that precede the behaviors, and the consequences that follow the behaviors. This information ultimately forms the development of comprehensive behavior support plans (BSP). Research supports the general effectiveness of function-based

intervention for a range of populations across various settings (Ferro & Liaupsin, 2007). A meta-analysis conducted by Goh and Bambara (2012) examined individualized positive behavior supports developed from FBAs. The analysis included 83 students representing a sample of 145 students with and without disabilities. Results indicated that FBA-based interventions were moderately effective for increasing appropriate behaviors and reducing problem behaviors.

Behavior contracts/setting behavior goals. When students are accepted into the BRAIN program, the first task is to create a behavior contract made between the BRAIN team, student, and parents. This contract clearly delineates the behavior and academic goals the student hopes to achieve. These goals are designed within three areas of focus: social/emotional development, self-regulation, and academic development. As outlined by Ruth (1996), the five key elements for school behavior contracts are the main goal (behavioral objective), target behavior (operationally defined behavior to increase or decrease), recording (progress monitoring), feedback (information regarding performance and future targets), and reward contingency (criteria for success). Behavior contracts when implemented as intended have shown to be effective in improving student behavior (Ruth, 1996). In the BRAIN program, students and the BRAIN team regularly review the behavior contracts to assess the students attainment of goals. This is an important part of the BRAIN program and is consistent with the forethought phase of self-regulated learning theory. According to theory it is in this phase of self-regulated learning that the students begin setting goals and planning for how to achieve them (Zimmerman, 2008). If after review of the goals, students have determined success, then self-efficacy regarding motivation to continue will be greatly increased (Zimmerman, 2008).

Proactive classroom management strategies. A considerable body of research highlights the value of using a proactive approach to improve student learning and on-task behavior (Clunies-Ross, Little, & Kienhuis, 2008). A proactive approach to classroom

management is described as preventative, meaning teachers will use strategies or alter the environment in ways that will lessen the likelihood of students to exhibit problem behaviors (Clunies-Ross, Little, & Kienhuis, 2008). Teachers in the BRAIN classroom use these strategies by organizing the physical space to allow for cooperative learning and to minimize disruptions, establishing clear and consistent procedures for following rules, and communicating effectively with students. Throughout the school day, teachers in the BRAIN program engage in competent communication with students by providing corrective feedback and clearing up any misunderstandings. Competent communication involves structured teaching interactions, delivering effective praise, and deescalating students who are in an agitated state with a calm and compassionate manner.

Points and levels system. The token economy in the form of points and levels system is the central component of the BRAIN program. A token economy is a behavior management program that relies on the principles of operant conditioning (Kazdin & Bootzin, 1972). Implementing a token economy involves selecting a currency (i.e., points) to be given to students when desired behaviors are exhibited or taken away when problem behaviors are exhibited. Research shows that token economies have been used successfully to increase positive interactions and appropriate classroom behavior and decrease inappropriate behavior (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008).

In the BRAIN program students are given score-sheets daily that are used to record points for each of the three goals. Students are required to score themselves every hour, and the teachers are also required to assign scores every hour. Students may earn three points by remaining on target with no behavioral infractions, two points if re-direction by the teacher has taken place, and one point for not achieving the goal for that class period. According to self-regulated learning theory this component of the program is a part of the performance phase of

the theory. It is during this phase that students learn specific strategies for maintaining self-control and self-observation. There are clear, written expectations for target behaviors, and students must self-record progress toward achievement of the goals. During the performance phase, students use the self-recorded data in order to track progress towards goal attainment, which in turn improves self-monitoring (Spruce & Bol, 2015).

Once the student has earned enough points, then a request to 'level up' may be submitted. Embedded within this token system is the levels system, meaning students have the ability through goal attainment to progress through five successive levels, providing greater access to the general educational environment. There are many variations of this system at each of the five sites implementing the program as the sites have adjusted the system to fit the needs of students at the various levels. An example of this system at the middle school is as follows; At level one, students remain in the BRAIN classroom for instruction and are only in a general education elective classroom one hour of the day. If students have earned the appropriate number of points, a request to level up to level two is submitted to the site BRAIN team. At level two, the student is in the general education classroom for three hours of the day. Again, after earning points students may request to progress to level three, which affords the opportunity to be in general education classrooms for all class periods of the school day. Level four includes eating lunch in the cafeteria with friends. This level is reserved for those students who have proved by moving through the levels to have self-control during unstructured time. Finally, level five students are in the general population for the entire day, with the exception of first hour elective which requires them to be in 'Morning Meeting'.

Morning meeting. Morning Meetings are a foundational piece of the district BRAIN program, and every site has scheduled in time for Morning Meeting. At most sites, it is held first hour every morning, but some sites have had to schedule Morning Meeting at different times of

the day in order to accommodate the students' needs. Morning Meetings are a practice developed by the Northeast Foundation for Children as part of the Responsive Classroom approach to teaching and learning (Kriete, 2003). It involves all students and teachers in the BRAIN program, gathering together to listen, speak, and respond to each other. The specific goals of this meeting are to build relationships, review score-sheets from the previous day, social/emotional skills training, and problem solving. This practice is an important part of the self-reflection phase of self-regulated learning theory. It is during Morning Meeting that students have an opportunity to review self-recorded scores for each class period as well as information regarding teachers' scores for each goal. The BRAIN teachers then help students self-evaluate whether or not the goal was attained and determine the reasons for the success or failure of the event (Spruce & Bol, 2015). As a result of this activity, students are given many opportunities to practice awareness of others, communication with others, and collaboration with others to solve problems.

Refocus room. The BRAIN refocus room is essentially an isolated timeout procedure that aims to decrease undesirable student behaviors. The refocus room is utilized immediately after a behavioral violation that is a danger to the offending student or others, destruction to property, or significant disruptive behavior that impedes the learning of the student or others. Examples include provoked and unprovoked physical aggression, significant property damage, elopement on and off campus, and sustained non-compliance after two correction procedures. The steps of this process are as follows: de-escalation in a designated area (refocus room), debriefing session with the teacher, and delivery of a face to face apology for the behavior. A staff member is always present in the refocus room while a student de-escalates but remains disengaged with the student until such time the student is ready. There is some research that supports the use of isolation timeout (Yell, 1994), but there is a lack of empirical research that

supports its use in restrictive classrooms for students with EBD. There continues to be much controversy regarding the use of isolated timeout procedures (Wolf, McLaughlin, & Williams, 2006).

Social Skills Training

The majority of students with EBD demonstrate social skills deficits. As a result, the BRAIN program requires that social skills training be integrated into the first hour or Morning Meeting. The implementation of social skills training is emphasized in conjunction with social-emotional learning curricula to teach broader concepts of emotional regulation and ethical decision-making. Some common goals found in social/emotional curricula include promoting skill acquisition, improving skills performance, minimizing competing problem behaviors, and facilitating maintenance and generalization of skills (Kavale & Mostert, 2004).

Effective Academic Instruction

The literature recognizes behavioral and academic issues to be interconnected (Reid, Gonzalez, Nordness, Trout, & Epstein, 2004). Thus, addressing academics through the use of effective instruction may improve behavioral outcomes for students with EBD. Effective instruction for students with EBD requires teachers to consistently deliver, monitor, and adapt instruction beyond what is required in a general education classroom. In the BRAIN program, all students begin with individualized one-on-one instruction. As students gain greater self-regulation, scaffolding into the general education environment occurs with students receiving the same education given to those students who are not disabled.

Parent, Family, and Community Connections

Parents and families have an enormous impact on the development of children and youth, including students with EBD (Fiedler, Simpson, & Clark, 2007). Academic and social benefits for children and reduction in family strain and tension are often directly connected with

well-orchestrated and designed communication, support and training programs (Bauer & Shea, 2003; Fiedler et al., 2007). The BRAIN team communicates daily with parents and families regarding the progress of the student. Additionally, the district level BRAIN team provides training one day a week for eight week to train parents in BRAIN basics, mental health issues, and appropriate behavioral interventions to use at home.

Data-Driven Progress Monitoring

Data informed decision making, using multiple sources of information and efficient technology-based systems to analyze the data and accurately connect students with research based strategies, is important in providing the appropriate level of service for students with EBD (Lane, Oakes, & Menzies, 2014). Progress monitoring is another important part of the BRAIN program. Student self-reported score-sheets and teacher reported scores are entered into the progress monitoring system in the district and is monitored by the behavior specialist. This data is used as point of discussion at every BRAIN team meeting to discuss student progress. This data is used to help the team determine if the program is working for particular students or if other interventions are necessary to help the student.

These elements include qualified and committed professionals, behavior management systems, social skills instruction, evidence-based academic instruction, parent, family, and community involvement, and ongoing data-driven progress monitoring. The use of interventions supported by scientific research is often cited as the recommended approach. The Behavior Response and Intervention Navigation (BRAIN) program was designed by administrators of Park Public Schools in response to the need for the creation of a more comprehensive program to address the needs of students with EBD. The BRAIN program has not been scientifically researched as it is specific to only this school district. However, it does have all elements of effective programs as identified in the literature in serving students with EBD.

Self-regulated learning theory will be used as a lens for viewing the creation and implementation of the BRAIN program. The definition of self-regulated learning is self-generated thoughts, feelings, and behaviors that are planned and cyclically adapted, based on performance feedback in order to attain self goals (Schunk, 2001). Self-regulation occurs in three phases that are interdependent: forethought, performance control, and self-reflection (Schunk & Zimmerman, 1994).

Evolution of the BRAIN Program

The Beginning: 2015-2016 School Year

When I heard they would all be arriving at Redwood Middle School, I realized that the need was probably bigger than any system we already had in place. Each of these students had individually demonstrated a need higher than we currently had in our system. It was a lot for a building to inherit all at once when no individual building had found success with them individually, to think about them kind of arriving all at the same time. (Martha, transcript of video interview, December 15, 2015)

In June of 2015, the principal of Redwood Middle School (RMS) was approached by three district administrators and advised there would be a group of students coming to middle school as seventh graders who had experienced many negative outcomes as a result of their behaviors. Martha, one of these administrators was a school psychologist who had served the district for a number of years and had experience with these students from the time they were very young. From observations and evaluations, she knew the difficulties they had experienced. The principal was informed of a possible solution, but for it to work, she would have to implement the program with the current staff because the district did not have funding to add additional staff for the program. The principal was willing to pilot the program in an effort to help these students find some success, and was willing to try it with the current staff. As a result

of this conversation, Martha, along with the Student Services Coordinator, the Coordinator of Special Services, and the director of the family counseling agency in the community worked together to create a program that could address the needs of the students. The BRAIN program was modeled from programs already in place at the community counseling agency and the various treatment programs throughout the state coordinated by the community counseling agency; however, the programs had never been implemented in a school setting. These four individuals worked throughout the summer months to develop the core elements of the BRAIN program, while the site principal worked to create a schedule that would accommodate the program and select a teacher who would be a good fit for the program and was willing to do it.

Pilot year at Redwood Middle School. The first meeting of the BRAIN team was held at the end of July in 2015. The BRAIN team was made up of three district administrators, the director of the family counseling agency, the principal, and Tracy, the teacher assigned to the program. It was at this meeting the framework for the program was presented and discussed, including a discussion of the physical spaces required for implementation. The BRAIN classroom needed to be in close proximity to the refocus room for the privacy of the students. After the physical setting was determined, the focus turned to the importance of informing the faculty of the new program and then training them in de-escalation techniques. All of this took place in August in order to answer any questions or address any issues or concerns. By the start of school, there were six, seventh grade students, five boys and one girl, enrolled in the program.

Year Two: 2016-2017

The program had experienced success in its first year at RMS as evidenced by attendance and suspension rates of those six students. The female student had been withdrawn by her parent and homeschooled within the first few months of the program. For the remaining students, none were suspended nor hospitalized and all were attending school

and going out to general education classes at varying levels. Because of this success, district administrators worked with principals who wanted to try the program at each of the different grade levels. Because of lack of funding, it was decided the program would be implemented for fifth and sixth grade students at Summit Intermediate School, which is located very close to RMS and whose students feed into that middle school. Third and fourth grade students would be served at one elementary school, Pinedale Elementary, and kindergarten through second grade students would be served at Aspen Elementary. This created a BRAIN program for every grade level at four sites throughout the district.

Change in personnel. During this school year there were changes in personnel that directly affected the BRAIN program. Martha, the school psychologist, took a job out of district at the very start of the school year and the Coordinator for Special Services had retired. In January of 2017, the district hired a behavior specialist, Ms. Adams, who would eventually help to oversee the BRAIN program. In June of 2017, it was announced that the BRAIN program would become a district led program, rather than largely being implemented by the individual sites, with the support and assistance of the BRAIN team. District administrators stated these decisions were necessary to ensure the fidelity of the program across the sites and consistency in programs.

Year Three: A District Program 2017-2018 School Year

The 2017-2018 brought in a number of changes for the program. A meeting for all principals of the district who had or would have a BRAIN program at the school sites was held on June 9, 2017 and laid out the implementation of the new District BRAIN Committee. The committee members would include the Assistant Superintendent of Schools, Director of Secondary Education, Director of Elementary Education, Director of Special Services, Coordinator for Special Services, Coordinator for Student Services, and the Behavior Specialist.

Site administrators and teachers would be a part of the team at the respective sites. Roles and responsibilities were also articulated at this meeting which included a delineated process with checklists for the receiving school, sending school, and administrator responsibilities. From this point forward any student referred to the BRAIN program would need to be approved by the District BRAIN Committee. There was also a change to the meeting structure requiring a monthly site “check-in” meeting with the District Committee. These meetings would be to discuss the progress of the students by analyzing the data collected on each student by the faculty and organized into charts by the behavior specialist. It was at these meetings that discussions would be held about students leveling up or down. Additionally, each site would have a semester review or fidelity check, administered by the district committee. A rubric was created to ensure objectivity and consistency in carrying out the fidelity checks. It was stated by the Assistant Superintendent, “These fidelity checks were created to ensure fidelity to the program and should not be considered an evaluation, but for an opportunity to have a conversation” (Minutes from Principal BRAIN Meeting Agenda, June 9, 2017).

There was also a change in the sites implementing the program. An additional intermediate school located on the north side of town, Cascade Intermediate, adopted the program, the third and fourth grade program held at Pinedale Elementary would now be held at Aspen Elementary and would include second graders, and the kindergarten through second grade program would now be held at Pinedale Elementary and would serve kindergarten and first graders.

Year Four: 2018-2019

In May of 2018, the Director of Student Services retired from the district. This was the first school year that none of the people who originally started the program would be involved, with the exception of the principal at RMS. The teacher who had first implemented the

program at RMS resigned the position at the end of the 2017-2018 school year. The teacher had been open about concerns regarding changing the program to a district program and felt autonomy in running the program had been removed. Additionally, the difficulty of working with students who have challenging behaviors year after year had taken an emotional toll. The teacher continues to work at RMS but as an elective teacher.

The sites implementing the program during this school year remained the same: kindergarten and first graders are served at Pinedale Elementary, second through fourth graders are served at Aspen Elementary, fifth and sixth graders who attend school on the south side of the district are served at Summit Intermediate, fifth and sixth graders who attend school on the north side of the district are served at Cascade Intermediate, and all seventh and eighth graders are served at Redwood Middle School. A third middle school will be opening in the 2019-2020 school year, but it has yet to be determined if either of the two other middle schools will adopt the BRAIN program.

Summary

Without appropriate intervention, children and adolescents with EBD are at increased risk for school failure, serious mental illness, substance abuse, and adult crime (Quinn & Poirier, 2004). Presenting an in-depth review of the literature establishes the need for this study. First, the literature review presented the characteristics of students with EBD, which include internalizing and externalizing behaviors, social skills deficits, academic deficits, a disconnection between home and school, and detrimental long-term consequences for these students. Next, research regarding the programs available for students with EBD was presented and included popular and successful programs such as PBIS, Comprehensive Classroom Management, and Social-Emotional Learning programs. However, these programs are focused on interventions for students in the general education classroom and have been found ineffective in some contexts,

especially for students requiring more intensive services in more restrictive environments. Many students with EBD benefit from specialized settings taught by highly trained educators that can provide them with the individualized attention needed for academic success. This chapter explained the research on elements of effective programs for students with EBD, and discussed the BRAIN program implemented in a Midwestern school district. This study used self-regulated learning theory as a lens by which to explore the interrelationships of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD.

CHAPTER III

METHODOLOGY

According to Merriam and Tisdell (2016), “The focus of qualitative research is on discovery, insight, and understanding from the perspectives of those being studied and offers the greatest promise of making a difference in people’s lives” (p.1). I have conducted a qualitative case study, searching for meaning and understanding of a contemporary phenomenon within its real-life context. Describing the research design and methodology, Chapter 3 includes a restatement of the research problem, purpose, research questions, and research design, including the procedures for participant selection, data collection, data analysis, the researcher’s role, and data verification.

Statement of the Problem

Behavior support programs created to address the complex academic and behavioral issues associated with students with EBD have focused on creating interventions in the general education classroom. These programs have been effective in supporting some students with EBD but have been ineffective in supporting others (Goh & Bambara, 2012; Lane, Wehby, Little, & Cooley, 2005; Smith, Katsiyannis, & Ryan, 2011).

Research suggests that some students with severe cases of EBD require more intensive programs provided in more restrictive settings (Kern, Hilt-Panahon, & Sokol, 2009; Lane, Wehby, Little, & Cooley, 2005; Maggin, Wehby, Farmer, & Brooks, 2016). This study explored the interrelationship of a program aimed at improving classroom behaviors for students with EBD in a selected school district in the Midwest using the lens of self-regulated learning theory. By exploring this relationship, one may better understand the program interventions beneficial to students with EBD in learning self-regulation of behaviors and achievement of academic and behavioral goals.

Purpose of the Study

This qualitative case study explored, through the lens of self-regulated learning theory, the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD in a selected Midwestern school district.

Research Questions

The research questions guiding this study are:

1. How is the BRAIN program implemented and sustained in a selected Midwestern school district?
2. What is the interrelationship, if any, of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD?
3. How does self-regulated learning theory explain this interrelationship?

Research Design

Drawing from the epistemological perspective of constructionism, qualitative researchers are interested in how people interpret personal experiences, construct their worlds, and attribute meaning to those experiences (Merriam & Tisdell, 2016). This study explored the interrelationship of the BRAIN program and the facilitation of the development of

positive classroom behaviors for students with EBD, telling the story of the school sites implementing the program to address the complex needs of staff and students and sharing the stories of the participants living this experience. Merriam & Tisdell (2016), defined four important characteristics of qualitative research including: a focus on process, understanding and meaning; the researcher as the primary instrument of data collection and analysis; an inductive process guided by a theoretical framework; and a product that is richly descriptive. Because of these characteristics, a qualitative research design was most appropriate for this study.

There are a number of different qualitative designs to choose from when conducting a study. "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context may not be clearly evident" (Yin, 2014, p.1). Additionally, a case study is research that aims to understand one thing well and is defined by boundaries; therefore, a case could be a program (Merriam & Tisdell, 2016; Stake, 2005). To study a case in-depth, the researcher becomes the primary instrument of data collection, relying on multiple sources of data including interviews, observations, and documents analyzed over an extended period of time (Creswell, 2009; Merriam & Tisdell, 2016; Patton, 2002). These multiple sources of data lead the researcher towards a deeper understanding of the case or phenomenon being studied (Patton, 2002).

Methodological Procedures

Participant Selection

School sites and interview participants were selected using purposeful sampling procedures. Merriam (1998) stated that purposeful sampling "is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p.61). The BRAIN program was created,

developed, and implemented by district administrators in Park Public Schools in order to address the needs of students experiencing severe EBD who had been unable to remain in school due to extreme and overt behaviors. The district chose to implement the program at five school sites throughout the district: kindergarten and first grades at one elementary site, second through fourth grades at another elementary site, fifth and sixth grades at each of the two intermediate sites in the district, and seventh and eighth grades at one middle school. Due to the implementation of the program at five sites, all five sites were included in this study, in order to gain a deeper understanding of program implementation for students at varying age levels and in different environments.

Interview participants included the principals at four of the five sites, as well as the five BRAIN teachers implementing the program. Selecting principals to interview at the various sites provided a better understanding of the day-to-day challenges and issues faced with the implementation of the program. BRAIN teachers were included as participants to gain a better understanding of the implementation at the classroom level. Finally, the behavior specialist, responsible for over-seeing program implementation as the district level, was chosen as a participant to better understand the overall program from a district perspective.

Data Collection

According to Wolcott (1992), data collection in “common everyday terms is about asking, watching, and reviewing” (p.19). The data for this case study came from interviews, observations, and documents. As the primary researcher, I conducted the interviews, observations, and document review to gain a deeper understanding of the phenomenon in its real-world context. According to Merriam (1998), “understanding the case in its totality, as well as the intensive, holistic description and analysis characteristic of a case study, mandates both breadth and depth of data collection” (p. 134).

Interviews. The main purpose of an interview is to obtain a special kind of information that cannot be gathered from observations (Merriam, 1998). The researcher wants to find out what is “in and on someone else’s mind” (Patton, 1990, p. 278). I chose to interview two elementary principals, two intermediate principals, five teachers responsible for the implementation of the BRAIN program, and the behavior specialist. These individuals were chosen based on their involvement in the BRAIN program at the various age levels.

I conducted and audio-taped interviews of all participants in a one-on-one and face-to-face, semi-structured format. By utilizing this format, the interview was guided by a list of questions or issues to be explored, and neither the exact wording nor the order of the questions was determined ahead of time (Merriam, 1998). This format allowed the interview to be more open-ended and conversational, while keeping with a structure of listed questions to maintain consistency throughout all of the interviews. (See Appendix D for a list of interview questions) During the interviews, I took hand-written notes, ensuring a backup in case the audio recording failed. I transcribed the interviews myself as quickly as possible at the conclusion of the interview to ensure my understanding of participant perceptions.

Observations. Observation is a major means of collecting data in qualitative research as it offers a firsthand account of the situation under study (Merriam, 1998). I conducted multiple observations over the fall semester during the 2018-2019 school year. These observations included BRAIN classrooms at each of the sites in my study as well as regularly scheduled district BRAIN meetings at each of the sites. Additionally, I attended a few fidelity-check observations with the district BRAIN team to understand the commentary from the district level in implementation fidelity at each of the sites.

Documents. Documents, including public records, personal papers, physical traces, and artifacts are a third major source of data in qualitative research (Merriam, 1998). “Documents

of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem” (Merriam, 1998, p. 133). Documents related to this case study were collected from August 2017 through December 2018 and included meeting agendas, minutes from BRAIN meetings, forms related to the BRAIN program, fidelity checklists and rubrics, progress monitoring charts related to student goals collected from the district behavior specialist, emails between district administrators and myself during development of the program, and interview transcripts recorded from interviews of teachers and district administrators during the pilot year of the program.

Data Analysis

“Data analysis is the process of making sense out of the data by consolidating, reducing, and interpreting what people have said and what the researcher has seen and read – it is the process of making meaning” (Merriam & Tisdale, 2016 p. 202).

In this study, I used the constant comparative method of data analysis. According to Merriam & Tisdale (2016), qualitative data analysis is inductive and comparative, and therefore the constant comparative method is an appropriate approach to use when generating categories or themes from the data. This approach involved reviewing information from the first interview, observations, and documents and then comparing this initial data with subsequent interviews, observations, and documents. This procedure of collecting, analyzing, and categorizing data occurred simultaneously throughout the entire process. The researcher went back and forth between all data sets, compared them, and looked for emerging categories or themes. The following steps adapted from Creswell (2009) were used to analyze the data.

Organize, prepare, and read data. Data collected for this study was obtained from interview protocol notes, recordings of interviews, observations and field notes, documents

related to the study, and document review notes. I transcribed the recorded interviews and combined them with interview notes. Then all data was organized by school site, including interview transcripts from the participants, field observation notes, and documents. Reading through all of the data several times allowed me to obtain a general sense of the information and reflect on its overall meaning, taking notes on my general reflections of this data in a separate notebook.

Code data. The first steps in the category construction process begin with reading the first interview transcript, the first set of field notes, the first document collected in the study (Merriam & Tisdale, 2016). Reading the interview transcripts, I began the first process of coding by jotting down notes, comments, and reflections in the margins. This level of coding is referred to as open coding because a researcher should be open to anything that might emerge (Merriam, 1998). After this initial coding, I went back through my notes and grouped the notes and comments with similarities. Merriam (1998) calls this grouping of notes, analytical coding or coding that goes beyond descriptive coding as it comes from interpretation and reflection on meaning (Merriam, 1998). The next steps involved moving on to other data sets such as observation notes and other documents. I scanned this information exactly the same way, keeping in mind the groupings already identified from the interviews and checking to see if the groupings were present in subsequent sets of data. I made a separate list of comments and notes from this data set and compared it with the one derived from the first transcript. I then merged the two lists into one master list of concepts derived from all sets of data. This list provided a primitive classification system that reflected recurring patterns in my study.

Generate categories or themes. According to Merriam & Tisdale (2016), the challenge is to construct categories that capture some recurring pattern that cuts across the data. These patterns that emerge from coding will become the categories in which subsequent pieces of

evidence will be sorted. I determined a preliminary set of categories and sorted all of the evidence collected into categories. These initial categories were used to develop a thick, rich description of the participants, locations, and events and determine which of the categories were found in all data sets. I then merged these categories into four themes. These themes formed Chapter IV, describing the context, setting, participants, and interactions among participants. I used the pre-determined categories of the elements of self-regulated learning theory, forethought/planning phase, action phase, and self-reflection phase, to organize the themes from Chapter IV for data analysis in Chapter V.

Convey findings and interpret meaning. Findings of the study were conveyed in a narrative format. The narrative approach included a full description of the participants, the settings, and a detailed description of the themes (Creswell, 2009).

Researcher Role

Researcher Bias

Qualitative research is interpretive research, with the researcher typically involved in a sustained and intensive experience with the participants (Creswell, 2009). This case study was conducted in the school district in which I have been employed for five years. I have worked closely with educators, parents, and students in the development and implementation of the BRAIN program over the past three years.

Because of my involvement in this program, I have had an intimate view of the internal processes of its development and of the culture and climate of the schools in which it has been implemented. “Backyard” research involves studying the researcher’s own organization or immediate work setting (Creswell, 2009). According to Creswell (2009), this often leads to compromises in the researcher’s ability to disclose information and raises difficult power issues. Because of my working relationships with many of the participants, it was critical for me to

openly communicate the objectives of this study and to ensure that all participants understood my role as a researcher. Creswell (2009) points out that if studying the backyard is necessary, the researcher should employ multiple strategies of validity to create reader confidence in the accuracy of findings.

In a qualitative study, the researcher is the primary instrument of data collection and analysis and can be subject to biases based upon past experiences. According to Merriam & Tisdell (2016), rather than trying to eliminate these biases, it is important to identify and monitor them in relation to the theoretical framework and to the researcher's own interests, making clear how the biases may be shaping the collection and interpretation of the data. My experience as an employee in this district and specifically with this program had the potential to create bias within this study. However, these experiences also provided a unique perspective, historically and contextually, during the data collection and analysis processes.

Ethical Considerations

In order to ensure trustworthiness and credibility, ethical considerations were employed regarding data collection, data analysis, and data interpretation.

Data collection ethics. Patton (2002) and Creswell (2009) identified several ethical considerations to be addressed regarding data collection when conducting qualitative research. Ethical considerations include (1) informed consent and confidentiality, (2) IRB approval, (3) gaining access to the sites, (4) limiting disruptions at the research site, (5) mutual benefits among researcher and participants, (6) sensitive nature of data collected, and (7) interview protocol. Each of these considerations is discussed below.

First, I developed an informed consent form for selected participants to sign, notifying each of the participant's rights in conducting the study. Second, IRB approval was obtained from the university. Third, I wrote a letter and met with the district superintendent to gain

permission to conduct the study. I then met with the principals and BRAIN teachers at each of the sites to discuss entry into the site. Fourth, I limited disruptions at the site by observing only during Morning Meeting, arriving early before students arrived and exiting after students had left the classroom. Fifth, mutual benefits among researcher and participants were ensured through offering the participants copies of transcripts, findings of the study, and the final document. Lastly, interview protocol procedures were followed regarding neutrality so as not to influence the participants in any way.

Data analysis and interpretation ethics. Ethics regarding data analysis and interpretation included assigning pseudonyms, securing data collected, and ensuring accurate interpretations of data collected (Creswell, 2009). In order to protect the anonymity of the school district, school sites, and participants, pseudonyms were assigned and used throughout the study. Information gathered during the study was kept in my possession or in a locked filing cabinet in my home. The written document was secured on a laptop computer and in the cloud with password protection known only to me. Informed consent forms and any other documents containing participant names were locked in a cabinet in my home office which was only accessible to me.

Trustworthiness of Findings

All research is concerned with producing valid and reliable knowledge in an ethical manner (Merriam & Tisdale, 2016). Although qualitative studies explore the subjective and are not bound to the validity and reliability tests of quantitative studies, I, as the researcher, have a responsibility to ensure the trustworthiness of my study. Several strategies can be used to enhance the trustworthiness of a qualitative study. Lincoln and Guba, (1985) recommend four criteria for establishing trustworthiness of findings including credibility, transferability, dependability and confirmability.

Credibility

Credibility deals with the question of how research findings match reality. Ratcliffe (1983) offers the following perspective on assessing credibility in qualitative research. First, he states that “data do not speak for themselves; there is always an interpreter or translator” (p. 149). Next, he states that “one cannot observe or measure a phenomenon/event without changing it, even in physics where reality is no longer considered to be single-faceted; and finally, that numbers, equations, and words are all abstract, symbolic representations of reality, but not reality itself” (Ratcliffe, 1983, p. 150). As a result, no one can ever truly capture or ‘prove’ reality as it is relative (Maxwell, 2013).

To ensure credibility in this study, I implemented techniques recommended by Lincoln and Guba (1985) and Merriam and Tisdale (2016). These techniques included prolonged engagement, persistent observation, peer review, triangulation, and member checks.

Prolonged engagement. Prolonged engagement allows the researcher to get as close as possible to participants’ understanding of the case or phenomenon. The goal is to get to a level of saturation where the researcher begins to see or hear the same things over and over again. Additionally, Patton (2015) argues that credibility hinges partially on the integrity of the researcher, and one approach to dealing with this issue is for the researcher to “look for data that support alternative explanations” (p. 653). For this case study, prolonged engagement allowed me to build trust, develop rapport and obtain accurate data from the various school sites. As an employee of this district, I had the opportunity to be completely immersed in the school sites implementing the BRAIN program.

Persistent observation. Closely related to prolonged engagement is persistent observation. By having the opportunity to observe these sites on a regular basis, I obtained more detailed and in depth data, allowing me to gain a clearer understanding of the cultures.

Peer review. Peer review is a process by which colleagues either associated with the study or who are new to the study review the data and assess whether or not the findings are plausible. For this study I asked a colleague to review the methodology and findings sections.

Triangulation. “Triangulation, whether you make use of more than one data collection method, multiple sources of data, multiple investigators, or multiple theories is a powerful strategy for increasing the credibility of your research” (Merriam & Tisdale, 2016, p. 245). Triangulation using multiple sources of data means comparing and cross-checking data collected through observations at different times or in different places or interview data collected from people with different perspectives or from follow-up interviews with the same people (Merriam & Tisdale, 2016). Additionally, Patton (2015) explains, “Triangulation, in whatever form, increases the credibility and quality by countering the concern that a study’s findings are simply an artifact of a single method, a single source, or a single investigator’s blinders” (p. 674).

I triangulated my data by gathering information from multiple sources including interviews of teachers and principals directly responsible for implementing the program and the behavior specialist overseeing the district-wide program, observational data from the five sites within the district, as well as the many documents associated with the program.

Member checks. Member checks allow the researcher to solicit feedback on preliminary or emerging findings from those participants who have been interviewed. “This is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being

an important way of identifying your own biases and misunderstanding of what you observed” (Maxwell, 2014, p.126-127). For this study, I provided copies of interview transcripts for review in order to verify accuracy.

Transferability

Transferability is concerned with the extent to which the findings of one study can be applied to other situations or contexts. Lincoln & Guba (1985) suggest one strategy for enhancing transferability is to provide a rich, thick description of the setting or context in which the study takes place. This allows the reader to assess the transferability of the study to another context. Another strategy for enhancing transferability is to give careful attention to selecting the study sample. By providing maximum variation in the sample, a greater range of application can be utilized by readers or consumers of the research (Merriam & Tisdale, 2016).

Therefore, to enhance the transferability of my study, I created a rich, thick description of the setting and participants. Additionally, I expanded my study to include the BRAIN program implemented at different grade levels and at different school sites, allowing readers an increased number of contexts in which to apply the findings to particular contexts.

Dependability and Confirmability

Dependability is concerned with the ability of the study to be replicated or repeated, and confirmability is concerned with the degree to which my findings would be consistent with another person’s interpretations of the findings. Strategies a qualitative researcher can use to ensure dependability and confirmability are triangulation, peer examination, member checking, and the audit trail. In establishing credibility, I have previously discussed implementation of

these strategies to enhance my study's dependability and confirmability. Additionally, all of my interview transcripts, observation notes, and documents, are available for audit.

Table 1

Trustworthiness Criteria and Examples

Credibility		
Criteria/Technique	Result	Examples
Prolonged engagement	-Build trust -Develop rapport -Immersed in data -Obtain wide scope of data -Obtain accurate data	In the field from October 2018 to February 2019; follow-up communication occurred in March and April; avenues of communication: emails, appointments, face-to-face, and telephone calls
Persistent observation	-Obtain in depth data -Obtain accurate data	Observation of participants during site visits and district BRAIN meetings
Peer Review	-Gaining additional perspectives and guidance from a trusted source	Gathered feedback on methodological procedures and findings of the study
Triangulation	-Verify data	Multiple sources: interviews, observations, and documents
Member Checks	-Verify documentation and conclusions	The participants received copies of the transcripts and final paper to verify accuracy, especially about conclusions drawn from the study, and provide any important information and/or to schedule a follow-up meeting

Transferability		
Criteria/Technique	Result	Examples
Thick description	-Provide a data base for transferability judgment -Provide a vicarious experience for the reader	Purpose behind the creation of the BRAIN program; evolution of the program; stories of implementation at

		all sites and experiences of those involved in implementation
Variation in sampling	-Provide an increased number of contexts in which to apply findings.	Every school site, from grade levels K-8, implementing a BRAIN program was included in the study

Dependability/Confirmability

<i>Criteria/Technique</i>	<i>Result</i>	<i>Examples</i>
Access to an audit trail	Allow auditor to determine trustworthiness of study	Interview guides, notes, documents, email exchanges, meeting minutes, and field notes are readily available for an audit

Limitations of Study

This qualitative study will focus on a selected Midwestern school district. Due to the nature of the research, the findings are relevant to this particular district and cannot be generalized across an entire population. Additionally, this case study only captured the experiences of those school administrators and district personnel involved in the creation and implementation of the BRAIN program. There are two elementary schools, two intermediate schools, and one middle school that have chosen to implement the program. Therefore, the findings of this study could be skewed due to such a limited number of participants. However, the findings, conclusions, and recommendations of this study may be of use to school districts in this state and across the country.

Summary

Chapter III provided an in depth review of the methodology used to conduct this case study. In order to gain a deeper understanding of the implementation of the BRAIN program,

data was collected from interviews, observations, and document analysis. My role in the research was discussed, with potential areas for researcher bias due to my personal experiences with the program. The trustworthiness of findings are clearly defined with specific examples of the validity and credibility of the findings.

CHAPTER IV

PRESENTATION OF DATA

Chapter Four presents data collected throughout this study. This study explores the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD in a selected Midwestern school district. To better understand the setting in which the BRAIN program was developed, an overview of the district is presented, including community support and student demographics. Finally, the stories of implementation at each of the five schools in the district reveals more about the ways in which the BRAIN program is utilized at each school for students in grades K-8 with emotional and behavioral disorders. The stories of each site are organized into four themes: The Right Teacher, The Right Environment, Morning Meeting, and Manifestations of Hope.

Overview of Park Public Schools

Park Public Schools (PPS) is a 6A, suburban school district located in the Midwest that covers 73 square miles. The community has seen enormous growth over the years, from approximately 10,000 residents in 1990 to approximately 20,000 as of 2018. Consequently, the district has grown from serving fewer than 20 students in a one-room school house built in

1920, to over 11,000 students within nine elementary schools, three intermediate schools, two middle schools, and one high school. The district has an average 10-year growth rate of 3.2%, ranging from a net gain of more than 200 students in one year to more than 500.

Community Support

There is strong community support for Park Public Schools as evidenced by the passage of a \$180.8-million-dollar bond issue in February of 2017. This bond issue has made it possible for the district to adjust for additional growth with the building of one new elementary and intermediate school, which opened in the 2018-2019 school year, and one new middle school scheduled to open in 2019-2020 school year. On the district website, the Superintendent states,

So grateful for the overwhelming support from our community... The passage of this historic bond election is a clear message to all of us in the district that our patrons want our students and staff to have what they need to be successful. (Superintendent, website, December 20, 2018)

Student Demographics

The students who attend Park Public Schools are 66.2% Caucasian, 3.4% Black, 5.3% Asian, 10.8% Hispanic, 5.3% Native American, and 9.0% identify as two or more races. The students who receive free or reduced lunches is 37.6% with 6.6% of the community living below the poverty line. The district has experienced a steady increase in students receiving special services to approximately 12.4% in 2017. Of the 12.4% approximately 2% are students who experience one or more behavioral disorders and are served under the categories of emotional disturbance (ED), autism (AUT), or other health impairment (OHI), which includes oppositional defiant disorder (ODD) and attention deficit hyperactivity disorder (ADHD). The needs for these

students can be great, and it is within this context the Behavioral Response and Intervention Navigation Program (BRAIN) was created.

Implementation of the BRAIN Program

The Brain program is implemented at different sites and different grade levels. Below I explain the intricacies of each program at each of the sites. I will begin with the perspectives of those implementing the program for the youngest students and end with the perspectives of those implementing the program at the middle school level.

Pinedale Elementary School (K-1)

Pinedale Elementary School is located on the north side of the Park School District. The exterior of the building has brightly painted doors, which make it a warm and inviting place. In this building, any student in K-1 who has been identified by the District BRAIN team as needing a BRAIN program placement is served. As of December of the 2018-2019 school year, six students, five boys and one girl, are being served in the program. Three are from Pinedale, and the other three are from across the district. One of them is in first grade, and the other five are in kindergarten.

The BRAIN team at this site is composed of the principal, assistant principal, and classroom teacher. The administrators are new to Pinedale for the 2018-2019 school year. Before moving to Pinedale, the principal had been at Aspen Elementary, another elementary school in the district that has a BRAIN program. Due to an unexpected illness, she has been in and out since the beginning of the school year. Therefore, the assistant principal, Ms. Green, who is new to the district, is handling issues with the BRAIN program. She had previously worked in a large urban district in early childhood programs. Ms. Green was hired at the end of the 2107-2018 school year and started working with the then principal at Pinedale Elementary to remake the BRAIN program at that site. Previously, there had been some challenges at

Pinedale with the BRAIN program and the appropriateness for students at that age level was questioned. However, the BRAIN team felt the BRAIN program was still needed but would need to focus on the needs of early childhood students; therefore, the program would look a little differently from programs at other sites. When asked about her thoughts on the BRAIN program for early childhood students, Ms. Green stated:

We completely changed our approach to providing an environment that is more conducive to learning for early childhood students and just really taking what we're already doing in the classroom, best practices with the general education teacher, and applying that to a very small or structured classroom. (Ms. Green, Interview, November 15, 2018)

In changing the approach to an early childhood philosophy, the BRAIN team decided to hire an early childhood teacher that had excellent classroom management skills and understood how to teach coping skills and replacement behaviors for those students whose behaviors were impeding the ability to learn in a classroom, or who were impeding others' opportunities for learning. Mrs. Mathis was currently teaching early childhood at their site, was well respected by her administration and colleagues, and was willing to try it. According to Ms. Green, "We were lucky enough to have a very amazing teacher that was willing to just take that next step, and she has exceeded our expectations" (Interview, November 15, 2018).

The Right Teacher

Mrs. Mathis has been at Pinedale Elementary school for seven years. She is well respected by her colleagues and was named Teacher of the Year for the 2018-2019 school year. According to Mrs. Mathis, she took the position of BRAIN teacher because she is passionate about behavior and knew that in order for students with severe behavioral disorders to be successful, they needed to be taught appropriate behaviors:

My classroom is like a typical early childhood classroom, except for the behavioral and social skill intervention time... General education teachers don't have time to stop and give social lessons and behavior lessons... They're not ever going to get the academics before they get the behavior down. (Mrs. Mathis, interview, November 15, 2018)

Building and repairing relationships. Building and repairing relationships is a significant focus for the BRAIN program at the early childhood level. The students enrolled in the program have had behaviors so severe that remaining in the general education setting is impossible. These behaviors include removing clothing, urinating in the classroom, climbing on cabinets, elopement, or other aggressive behaviors such as hitting or biting peers, and throwing furniture. These behaviors make removal from the classroom necessary, which impedes academic performance. Teachers become frustrated with the students due to the disruption to the learning environment, and parents become frustrated with receiving calls from the school to pick up the student for the misbehavior. Therefore, Mrs. Mathis works to build and repair relationships with students, teachers, and parents.

Students. Mrs. Mathis seems passionate about helping her students be successful. She states the most important part of meeting the needs of students is by holding them accountable for their behaviors and also forgiving them:

I think just being able to hold them more accountable for their actions and following through is meeting their needs more than anything. They just need someone who is going to come in every day, talk about what happened, but be forgiving and start fresh every day...and who has the time and the resources to do it. (Interview, November 15, 2015)

It also appears that Mrs. Mathis' students love her. On the day of the Teacher of the Year ceremony, students returned to class from the ceremony and were jumping up and down,

hugging her, and talking about how much they loved her. It was difficult to get them calmed down that morning, but Mrs. Mathis was able to do it with a firm, calm voice, which the students responded to quickly. One student in particular was having a difficult time staying focused on the assignment. The following is an interaction between Mrs. Mathis and the student as they all sat in a group working on an assignment together:

Mrs. Mathis: "I will give you two choices, you can do what Mr. Matt has asked you to do, or you can go back to your seat."

The student begins to pout for a moment and then gets to work, but only for a minute. He then refuses to do what is asked and is disrespectful to the teaching assistant, Mr. Matt.

Mrs. Mathis: "You are in his space, you are being unkind, and you are not showing patience. What I need from you is for you to stay in your seat, keep your hands off of Mr. Matt, and do what I'm asking you to do. That is what I need from you"

Student gets to work but then very quickly becomes uncooperative again with Mr. Matt.

Mrs. Mathis: "You now need to go to your calm down spot, or go to your seat."

Student: "No I'm doing this, I'm not finished!"

Mrs. Mathis: (very calmly) "Listen, listen, your chair or the calm down spot, which one for refocus?"

Student: "No, No!"

Mr. Matt: "Go sit on the rug with the pillow."

Mrs. Mathis: "You can come back whenever you are ready to pay attention."

Student goes to a small rug placed in front of a window away from the rest of the group.

Student: "Not fair!" (She is moaning and pouting.)

Student gets quiet after about 15 seconds and is just sitting, looking out the window. After just a few minutes:

Mr. Matt: "Are you ready to return to the group?"

Student: "Yes."

Mr. Matt: "OK. Come do some work so you can get your sticker, but you have to do some work."

Student then returns to the group and sits in the assigned seat.

After this exchange, the student along with all of the others continues working on the assignment with no further disruption. The students are talking and laughing with each other and seem to be genuinely enjoying the assignment. The environment in the classroom is accepting and tolerant. Mrs. Mathis is firm and holds students accountable but also shows great care through actions and words. The students respond in the same way, with kindness.

Teachers. Mrs. Mathis worked as a teacher in the general education classroom; therefore, she understands what it is like to manage a classroom of up to 25 early childhood students. Mrs. Mathis believes the role of the BRAIN teacher is assisting co-workers in learning strategies for handling students who are making it difficult to teach. According to Mrs. Mathis:

Designating a teacher just for behavior has helped the general education teachers so much because sometimes those extreme behaviors can last for 2-3 hours...You just don't have time to be patient and outlast them (Mrs. Mathis, interview, November 15, 2018).

Once Mrs. Mathis receives these students into the program, she immediately begins teaching appropriate behaviors for them to be successful in the general education classroom. As students learn these skills and begin to transition back into the general education classrooms, Mrs. Mathis expressed a responsibility to ensure the teachers are also equipped to manage students effectively. She views this part of the job as a major challenge in that many teachers find classroom management to be one of the most difficult parts of the job. According

to Ms. Green, “Mrs. Mathis attends the PLC meetings of those teams who have BRAIN students and helps identify when applying different coping strategies is necessary.” Mrs. Mathis has found that teachers’ perceptions of BRAIN students can be negative, so she is working with teachers informally to develop a clearer understanding that the student sent into the program is no longer the student coming back into the classroom. Most teachers can see changes in behaviors, but some are apprehensive, assuming the skills necessary to manage BRAIN student behaviors are lacking. Mrs. Mathis said that she believes teaching teachers to manage behaviors and working with more students in the school on self-regulating behaviors would have the greatest impact on the school as a whole.

The Right Environment

Setting. Mrs. Mathis’s classroom is located down the hall from the main office. Her room is full of brightly colored charts and posters with positive and encouraging messages about appropriate behaviors. There are also behavior charts in the room with students’ names and stickers indicating progress toward goal attainment and earning of extrinsic rewards. There are colored lights and streamers hanging from the ceiling and a large rug near the front of the room with letters of the alphabet. There is a separate area near the back of the room for students to use as a quiet place to calm down. This space has a full length window, a small rug, and a basket of plush toys. The refocus room is located by the teacher’s desk and is used for students whose behaviors are out of control. The room has blue-padded walls and is intended as a space to keep students from harming themselves or others.

The furniture in the room is arranged in several different groupings: a long table where students work on individual assignments, two long tables used to separate students, a round table in the center of the room, and three teacher desks: one for the teacher and two for the teaching assistants in the classroom.

Safe place. The classroom is highly structured and includes procedures for everything that takes place in the room. Mrs. Mathis greets each student as they enter the classroom and begin morning activities. Once all are situated, behavior intervention begins, in which the students gather around the round table and learn behavior skills. Each student gets out a personal binder, which contains the daily record of each student's progression toward goal attainment. Academic work begins in the BRAIN room or students begin to "push out" to other classes depending upon the student's level. Mrs. Mathis ensures students adhere to a routine similar to any other student in the building and explains, "I try to stick to their schedule as much as possible, so whatever they are doing in the general education classrooms, I try to do in the BRAIN program also."

Some of the most difficult times for students with behavioral disorders is when the schedule changes in any way. Many times behaviors become more extreme right before a break, or if the normal routine changes, such as an assembly. Therefore, one of the greatest challenges to the environment is during these times of transition:

Our students love routine and they love a schedule, and just, in general, as a building right now, it's just kind of the week before Thanksgiving, so I think when our friends have difficult days, they are very difficult days." (Ms. Green, interview, November 15, 2018).

It is during this time the routine and structured environment provided by the BRAIN program creates a safe place for the students as the expectations are clear and consistent every day. This structure appears to help students cope through the transitions of a school day and school year.

Level system. The level system at Pinedale is based on six levels (see Table 2). At level one, the students spend all of their time in the BRAIN classroom, with the exception of 30

minutes in the homeroom class with a full time teaching assistant. Lunch and recess is with the BRAIN class, greatly restricting interactions with other students. At level two, students continue to spend the majority of time in the BRAIN classroom, but “push out” to 30 minutes of reading time and 30 minutes of math time in the homeroom class with a teaching assistant.

At level three, all of the privileges of level two are granted, but an additional 30 minutes is added for science or social studies, without a full time assistant, but a limited assistant. This allows students to have more opportunities to self-regulate by pulling back the assistant to more of a monitor position. At this level, students are allowed to participate in art and have recess with the homeroom class; however, the students are still restricted to lunch in the BRAIN classroom. At level four, students have all of the privileges of level three, plus an additional 30 minutes in reading in the homeroom, an additional elective, lunch with homeroom, and attend field trips with an assistant or parent.

Level five has two divisions, level 5a and level 5b. Level 5a allows the student to have 90 minutes for reading in the homeroom, 60 minutes for math, 30 minutes for science or social studies, all electives in homeroom, lunch and recess with homeroom, field trips with an assistant or parent, and attend school assemblies. The most significant change for level 5a is no longer having an assistant monitoring. At level 5b, students are essentially in homeroom the entire day, just as any other student in the building. BRAIN students “check-in” with the BRAIN teacher in the morning and “check-out” with the BRAIN teacher in the afternoon. This is called “check and connect” and is meant for the student to be completely independent, but continuing the support of the BRAIN teacher in ensuring readiness for the day and debriefing at the end of the day. Finally, at level six the students graduate from the program and attend school as any other student.

Points system. To progress through the levels, the students must earn points toward goals. Points are tracked each period by the BRAIN teacher, and general education teacher if applicable. The point system is based on a 3-point scale: 3 points for goals met, 2 points for goals partially met, and 1 point if unsuccessful in meeting the goal. At the early childhood level, Mrs. Mathis has created a system that is easily understood by her students. An example of a behavior sheet for Pinedale is located in Appendix F. The illustrations on the daily behavior sheet are taken from the behavior training curricula, *BrainWise*, used in the classroom to help students learn appropriate coping skills. The lizard is indicative of the “lizard brain,” the part of the brain utilized when being reactive and impulsive, representing that the student has not met the goal. The “iffy face,” is indicative of doing fairly well on meeting the goal, but the student may have needed more redirecting. Finally, the wizard hat is indicative of the “wizard brain,” the brain utilized when using coping strategies to stop, think, and then act (Barry , 2008).

Goals. Behavioral goals for students in the BRAIN program are written by the site BRAIN team with the assistance of the behavior specialist. Goals are written in a positive tone, stating the behaviors the student will work toward. At the early childhood level, goals are written for specific behaviors, and according to Mrs. Mathis, one of the challenges of the BRAIN program at the early childhood level is determining what is developmentally appropriate:

It’s hard for the BRAIN program at the early childhood level because our kids are not at the stage where they can self-regulate 100%, or consistently...And so that’s kind of a balancing act we have found ourselves in...OK, what’s developmentally appropriate, what are they actually able to do, and what is not developmentally appropriate?

(Interview, November 15, 2018)

The team isolates the three most disruptive behaviors and writes goals for those behaviors. Following are examples of typical goals: (1) When given a task or demand, the student will

comply within 20 seconds or less without saying 'no.' (2) Student will remain in the designated area at all times (no elopement). (3) Student will remain safe at all times (no aggression, property destruction, etc.). (4) Student will follow classroom expectations and tasks within 20 seconds with 2 or fewer prompts (includes staying clothed at all times).

At the conclusion of each day, Mrs. Mathis collects the daily behavior sheets for each student, tallies the points and assigns a percentage toward goal completion for each goal. She then places each of the sheets in the student's behavior binders in preparation for tomorrow's Morning Meeting.

The Morning Meeting

Morning Meeting is held first thing in the morning. It is during this time that students discuss behavior scores from the previous day, work through the challenges had, and receive replacement behaviors to be used the next time when faced with the same problems. Through self-evaluation, students learn the impact behaviors have on others, and Mrs. Mathis helps students understand that poor behaviors create negative reactions from teachers and/or peers. During this time Mrs. Mathis teaches students a variety of coping and social skills to manage behaviors. She uses numerous strategies aimed at providing positive reinforcement for appropriate behaviors and motivating students to work towards self-control.

The setting. To start the day, Mrs. Mathis asks all students and the two teaching assistants to join her at the round table located in the middle of the room. The students pick up the personal binders and sit at the round table, noticing a new student in the room. Mrs. Mathis introduces and welcomes the student to the class, showing a copy of the daily behavior sheet, and asking the class for help in explaining the procedures to the new student.

New student: "What do the wizard hats mean?"

Mrs. Mathis: "You earn a wizard hat when you have achieved your goal for that

period.” Our goals are all about having self-control.” (Speaking to the group) “Do you remember what the three steps to self-control are?”

Students: “You stop, think, and then act.”

Mrs. Mathis: “Very good. What happens when we don’t practice self-control?”

Student: “It doesn’t turn out very good.”

Mrs. Mathis then reads a poem to the students about self-control. She has them take a deep breath, close their eyes, and think it through.

Mrs. Mathis: “Now, what do the iffy faces mean?”

Student: “You’re fine, but you better be careful.”

Mrs. Mathis: “What does the lizard mean?”

Student: “It means you have lost all self-control.”

Mrs. Mathis: “Exactly, and that is why we are all going to work for wizard hats!”

As this discussion is taking place, the new student quietly watches the interactions between the students and teachers. Mrs. Mathis then asks the students to open the personal binders, “We are going to go over everybody’s binders from Friday.”

Self-evaluation. During this part of Morning Meeting, students are required to reflect on the previous day. Mrs. Mathis explains:

These are the behaviors we have to work through, and the point is to give them some real life situations...What were some choices made yesterday that weren’t so good, and what were some choices made that were good that can be carried over to today?

(Interview, November 15, 2018)

According to the District Behavior Specialist, “Self-evaluation can be very hard for students at this age, as it is difficult to take personal responsibility for actions” (Behavior Specialist, interview, October 10, 2018). To help students evaluate personal behaviors, Mrs. Mathis

provides a non-threatening environment where students feel emotionally safe in facing any negative behaviors. The following is a script of Morning Meeting held on December 17, 2018:

Mrs. Mathis: "OK, student A, tell us your good news from Friday!"

Student A: "I had a 100% from all day!"

Mrs. Mathis: "Great job! Remember we want you to be so proud of yourselves, so what do we say Student A?"

Student A: "I am so proud of myself!"

All Students: "So are we!"

Mrs. Mathis: "Student B, tell us about your day."

Student B: "I got all wizard hats, I had a perfect day!" (jumping up and down)

Mrs. Mathis: "Great, now let's try to get a 100% today!"

Student B: "I am so proud of myself!"

All Students: "So are we!"

Mrs. Mathis: "Student C, I see that you had kind of a rough start to your day. Can you tell me what happened?"

Student C: "I punched my friend."

Mrs. Mathis: "Why did you punch your friend?" (student has his head down and does not answer) "Did you punch your friend because you didn't get to be at the front of the line?"

Student C: (head down and mumbles) "Yes."

Mrs. Mathis: "You have to stand at the end of the line this week to solve this problem."

Student C: "OK."

Mrs. Mathis: "Now I see that after those three lizards...."

Student C: (interrupts Mrs. Mathis) ..." I turned my day around! I am so proud of myself!"

All Students: "So are we!"

Although this meeting was very positive, Mrs. Mathis says there are times when Morning Meeting can trigger negative behaviors, especially when the students didn't have a good day the day before:

If they had a bad day yesterday, and I say, OK, it's time for Morning Meeting,...they'll get under their desk because they know that we're about to reflect on past behavior, and they already know it's not good, and so we're going to have to talk about it and work through it. (Interview, November 15, 2018)

In working through these challenges, Mrs. Mathis remains positive and constantly reminds students that sometimes there will be "bumpy" days, but that it is OK. She makes her students take responsibility for what happened, teaches replacement behaviors, and often tells her students how proud she is. Mrs. Mathis reminds her students to have hope, "You did not meet your goal yesterday, so what do we say? We will try again today!" Finally, she gives them support and training needed in order to self-regulate behaviors.

Skills training. Teaching behavioral strategies is essential to Morning Meeting.

According to Ms. Green, "In order to read, you have to have strategies, and with our kids who have behavioral issues, they have to have strategies to cope and to interact appropriately with their peers and other adults" (Ms. Green, interview, November 15, 2018). Therefore, Mrs. Mathis spends a significant amount of time teaching replacement behaviors and coping skills through a variety of integrated curricula designed by her. Additionally, she uses different strategies to positively reinforce appropriate behaviors to help her students learn self-control.

Replacement behaviors and coping skills. Mrs. Mathis uses a combination of purchased curriculum and curriculum she created for teaching coping skills. The purchased curriculum *BrainWise* is a researched based program designed to help children build social and emotional

control and self-regulation skills (Barry , 2008). This curriculum uses the previously introduced metaphor of the lizard and wizard brain to assist teachers in helping students understand the biology of the brain and strategies used to control impulsive behavior; to stop and think (Barry , 2008). The daily behavior sheet used in Mrs. Mathis' classroom is based on this curriculum. The teachers indicate the scores for each period with either the wizard hat, three points, the "iffy face", two points, or the lizard, one point. Through this curriculum, Mrs. Mathis teaches students what it means to have self-control by following the three steps of stop, think and then act. "It is important we always use our wizard brain and not our lizard brain," is a common statement Mrs. Mathis uses to remind her students to stop and think.

Mrs. Mathis also utilizes other resources in teaching coping skills. One teaching aid is posters with illustrations teaching students the difference between situations with individual control and situations out of their control. During a classroom observation the following lesson took place during Morning Meeting.

Mrs. Mathis: "So when we are getting angry, I want you to think about what is in your circle of control. No point in getting angry over things that are outside your circle of control."

Mrs. Mathis then reads a book titled, *I Just Don't Like the Sound of No!* As the book is read, the students sit quietly and listen. Occasionally, when a familiar line is read, the students will raise a hand and wait to be called on to share personal experiences of being told "no."

Mrs. Mathis: "So sometimes hearing the word no makes us very angry, and we don't

know what to do with those feelings. What are some of our coping strategies we can use? We can go push, push, push against a door." (Students stand up and go push against a door and then return to the seats).

Mrs. Mathis: "We can count to ten! Let's do it quietly together." (Students all close their eyes and begin counting to ten).

Mrs. Mathis: "We can take deep breaths." (Students keep their eyes closed and take deep breaths).

Mrs. Mathis: "We can squeeze a stress ball."

Student: "We can play with the Play-doh at our desk."

Mrs. Mathis: "Yes, you can squeeze and release Play-doh."

Mrs. Mathis then has each student complete an activity cutting out pictures, illustrating the different activities just practiced and matching them with the correct coping strategy just talked about.

Positive reinforcement of appropriate skills. According the Behavior Specialist, "The bread and butter of behavior change is the positive reinforcement of appropriate skills" (Interview, October 10,2018). The level system of the BRAIN program has built in positive reinforcement for students, with the capability of earning additional privileges with progression through the levels. The students participating look forward to earning additional time in the general education classrooms with peers or earning the opportunity to eat lunch or go to recess.

However, according to Mrs. Mathis, the level system may not be appropriate for the early childhood population.

I have mixed feelings about the level system at the early childhood level because they have no idea what it is like to get to go to PE or to art because they have not been in school long enough to have those experiences. So for them it's kind of like, OK, but that means absolutely nothing to me. (Interview, November 15, 2018)

As a result, Mrs. Mathis has created incentives aimed at positive reinforcement. When students meet their daily goals, each is rewarded with a sticker to place on the chart beside his name. Additionally, Mrs. Mathis has created incentive activities for the class. For example, if no students are sent to the refocus room, the class earns a popcorn kernel, and after earning so many kernels, the class has a popcorn party. If all of the students in the class earn one hundred percent of their wizard hats for the day, a donut is placed on a chart, and after five donuts, the class earns a donut party. There are other extrinsic rewards for Mrs. Mathis' students that provide rewards for appropriate behaviors.

Mrs. Mathis also provides intrinsic rewards to motivate students to behave appropriately. By regularly telling students about the positive actions and behaviors displayed, as well as her pride for each one, Mrs. Mathis builds positive self-esteem. During an observation of the classroom, the following conversation took place between Mrs. Mathis and a student during Morning Meeting.

Mrs. Mathis: "You didn't have a very good day yesterday. You ran away from the teacher and hit her. You lost your self-control. You got angry, and Mr. Matt had to go down to your class to talk with you"

Student: "I know." (Student has his head down and will not make eye contact).

Mrs. Mathis: "Mr. Matt gave you a choice to either walk, on your own to the BRAIN classroom, or he would have to escort you. What did you choose?"

Student: "I chose to walk on my own."

Mrs. Mathis: "That's right. You were able to think about it, stop what you were doing, and walk back to the room so you could recover. That is an amazing break through! We are very proud of you, and you should be very proud of yourself, and your friends are proud of you too."

All Students: "We are very proud of you!"

Mrs. Mathis: "You did not meet your goal yesterday. So what do we all say to him?"

All Students: "Let's try again today!"

Mrs. Mathis ends the lesson on this day with the following statement: "Get out your mirror, say I am so smart, I am a great kid, and I will have a great day!" By interacting with students in this way, she cultivates a positive sense of self-efficacy that creates hope.

Manifestations of Hope

The definition of hope is a feeling of expectation and desire for a certain thing to happen. The students in the BRAIN program at the early childhood level have been placed in the program because negative behaviors have impeded their learning and have caused such disruption in the classrooms that peers are also unable to learn. Consequently, the students are accustomed to receiving negative attention. BRAIN students know the negative behaviors cause problems, but the students do not know how to regulate individual behaviors and practice self-

control. Because of this, school experiences have been negative, resulting in serious discipline, including suspension. The students have little hope of changing the behaviors without intervention. With progression through the program, students gain a stronger sense of self-efficacy as the teachers and principals notice changes in the behaviors and offer individual praise, something rarely received before from teachers and peers in school.

Principals. When considering a successful outcome for students in the BRAIN program, Ms. Green responded, “We want them to be able to thrive in a regular classroom and continue to grow. When that happens, it is exciting for all of us.” There has been evidence of this at Pinedale Elementary. As a principal, Ms. Green has had the opportunity to view the program from a perspective that encompasses the child, parents, and faculty. She understands the home environment of the child, as well as previous struggles in general education classrooms’. In speaking about one student in particular, Ms. Green stated, “We’re all just so excited because he came in with a really, really bumpy start...He has just really thrived in his classroom, in applying the strategies, and he’s happy. He sees that ownership” (Ms. Black, interview, November 15, 2018).

Teachers. Mrs. Mathis’s goal for students is learning how to have self-control in the general education environment, allowing BRAIN students to look and act like their peers:

I want them to blend in with their peers when it comes to behavior, at least. I want them to be able to cope, to problem solve, to be able to make friendships... I also want them to know that in life, you aren’t going to be able to control a lot of things in their lives because, I think up to this point, they have been able to control a lot of things in their lives because it’s easier for Mom and Dad to let them control, let them be in charge, and give them whatever they want. (Interview, November, 15, 2018)

Mrs. Mathis sees small successes every day, and when asked what she considered a successful outcome for her students, she responded, “Whenever we get kids that are being suspended from school and all kinds of stuff, and now they’re functioning in a general education classroom with no assistant for up to three hours a day, that’s very successful” (Interview, November 15, 2018).

Students. The students at this age level express manifestations of hope in interactions with peers and teachers. During Morning Meeting, one of the students in the class began jumping up and down after having met 100 percent of the behavior goals from the day before, expressing pride and excitement in wanting to “do it again” to earn an ice cream cone. This pride was evident in the expressions of the students after accomplishing a goal. During Morning Meeting, students reviewed the behaviors from the day before, and if the behaviors were negative, the students tended to sit with heads down, not making eye contact. One was observed biting the lower lip and seemed quite sad. However, as Mrs. Mathis turned the discussion to the positive behaviors the teachers had witnessed, the student looked up and smiled. Then when the students were told how wonderful each of them were, and that they were capable of great things, they became excited and made statements like, “I turned my day around, I am so proud of myself!”

Aspen Elementary School (2-4)

Aspen Elementary School located on the south side of the Park School District, is nestled in the middle of a neighborhood, surrounded by trees. It is one of the oldest buildings in the district. The BRAIN program here serves qualifying students in grades 2-4 throughout the district. As of December of the 2018-2019 school year, there are five students, four boys and one girl, in the program. Two students in the program are Aspen Elementary students, and the others come from other district sites. Three are in third grade, and two are in fourth grade.

The BRAIN team at this site is composed of the principal, Mrs. Perry, and the classroom teacher, Mr. Johnson. Mrs. Perry has spent four years at Aspen Elementary, serving three years as an assistant principal and now serving as the head principal. The BRAIN program is in its second year at Aspen. Mrs. Perry believes the program here has been successful for most kids and attributes the majority of this success to the teacher, Mr. Johnson. “Mr. Johnson is familiar with a wide range of behaviors and ages, so he is very good at figuring out what triggers kids, and narrowing down each student’s specific needs and goals” (Mrs. Perry, interview, November 8, 2018).

The Right Teacher

Mr. Johnson worked with emotionally disturbed students, grades Kindergarten through sixth grade, in a large urban school district before coming to Park Public Schools. Mr. Johnson is certified in Special Education and enjoys working with students with emotional and behavioral disorders. “There’s never a dull moment, I’ve always got something to do. It amuses me. It’s not often that you get cussed out by someone who is 4 feet tall” (Mr. Johnson, interview, November 8, 2018). Mr. Johnson transferred to Aspen to be the new BRAIN teacher when the program started. Mr. Johnson is well respected by colleagues and was runner-up for Teacher of the Year for the 2018-2019 school year.

Building and repairing relationships. Mr. Johnson is tall, medium build, has a full beard and tattoos. He looks quite intimidating but has a very calm demeanor. The students seem comfortable talking about a variety of topics. One of the students tells about a meeting with a therapist the day before and having learned about yoga cards. Mr. Johnson asks for an explanation about yoga cards. The student tells him, “Well, you pick a card, and it tells you what yoga move to do. It’s really cool.” Mr. Johnson asks a few more questions regarding yoga cards. Another student starts asking about the kind of music Mr. Johnson likes, and the informal

conversation continues. This easy-going demeanor is evident in the relationships with students and teachers, as well as parents Mr. Johnson interacts with daily.

Students. Mr. Johnson spends a great deal of time building relationships with all students in the building, not just BRAIN students. While checking in on BRAIN students throughout the day, Mr. Johnson focuses on engaging with all of the students in the classroom.

None of the kids in this building know what the BRAIN program is. They think they come to my class to have fun all day. So all of the kids want to be in my class, and when they go to regular homeroom, I wander in, I hang out, and instead of just interacting with my students, I'm interacting with all of the kids in the class...There is no stigma attached to these kids, and that's what I want. (Mr. Johnson, interview, November 8, 2018)

As the BRAIN teacher, Mr. Johnson works with some of the most disruptive behaviors, which many times manifest themselves externally and can be violent or disrespectful and defiant. During two separate observations, one of the students displayed significant self-control issues and disrespectful behavior. The following is a conversation that took place between the two of them:

Mr. Johnson: "Student A, you have the option, you can do your work now, or you can do it later during your recess."

Student A: "I don't want to do it at all."

Mr. Johnson: "I understand but you need to work on your self-control and do what I have asked you to do."

Student A: "You control yourself, dude."

Mr. Johnson ignores him and continues interacting with the other students. This further agitates Student A, so he continues to blurt out in an attempt to get attention. He then asks Mr. Johnson a question that does not make sense, and Mr. Johnson continues to ignore him.

Student A: "Answer my question!"

Mr. Johnson: "I am answering questions from students that actually pertain to our lesson."

Student A: "What lesson?"

Mr. Johnson: "Our lesson on self-control."

Student A: "Self-control is stupid!"

Mr. Johnson: "Student B, I like how you have folded yours in half where you can't read it. It will kind of be a surprise. Great job!"

Student A: "Why do I have to finish my work? I hate this!"

Mr. Johnson: "I know, but you still have to do it."

Student A: "This is all stupid and dumb. I hate this class!"

Mr. Johnson: "Do you need to go to the re-focus room?"

Student A: "I'm not scared of you!"

Mr. Johnson: "You now have to give me five minutes of recess, and if you cannot get control, then you will continue to lose an additional five minutes every time you blurt out."

Student A is then quiet for the remainder of the period. Throughout this interaction, Mr. Johnson never raised his voice and remained calm. At the end of the class period, he tells the para-professional to take Student A for a walk and then on to his math class so that Mr. Johnson can speak with another student in private. Student A does not like this and wants to stay in the room with Mr. Johnson. Mr. Johnson explains to Student A that "he believes in him and knows he will have a good day; he just needs to focus on self-control." Student A then

leaves the room with the para-professional and tells Mr. Johnson that he'll see him later during lunch.

Teachers. Mr. Johnson advocates for students throughout the building. Many teachers are apprehensive about receiving BRAIN students into their classrooms, so Mr. Johnson visits with the teachers regularly and works to ensure students are placed correctly. When the site BRAIN team receives the student's enrollment packet, a meeting is held to discuss the student's particular needs, teacher rosters are checked, and the student is placed in an environment that will support his emotional needs.

Communication is important in ensuring the general education teacher has the support and resources needed in order to help the BRAIN students transition into the general education classroom. Mr. Johnson regularly communicates with the teachers who have BRAIN students to teach practices so the student can be successful. During Morning Meeting, a student is asked to tell something good that happened the day before. The student could not think of anything, so Mr. Johnson prompted the student by saying:

Mr. Johnson: "I talked with your teacher yesterday."

Student: "Yeah, I saw you in there. I saw you two talking."

Mr. Johnson: "She said you had an awesome day."

Student: "No, I didn't, Timmy called me ugly!"

Mr. Johnson: "Yes, your teacher told me you two were arguing with each other, and that is why I talked with her, and we made a plan for you, so you and Timmy can be separated from each other in order to keep you from arguing with each other."

Regular communication not only helps the teachers understand and support the students more effectively, but it also helps the student understand that there are a team of people assisting each student by providing appropriate supports and strategies.

The Right Environment

Setting. Mr. Johnson's classroom is located near the end of a long hallway. The room is large and has three teacher desks, several tables, student desks, a computer bank, sink, and an exterior door. The room is lined with brown paneling, and a very large window faces the hallway, but the window remains closed at all times. The room is not colorful, but is decorated with bulletin boards. There are a couple of bean bag chairs in one corner of the room. Adjacent to this area is the refocus room, a small room with blue padded walls and a half door. There is a large area for students to move around.

Safe place. The BRAIN classroom at Aspen Elementary provides a safe and structured environment for students. Students know that when facing challenges throughout the day, there is a safety net to return to. According to the principal at Aspen, "One of the greatest strengths of the program is that a lot of our kids...thrive in the small group environment, and so it's that safe, small group, to go to..." (Interview, Mrs. Perry, November 8, 2018).

As students move to other classrooms, a common phenomenon takes place. Students begin to self-sabotage to return to the safe BRAIN room. According to Mr. Johnson, this happens quite often and is experienced by most BRAIN students. Recently, one student was doing well and was ready to level up to a level 4 but became scared and self-sabotaged by acting out.

One of our students is on Level III-B. He is actually a Level IV but doesn't want to call it that because it scares him...He finally shared with us that he was scared...Because of this we adapted the level to a Level III-B and pulled him back in the BRAIN room for a small amount of time to reassure him that we were still there supporting and helping him. (Mr. Johnson, interview, November 8, 2018)

To help students cope with the fear of moving out into the general education

classroom, Mr. Johnson invites parents to a meeting with their child when self-sabotage begins to occur. Mr. Johnson explains the reasons behind the self-sabotage and develops a plan to address the concerns that fits the child's needs. The levels within the program are often modified to help the child feel safe and more in control.

Level system. The level system at Aspen is based on six levels (see Table 2). At Level I, students spend the majority of the day in the BRAIN classroom with only one 30-minute block of time spent in the homeroom classroom for reading with a full time teaching assistant. Lunch and recess is with the BRAIN class, and interaction with other students is greatly restricted. At Level II, students go to the homeroom class and receive 30-minutes of reading, 30-minutes of math, and recess time with the peers; however, a full time teaching assistant is assigned to monitor behavior. The rest of the day is spent in the BRAIN classroom.

At Level III the students spend 30 minutes of reading, 30 minutes of math, and 30 minutes of science or social studies in the homeroom class and have recess with peers. Some significant changes occur at Level III. No teaching assistant is assigned, and students are allowed to pick one specials class. According to Mr. Johnson:

At Level III we add a little bit of responsibility for them. They get to go to specials, but they only get to pick one per week...We also only check on them at this point. They don't have to have one of us with them at all times. (Interview, November 8, 2018)

Level IV is a milestone for the BRAIN students. At this level students are allowed to have lunch with peers, in addition to earning snack time, including popcorn, snow cones, or a snack brought from home. Mr. Johnson states, "Level IV is really big for our students. They really look forward to getting to eat lunch with their friends" (Interview, November 8, 2018). At Level IV, students have earned 60 minutes of reading, 30 minutes of math, 30 minutes of science or social studies, and two specials classes of their choosing.

Level V is where many of the students in the program begin to self-sabotage. Because of this, Level V is broken into two levels; A and B. At Level V-A, the students have earned 90 minutes of reading, 60 minutes of math, 30 minutes of science or social studies, all specials, and Friday assembly. At this level, students are in the homeroom classes for most of the day and are allowed to go to an assembly held every Friday morning with no extra supervision. At Level V-B, the entire day is spent in the general education classroom, with the exception of Morning Meeting and check-out at the end of the day. Finally, at Level VI, students no longer attend Morning Meeting, but instead go to a “check and connect” with Mr. Johnson, to gauge the student’s emotional temperament for the day and assist with any problems from the day before.

Points system. Just as in the early childhood program, the BRAIN program at Aspen uses a point system to determine students’ progress towards meeting goals. The point system is based on a 3-point scale: 3 points if the student met the goal; 2 points if the student met the goals, but had to re-directed by the teacher; 1 point if the student had to be re-directed over five times before meeting the goal; and 0 points if the student did not meet any part of the goal. Beginning at second grade, students record scores in every class period. Students are responsible for keeping data self-tracking sheets in addition to the teacher’s score sheet, allowing for discussion of discrepancies during Morning Meeting. This allows the student to self-reflect and self-evaluate regarding progress. An example student data collection sheet for Aspen can be found in Appendix G.

At the end of every week the student’s scores are averaged to determine whether or not the student has maintained at the current level or if enough points have been consistently earned to advance. All students must remain on a level for a minimum of two weeks while

maintaining consistent goal completion before considering leveling up. Once this is accomplished, a request to level up can be completed and submitted to the site BRAIN team.

Goals. Beginning in second grade, all students in the BRAIN program are assigned goals pulled from three broad categories: social development, on-task/work completion, and self-regulation and emotional development. These categories, goals, and objectives were written by the district school psychologist in 2015-2016 when the program was first developed. This document is used by the site BRAIN team to create specific goals for students based upon particular needs; however, each student must have at least one goal written for each category.

For example, in social development, students work on building peer and adult relationships. An example of a specific goal is: Student will follow school/classroom rules and adhere to teacher expectations in no more than five prompts. In on-task/work completion, students work on improving classroom performance. A specific goal for this area is: Student will begin a task when assigned/complete assignment within set time limits with no more than five prompts. In self regulation and emotional development, students work on tolerance and self-calming strategies. A specific goal for this area is: Student will utilize coping skills when experiencing anxiety or difficult situations (calm breathing, lemon squeeze, skip counting, etc.). As students master goals within a particular category, an additional goal can be assigned.

At the end of each day, Mr. Johnson collects the scores from the homeroom teachers at Morning Meeting. Mr. Johnson will talk with his students about the behaviors and scores from their teachers the previous, day compared with the student created data charts.

The Morning Meeting

Morning Meeting at Aspen Elementary takes place right at the beginning of school. Morning Meeting is informal at Aspen. Mr. Johnson will either talk with each individually, or he

may talk with all of them at the same time while sitting at his desk, comparing the self-scored behavior charts with those of the teachers.

We go over the scores they got from their teacher, and we go over the scores that they gave themselves. We then talk through all of the positive behaviors as well as the negative behaviors and talk about how we can do better. (Interview, November 8, 2018)

The setting. Students in the BRAIN program at Aspen Elementary come from multiple schools and arrive at different times in the morning. At approximately 7:20, two boys and a girl enter the room talking about the school's breakfast choices. One of the students says, "Well, if they're trying to make kids happy, I'm not happy at all, I wanted strawberry milk." The other students agree and continue the breakfast discussion. Mr. Johnson then starts the discussion by stating, "Let's talk about the pro's and con's from yesterday."

Self-evaluation. Many of Mr. Johnson's students have a difficult time taking responsibility for negative behaviors; therefore, self-evaluation can be challenging. However, Mr. Johnson values this time as it gives students the opportunity to discuss feelings regarding behaviors, as compared to the teacher's perception. Mr. Johnson believes it is important that these conversations take place the following day.

It's good because we're not talking about stuff that happened that day, so it's not something fresh on their minds, so it's not something they're going to start stressing about and get worked up about. It's something in the past...We can't change it, but we can make it better next time. (Interview, November 8, 2018)

The following is a script of Morning Meeting held on December 19, 2018:

Mr. Johnson: "Student A, how was your day?"

Student A: "I did good; I didn't get mad yesterday."

Mr. Johnson: "I saw something great yesterday. Because when the door was closed and you guys had finished with specials, you came back to the room, and the door was closed. And I heard you say, "Let's go back to class because student B is having an issue." That made me very proud of you, that you knew he needed to have his privacy to get under control."

Student A: "It sounded like he was very angry."

Mr. Johnson: "He was having a hard time. How about you, Student C?"

Student C: "I had a really good day; I did all of my work. I did have a con. I got upset, and then I didn't want to do my work."

Mr. Johnson: "Why were you upset?"

Student C: "Because she took my Pokemon cards, and it made me mad!"

Mr. Johnson: "But are you supposed to have your Pokemon cards at school?"

Student C: "No."

Mr. Johnson: "Why?"

Student C: "Because we might play with them before we are done with our work, or other kids might take them from us."

Mr. Johnson: "That's right. So there is no point in getting mad, right?"

Student C: "Yes, I guess so."

Mr. Johnson: "What about you, Student D?"

Student D: "I had a con. I was hiding behind a tree."

Mr. Johnson: "Why did that happen?"

Student D: "Because somebody was rude to me, so we had an argument on the playground."

Mr. Johnson: "What were some things you came up with about controlling your anger?"

Student D: "To squeeze a ball or take deep breaths."

Mr. Johnson: "Did you use any of those things?"

Student D: "No, I forgot."

Mr. Johnson: "Let's work on using those strategies you have been taught when you are getting angry, OK?"

Student D: "I'll try."

Following this discussion, the remaining students enter the room, and Mr. Johnson briefly talks with them about the previous day and their feelings. The focus turns to the day's work and to skills training.

Skills training. Skills training takes place at varying times throughout the day, depending on the daily schedule. During this time Mr. Johnson utilizes the *BrainWise* curriculum, *Character First*, and other supplemental materials. "There are some good parts to the *BrainWise* program, but mostly not...That's why I've got my supplemental stuff, with *Character First*, and *Word of the Week* from a program called *Qubo*" (Interview, November 8, 2018).

Mr. Johnson has scheduled these programs for specific days of the week: *BrainWise* is on Wednesday, *Character First* is on Tuesday, Thursday, and Friday, and a counselor from the local family counseling agency visits on Monday with a lesson on coping skills.

Replacement behaviors and coping skills. According to Mr. Johnson, the most important part of the BRAIN program is the teaching of replacement behaviors and coping skills. "We have to give them those skills in the first place because that is what they are lacking when they come to us" (Interview, November 8, 2018). During an observation on December 12, 2018, this behavior intervention lesson occurred.

Mr. Johnson: "OK, let's all move to the table and we are going to do an activity about self-control. Can anyone tell me what that means?"

Students: "It means stopping to think before you act."

Mr. Johnson: "Right, it is not acting impulsively. Sometimes we want to act impulsively, but we need to use our words better. It's about learning to have a discussion, learning to control our tongue. So today we are going to make a big mouth with a big old tongue hanging out. We are going to decorate it with some nice things we can say when we are thinking about saying something that is unkind. We are going to place these on our desks to remind us of nice things we can say to each other."

Mr. Johnson, the two teaching assistants, and the students all work together creating cut-outs of mouths, all laughing and complimenting each other. The group then begins discussing kind words or statements to be written on the tongues.

Mr. Johnson: "I'll start. You look great today! Is this a nice thing to say?"

Students: "Yes!"

Student A: "You're awesome. You should run for President!"

Mr. Johnson: "Yes, that is a very nice thing to say."

Student C: "Can I say thank you for being my teacher?"

Mr. Johnson: "Yes, if that is something you would like to say."

After the discussion, the students tape the projects to the desks to remember how important it is to say kind things to each other.

Positive reinforcement of appropriate skills. Mr. Johnson does not utilize extrinsic reward incentives. He believes the program itself creates the motivation for students to want to do well and move through the levels to have more time with peers. Mr. Johnson reinforces appropriate behaviors through daily interactions with students. During a class discussion on December 12, 2018, Mr. Johnson was presenting a lesson, and one student continued to blurt out and create a disruption. Instead of allowing the student to control the classroom through

inappropriate behaviors, Mr. Johnson chose to ignore the student and reinforce appropriate behaviors exhibited by other students in the room.

Mr. Johnson: "I like how Student A raised his hand. That is a very kind thing to do."

Student B: "Mr. Johnson, Mr. Johnson, answer my question!"

Mr. Johnson: "I would love to answer your question, but I'm waiting for you to raise your hand."

As the lesson continued, Mr. Johnson modeled positive reinforcement of appropriate behaviors by thanking each student for doing the right thing, while at the same time ignoring negative behaviors. This created frustration for the student not following directions, but eventually the student raised a hand and waited to be acknowledged by Mr. Johnson. Mr. Johnson acknowledged and thanked the student for displaying appropriate behavior by following the classroom procedures.

Manifestations of Hope

Hope continues to be a powerful emotion at this level. Because students are a bit older, manifestations of hope are less overt than displayed by early childhood students. Students tend to display pride in quieter ways, such as smiling when receiving positive feedback from principals and teachers.

Principals. When asked what she considered a positive outcome for students in the BRAIN program, Mrs. Perry stated,

I want to see them level out of our program and return to the general education programs, to handle their emotions effectively, and not feel stigmatized by past behaviors...I want them to be able to go back and say, "I've grown up. I may have made some bad choices, but this is me now, and I know better, and I'm here to learn."

(Interview, November 8, 2018).

She cites students who have been through the program and have learned to control disruptive behaviors. She has hope for them and believes the program has done much to help them, but she has concerns for some, especially when mental health is the issue.

Teachers. Mr. Johnson believes the program is working for most students and smiles when talking about one student.

He would be hardly recognizable from last year. Last year an immediate response to a difficult situation was to run from the class, screaming at the top of his lungs, and knocking people over. He has now learned self-control, and when he becomes angry, it is more internalized. (Interview, November 8, 2018)

Mr. Johnson has hope for all students stating, “I want these kids to be happy with who they are” (Interview, November 8, 2018). Through focused intervention and education, students can learn to self-regulate negative behaviors, allowing successful navigation through school and life.

Students. During an observation on December 12, 2018, one of Mr. Johnson’s students had just finished a reading class and had entered Mr. Johnson’s classroom in time for behavior intervention. The student entered the room clearly upset and ran straight to a table in the middle of the room, crawled underneath it, curled up in a ball, and began crying.

Mr. Johnson: “What’s wrong?”

Student: “I don’t want to be here!”

Mr. Jones: “Why don’t you come out from underneath the table and go to the bean bag?”

Student: “No, I don’t want to be here!”

As this was taking place, Mr. Johnson and the teaching assistants continued setting up for the day’s activities. One of the teaching assistants moved a chair at the table the student was under

and said, "Excuse me," when pulling out the chair. The student then got out from underneath the table and ran to the door continuing to cry.

Mr. Johnson: "Why has it been a tough morning? Because you missed yesterday?"

Student: "Yes."

Mr. Johnson: "Are you overwhelmed?"

Student: "I don't know."

Mr. Johnson: "Would you like to join us?"

Student: "I don't know. I would like to go to the bean bag for a little bit."

Mr. Johnson: "OK, would you like me to set a timer for you?"

Student: "No."

Mr. Johnson: "OK, I'll just keep a timer in my head."

The student continued to cry and after a few minutes became louder.

Mr. Johnson: "Let's try to control ourselves while we are over there."

Student: "OK."

After about five minutes, the teaching assistant asked the student to join the group.

Student: "I need one more minute."

Mr. Johnson: "OK, I'll set a timer for one more minute."

After the minute was up, Mr. Johnson asked the student again to join the group. Quietly crying, the student joined the group at the table and began working with help from the teaching assistant. No one asked what was wrong; the other students continued with the activity and allowed time for the student to regain composure. While working on the activity, the student expressed concern that the project did not look right. Mr. Johnson looked at the project and said, "You've done a very nice job. Great work!" For the first time, the student smiled.

As the students were preparing to go to the next class, the student asked Mr. Johnson about lunch detention due to the negative behaviors displayed. Mr. Johnson explained that sometimes it is easy to become overwhelmed; however, Mr. Johnson continued to praise the student for using coping skills by asking for a break and then recovering enough to finish the activity and get back on track for the day. The student just smiled and said, "Thank you, Mr. Johnson."

Summit Intermediate School (5-6)

Summit Intermediate School is located on the south side of the Park School District. The building has had multiple uses, but Summit was remodeled and became the first intermediate school. As of December of the 2018-2019 school year, there are three students in the program at Summit, all three are boys, and all are in the fifth grade.

The BRAIN team at Summit is composed of the principal and classroom teacher. The principal at Summit, Mrs. White, is new to the school, but served as a principal in an out-of-state district for five years. At her previous district there was a program similar to the BRAIN program that was effective. "We had a very strong teacher and that makes all the difference in that kind of classroom" (Mrs. White, interview, October 30, 2018).

The Right Teacher

Mrs. Capps has been at Summit for two years as the BRAIN teacher and worked with emotionally disturbed students in a previous district for one year. She is passionate about working with students who have behavioral disorders.

I want to be the best for them, I like these kids, and I do well with these kids. Even when I feel like I'm burning out, I don't want to step back...The reason I work well with them is because the Lord has blessed me with a lot of patience. I don't get angry or excited...I will never yell at them. (Interview, October 30, 2018)

In observing and talking with Mrs. Capps, the high expectations and care and support are evident. She has genuine concern for student's well being and is fiercely protective and demands expectations are met. According to the principal, Mrs. White:

She's got very high expectations, and she makes sure she communicates those expectations with the students. She is most consistent and does it with fidelity. She is firm yet encouraging with them...They know what those expectations are, but they also know they are cared for. (Mrs. White, interview, October 30, 2018)

Building and repairing relationships. In the summer months Mrs. Capps reads student records to learn of the student's experiences, past academic performance, past disciplinary issues, and family history to better understand needs before creating an intervention plan and developing behavior goals. A formal meeting is then scheduled for introductions and to gain additional information from parents. Mrs. Capps works with teachers receiving BRAIN students into the classroom to assist them in understanding the particular needs of the student and the purpose of the BRAIN program in helping the student to self-regulate. Mrs. Capps understands the importance of communicating and building relationships with students, teachers, and parents to provide students a better chance of long-term success.

Students. In building relationships with students, Mrs. Capps learns about personal interests, hobbies, and activities.

We really like to talk about our sports and about how great we did and things we need to work on. I like to set aside time for them...for a few minutes. They can feel that connection. We can start building a relationship. We can talk about Pokemon because they are all into Pokemon, and I've done more research on Pokemon than I ever care to admit. (Mrs. Capps, interview, October 30, 2018)

There are two guinea pigs in the room. All the students care a great deal for the two animals and are allowed to hold and pet them. One of the students asks immediately to hold one of the guinea pigs. After taking it out of the cage, the student sits quietly, petting the animal. The students are allowed to do this daily as Mrs. Capps thinks it is important to learn gentleness and caring for another living thing.

When the principal, Mrs. White, talks about Mrs. Capps's ability to build and repair relationships, she says:

The kids understand they are held accountable for their actions, and if they did well, then they are celebrated. And if they didn't, Mrs. Capps will talk to them about it, but then it's a brand new day, and everything starts over. (Mrs. White, interview, October 30, 2018)

Teachers. This is Mrs. Capps's second year with the BRAIN program and she felt a disconnect between the general education teachers and the BRAIN program existed. After listening to general education teachers discuss students in the BRAIN program, Mrs. Capps realized that they lacked a basic understanding of the program. As a result, Mrs. Capps decided to do a presentation to provide the faculty with information about the purpose and expectations of the program. To have a successful BRAIN program, Mrs. Capps felt clearer understanding of what a Tier III intervention entails was needed. To be placed in the BRAIN program, six weeks of data is collected and then a referral to the district BRAIN team is completed. Once this was understood, Mrs. Capps felt there was more acceptance of the students, and teachers had a better understanding of their role in supporting BRAIN students.

During an observation on December 3, 2018, Mrs. Capps was absent due to a funeral. A general education teacher substituted, and with the help of the teaching assistant, the class was well managed. When Mrs. Capps returned the following day, she asked the students to

write thank you notes to the teacher. This helped the students understand the importance of kindness and appreciation for those who help each other, and it also served to build stronger relationships with the teachers and the BRAIN program.

The Right Environment

Setting. Mrs. Capps' classroom located near the main office, is a smaller room with two teacher desks, four student desks, and a half-circle table near the back. Near this table are two cages with two guinea pigs: Milo and Niphlus. The students feed and water Milo and Niphlus. As a part of the morning routine, the students hold and pet the guinea pigs, which seems to have a calming effect on one of the students. In the corner sits a folded up teepee. The teepee is sometimes set up for students to have a quiet place to go to calm down. The teepee provides a calm down area that seems much less like a punishment and more like a calm, quiet oasis.

The room is well organized and brightly decorated. "Together We Rise" is written in brightly colored, large letters. A bulletin board is decorated to match the lesson for the week. For example, the word "Relationships" was followed by two questions: How do our relationships help or hurt our lives? What choices do you struggle with and why? These questions are discussed during social skills training time. Another area is where students collect score sheets for the day and record progress toward goals every period. Finally, there are posters created by students, depicting their likes and dislikes, interests and hobbies.

Safe place. Mrs. Capps provides a safe place for students by having a highly structured environment in which students know what to expect every day. "It's just consistency and structure. My kids know every minute of every day what's happening, where they're going, what time, how to turn things in. There's a procedure for everything" (Mrs. Capps, interview,

October 30, 2018). In the mornings, students are greeted while entering; this is breakfast time in the classroom. While eating, the students talk with each other or play games provided by Mrs. Capps, ensuring the students have something to do in the morning to remain occupied, while also having time to prepare for their day. The bell rings at 8:10, and by this time, the students have finished breakfast and are seated, ready for class.

Every day begins with a review of the schedule for the week and daily announcements. The students in the BRAIN program typically do not like surprises, so clear articulation of the schedule and events of the week are important to the success of the students. The rest of the week is highly structured with a different activity taking place every day of the week. Mrs. Capps says, "On Monday's, they know that they're going to come in and we're going to talk about their weekend, and we're going to do something that is more social skills related" (Interview, October 30, 2018). Tuesdays are for typing to provide them with practice for state testing. Wednesdays are called "Wisely Wednesdays," as students are taught from the *BrainWise* Curriculum, followed by math skills on Thursdays, and finally on Fridays, a counselor from the local family counseling agency teaches about coping skills. After the first block of the day, students go to the general education classes, depending on the student's current level.

Level system. The level system at Summit is based on five levels (see Table 2). At Level I, students remain in the BRAIN classroom all day with the exception of attending one elective class, called Life Apps. At this level, students are not allowed to bring bags, backpacks, or binders from home. All instructional materials are provided by the school. Additionally, students have a full time teaching assistant throughout the day. The only change at Level II is the addition of one core class. At Level III, students are allowed to attend an additional core and Life App class, and are allowed to bring a backpack or a binder from home. It is at this level that students earn independent hallway and bathroom privileges and no longer require monitoring.

At Level IV, students earn a number of new privileges. In addition to adding a final core class, students are allowed to bring a lunch from home, rather than the before required school lunch and eat in the cafeteria with peers. Students are now allowed to buy concessions from fundraisers at the school. Finally at Level V, all privileges with peers are earned, including being in the gym and/or cafeteria before and after school and recess.

As at other BRAIN sites throughout the district, the levels can be adjusted based on the individual needs of the students.

Mrs. Capps believes one of the greatest strengths of the BRAIN program is the leveling system. She explains:

Kid's understand levels because of video games, board games... So the fact that you put their behavior into something more tangible for them turns into something that is reachable...So the leveling system is really, I think, what makes the program work.

(Interview, October 30, 2018)

Points system. The points system at Summit is different than all other sites. Mrs. Capps uses a 5-point scale to assess student's progress. Five points are earned if the student worked and remained on task for the entire class period, with 4 points for working and remaining on task for the majority of the class. Three points are earned if the student was mostly on-task but had to be redirected multiple times. Only 2 points are earned if the student disrupted class, and 1 point is earned if minimal work was completed, or the student was disruptive or did not comply with direction. Finally, 0 points are earned if the student walks out of class, refuses to work, creates a disturbance, or has to be escorted out.

Additionally, students must earn a certain percentage of goal completion at every level. For example, at Level I goals must be met at least 50% of the time in order to maintain at that level. To move up to Level II, goals must be met at least 50% of the time to maintain, and to

move to Level III, students must meet their goals 70% of the time. By the time students reach Level V, goals must be met 90% of the time and sustained at that percentage for at least two weeks before being allowed to exit the program.

Goals. Just as at Aspen Elementary, goals for students in the BRAIN program at Summit are written in three categories: Social development, on-task/work completion, and self-regulation and emotional development. Typical goals at this level include: (1) I will not be disrespectful in class. (2) I will follow classroom expectations. (3) When I feel upset, I will go to my safe place. The goals are not written as specifically as at the elementary level which leads to more subjectivity in assigning points for scores. Moreover, this allows for more discussion with students at this level, providing an opportunity to communicate feelings about the scores.

Mrs. Capps provides students at this level a voice in setting goals. While the goals for the program at Summit are created by the site BRAIN team, the parents, and the behavior specialist, Mrs. Capps works with students weekly in setting personal goals.

I have one student in particular who is having some issues at home, and so he has been blurting out in class more than normal...He knows it is something he needs to work on, so I am giving him a voice in setting a personal goal. (Interview, October 30, 2018)

The Morning Meeting

At Summit Intermediate Morning Meeting is held at two different times of the day, depending on the grade level. For fifth grade students, Morning Meeting is held during the first scheduled Life App class. All students at Summit attend a Life Apps class during the first block of the day, making this is just part of the normal schedule. Sixth grade students do not have Morning Meeting until the afternoon as all sixth graders at Summit have core classes in the morning and Life App blocks in the afternoon. Sixth grade BRAIN students then have Morning Meeting during the first Life Apps class. According to Mrs. Capps:

I refuse to take my sixth graders out of their core classes, and I refuse to take them out of their Life Apps classes. They like them, they've earned them, so we just decided to make Morning Meeting a Life Apps class. (Interview, October 30, 2018)

The setting. Currently all students in the BRAIN program at Summit are fifth graders, so Morning Meeting is held in the morning. As students arrive, they finish breakfast, play games, or hold the guinea pigs. When the first bell rings, Mrs. Capps reviews the schedule for the day and week. During an observation on Monday, December 3, Mrs. Capps asked the students about their weekends. This is a normal occurrence on Mondays, as sometimes students may have had a rough weekend at home and have a lot to talk about and work through. The following conversation took place during this observation:

Student A: "I had a good time this weekend because I got to spend some time with one of my friends. He is so funny because he always likes to talk in Chinese, and that is why I really like him, and he gets to come to my house all of the time. My mom lets him come over, but she always asks if they are good or not, because one time I had a bad one."

Mrs. Capps: "Did you know he was bad?"

Student A: "Yes, and I tried to hide it from my mom, but she found out about it."

Mrs. Capps: "Mom's are good at that!"

These conversations regarding the weekend continue for about twenty minutes with each student patiently waiting to be called on. The students love to have Mrs. Capps's attention, so after having shared a story, the students raise their hands immediately, waiting for another chance to tell another story. After all have had an opportunity to share, Mrs. Capps assigns an activity to write thank you notes to the substitute from the week before, each student writing for ten minutes. These must be kind and appreciative. As the students write, Mrs. Capps calls each to her desk to review the scores from the previous day.

Self-evaluation. This part of Morning Meeting is held privately as Mrs. Capps wants to protect the privacy of students. So while the students work on an activity, each is called up individually and talks quietly because “their business is their business” (Interview, October 30, 2018).

During this conference, Mrs. Capps asks the students about behaviors the day before and any issues or difficulties experienced in class. Mrs. Capps then shares the perceptions of teachers regarding progress on behavior goals and looks for any discrepancies to discuss differences. The following is a script from a Monday Morning meeting held on December 4, 2018:

Mrs. Capps: “We really have to work on the bathroom issue. You seem to use more passes than most of your classmates. Mrs. Smith isn’t going to keep doing that. Will you work on that?”

Student A: “Yes, I’ll do better.”

Mrs. Capps: “Good job, keep it up.”

She then calls a second student to her desk.

Mrs. Capps: “You had a really good day on Friday. Congrats and thank you. Monday it looks like we had a little hiccup here. Your scores are going to keep you where you are at. You need to make sure you are keeping comments to yourself. Whole class should not be paying attention to you. Sit down, raise your hand, and do your work. It’s not fair to other students if you distract them. They have the right to learn. I’m letting you know if this continues, there is no way you stay at level. Do better, I know you can.”

The student does not respond and remains quiet with head down. The student only smiles when Mrs. Capps expresses belief in the student’s capabilities to accomplish goals.

Skills training. Mrs. Capps primarily uses the *BrainWise* program in teaching social skills. According to Mrs. Capps, students at this age have to understand the reasons behind adverse behaviors to self-regulate. She explains:

As fifth graders, they really need to know how their body operates...to know the parts of the brain that control emotion and impulsivity. They really want to know why things are happening. It's the big "Why" stage-...so I try to give them as much information as I can. (Interview, October 30, 2018)

Mrs. Capps begins the year with teaching the anatomy of the brain, followed by discussions around emotional control. The students learn about the importance of healthy relationships, discussing supports available.

Replacement behaviors and coping skills. Mrs. Capps uses an analogy of an elevator in teaching students about regulating emotions:

When we are at a level 0, we are just hanging out in the lobby...around other people. But as we begin to get upset or angry, we start going up the elevator, and if we get to...level 10, then we are now in the penthouse. The penthouse is cool, but we need to be all by ourselves...We need to calm down and use whatever coping skill works best for us and try to bring down that elevator. (Interview, October 30, 2018)

Mrs. Capps also teaches students the importance of separating fact from opinion as students at this age tend to gossip. She works with students in resolving conflict by assisting students in developing positive solutions. Students are taught about the importance of social support networks and recognizing when others are trying to be helpful or hurtful. She explains:

The most important skill sets for fifth graders are learning to separate fact from opinion because there is a lot of storytelling. And then recognizing our red flags, knowing what makes us mad and then knowing where we're at on our elevator because that is going

to decide whether or not we need to take a break. Do we need to step away?

(Interview, October 30, 2018)

Positive reinforcement of appropriate skills. Positive reinforcement is built into the program through the levels and points system. Mrs. Capps stresses helping students understand there is power through personal choices, and talks about understanding the privileges all around and how those privileges must be earned. When students make good choices, privileges may be earned, leading to a positive cycle of good choices with privileges.

They have to learn that however far they progress in this program, it is up to them... It's their choice. When...they finally decide, "Oh, she's not budging," it's then their choice to progress, I'm just there to help them facilitate that choice. (Interview, October 30, 2018)

Manifestations of Hope

Intermediate students experience hope in learning to control anger, in developing positive relationships with peers, and in having academic success. In implementing the BRAIN program at Summit, Mrs. Capps has a philosophy that allows students the freedom to make mistakes, ensures students know they are cared for, and provides advocacy when they struggle, helping to instill hope.

Principals. The principal at Summit believes the program is meeting the needs of students. She states:

I think them seeing just that success of being able to handle their emotions and being able to use the tools that they're being taught so they can be...with their peers, and go to lunch, and go to recess...That is what they want...They want to be normal. (Mrs. White, interview, October 30, 2018)

Teachers. Mrs. Capps hopes students learn to control negative behaviors, which affords the students better opportunities in academic achievement. She believes success looks different for every student, but all students can experience success through the program at every level. When asked what was considered a successful outcome, she explained:

Successful for my kids is leveling out because I know they can. Success for some...I have sent over to the middle school is them staying at a level three or four...They may need that extra structure, and that's OK. (Interview, October 30, 2018)

Mrs. Capps also finds hope in classroom performance. Often students who have experienced behavioral and emotional disorders have academic difficulties. So much time has been spent out of the classroom that students have fallen behind academically. She states:

We see lots of progress...because their behavior is finally under control, and they are able to learn. That's really exciting...I had one kid jump 100 points on his STAR 360 assessment. I told him, "Do you see what happens when you are in class and you learn? You are so smart!" (Interview, October 30, 2018)

Students. Peer relationships are paramount at this age. Many students want to self-regulate due to the detrimental effect their negative behaviors have on friendships. Mrs. Capps spoke of one student who, when frustrated by other students, would become volatile and violent. However, Mrs. Capps says the student now understands the importance of using coping skills. He said, "I don't want to be embarrassed anymore, I want to control my anger instead of losing control and having everybody laugh at me." Mrs. Capps believes helping students learn coping strategies to assist in navigating social situations is a primary responsibility.

At Summit Intermediate, when a student wants to level up to a higher level, a form must be completed detailing the reasons for requesting to level up. During Morning Meeting on

December 4, 2018, Mrs. Capps had a conversation with one student about the request to level up.

Mrs. Capps: "Student A, I got your level up request and I'll take it to the principals after your first Life App. Can you come up here and clear up two words I cannot read?"

Student A: "It says, I have worked hard to raise my hand. I have been respectful to my teachers. I have not been blurting out."

Mrs. Capps: "Thank you, sir. Why do you want to be at a level 5? You need to write down whatever you want, ok?"

Student A: "I want to be able to have recess with my friends!"

Mrs. Capps: "We call you down to the office when you get to a level 5, so don't be scared. Just remember, getting to level 5 is a big deal, and we just want to celebrate you!"

Student A: "I'm really excited but really nervous. I am doing really good!"

The pride the student had for his progress was evident on his face. Mrs. Capps asked for a high-five.

Cascade Intermediate School (5-6)

Cascade Intermediate School is located on the north side of Park School District. The building opened in 2013, and there are approximately 800 students between the fifth and sixth grades. The building is open, bright, and beautifully decorated with innovative flex rooms located at the end of each pod, specifically for providing space to engage students in unique learning environments. As of December of the 2018-2019 school year, there are four students in the program, three boys and one girl. All of the students are from Cascade Intermediate.

The BRAIN team at Cascade is composed of the principal and the classroom teacher. The principal of Cascade Intermediate, Mrs. Summers served as an assistant principal at Redwood Middle School before moving to Cascade Intermediate in 2013. The BRAIN program

was implemented at Cascade during the 2017-2018 school year and according to Mrs. Summers, was needed to address the significant needs of some of their students with emotional and behavioral disorders.

We had some students that were extremely high need, and we had supports in place, but they always felt patchy to us. It always felt like our hearts were in the right place, but the consistency just wasn't there, and it was hard...We were trying to fit a child into a structure that just wasn't quite right for them. So having the BRAIN program enables us to have a structure with consistency. (Mrs. Summers, interview, November 2, 2018)

In planning for the program at Cascade, Mrs. Summers and the assistant principal chose a teacher currently working at the school. Mrs. Blevins was selected because of her passion for working with students with emotional and behavioral disorders, as well as expertise in setting up an appropriate environment for the program. However, Mrs. Blevins discovered she was pregnant and would not be returning to school until the second semester. Mrs. Summers then assigned a first year teacher to the program, along with another teacher who would conduct the Morning Meeting. During this first semester of the program, Mrs. Summers learned the importance of communication and of maintaining fidelity to the program. Due to the unusual implementation of the program, the importance of open communication between teachers, teaching assistants, and the principal was fully understood.

We definitely had some tendencies to move away from the guidelines of the program, trying to meet individual student needs...We had to keep the structure of the program in tact in order to maintain the integrity of the program, and therefore, communication was critical during that first semester. (Mrs. Summers, interview, November 2, 2018).

When Mrs. Blevins returned during the second semester, the strong communication continued, and the team slowly worked to transition those teachers who had helped during the first

semester out of the program. When asked about the intensity of involvement in the program during the school year, Mrs. Summers stated, “Last year, we had to be down there a lot, but this year the communication is so much better. We communicate every day with the students and BRAIN teacher, and we have a good understanding for what is happening on a daily basis” (Mrs. Summers, interview, November 2, 2018).

The Right Teacher

Mrs. Blevins has been a special education teacher for fourteen years and is passionate and emotional when talking about students. The flexibility of the BRAIN program has been evident. By utilizing different curricula and studying the importance of the environment on the emotional well being of students, Mrs. Blevins has created an active learning space called the “RUBBLE” room, which stands for Rockets (the mascot for Cascade Intermediate) Ultimate Brain Based Learning Environment. Here, students move through a variety of centers with different tasks, allowing for opportunities to process information and move the body at the same time to stimulate brain function. Mrs. Blevins is innovative and focused on building relationships with students, teachers, and parents. According to Mrs. Summers, “Mrs. Blevins is the key to it all, she shares what works and what doesn’t work, and is good at teaching others about the little short cuts in making relationships with students” (Interview, November 2, 2018).

Building and repairing relationships. Mrs. Blevins builds relationships with students through advocacy and helping them search for ways to find success in the classroom. Mrs. Blevins educates teachers by providing positive classroom management strategies for BRAIN students and strategies to build relationships with students. Finally, Mrs. Blevins works with parents by remaining in constant communication and offering suggestions on how to support children in achieving both academically and socially.

Students. Mrs. Blevins becomes emotional when talking about the chaos and trauma many of the students have experienced.

It is so hard to watch chaos when you can't do much about it...seeing the things that children have to live through make it hard to go to work. When you have a fifth or sixth grade child who is trying to commit suicide, I mean that's hard. You just want to take it off of them, but you can't. (Mrs. Blevins, interview, November 2, 2018)

Mrs. Blevins supports students by advocating for them with other teachers and implementing a variety of accommodations aimed at helping the students cope with different challenges. She explains, "I'm a special education teacher at heart, so meeting their needs in my BRAIN room...I can figure out how they learn...what they need...and just setting them up for success" (Mrs. Blevins, interview, November 2, 2018). Mrs. Blevins develops close relationships with her students due to the small environment of the BRAIN room and because of her special training in dealing with students with emotional and behavioral disorders. This training has allowed better understanding of a student's needs, especially when the student is not progressing through the program as planned. She talked about one student who is currently on a Level III:

He kind of backslid a little bit, and what we found is that he was struggling with academics...Then we found out that we didn't have him in the appropriate placement. He needed additional services. He needed direct instruction. So we made that adjustment, and now he is progressing. (Mrs. Blevins, interview, November 2, 2018)

Teachers. Mrs. Blevins builds relationships with teachers at Cascade by helping students transition into general education classrooms. Often teachers are apprehensive about receiving students known to have caused serious disruptions to the the learning environment; therefore, Mrs. Blevins is proactive in providing strategies that have been tried and found

effective. According to the principal, Mrs. Summers, “Mrs. Blevins is able to try out different strategies to help her students in the smaller environment and then transition that support to the larger general education classroom” (Mrs. Summers, interview, November 2, 2018). One student was struggling to sit still during math time, so Mrs. Blevins had the student stand at a taller table. Mrs. Blevins found the student worked well standing up and was able to move around more freely while processing through the work. Placement of a taller table was then implemented in the general education classroom with the student finding success in math. According to Mrs. Summers, “It’s just a very good setting to find out what’s successful for kids so that you can integrate that into the general education classroom” (Mrs. Summers, interview, November 2, 2018). Mrs. Blevins feels support from the general education teachers, and the teachers have expressed willingness to try the different accommodations being suggested.

Mrs. Blevins created the RUBBLE room for all students in the building, not just BRAIN students. All teachers have been trained in the effective use of the RUBBLE room as a positive learning environment. According to Mrs. Summers, “The teachers are excited to use the new room” (Mrs. Summers, interview, November 2, 2018). By working with teachers in creating these types of innovative environments and strategies for students, Mrs. Blevins has earned the respect and trust of colleagues.

The Right Environment

Setting. Mrs. Blevins classroom is located at the end of a long hallway. The room is calming, with natural light. Mrs. Blevins does not use the classroom lights at all but does have a few floor lamps in different areas of the room. There is one teacher desk and a semi-circular table used for group work. All other student desks are separated in different areas of the room. Each student desk is placed near a wall or board, and students make the space their own. Student drawings are posted around each desk, as well as “sticky” notes displaying daily goals.

Additionally, there is a small room within the room, with blue-padded walls and a half-door at its entrance with “Chill Room” written above the door. I asked Mrs. Blevins why she called it the Chill Room, and she told me it just sounded safer and less intimidating than calling it the refocus room.

The walls are brightly decorated with posters indicating appropriate behaviors, posters explaining the level system, posters explaining the incentive programs, and behavior charts of personal goals. There is a personalized place for coats and backpacks.

This classroom is utilized for the majority of the day, but the students also have access to the RUBBLE room during first and last periods. This large room has exercise equipment, a mini-trampoline, and large exercise balls used as chairs around a rectangular table. The room has five different centers with activities that students rotate through. Each center includes an educational activity and different exercises or physical tasks students complete. It is in this room that Morning Meeting and social skills training take place.

Safe place. According to Mrs. Summers, one of the greatest strengths of the BRAIN program is the structure, “I think transition for kids is so overwhelming and especially for kids that don’t have self-control...so many things to deal with, that having the opportunity...to have a self-contained starting place really helps them adjust” (Mrs. Summers, interview, November 2, 2018). She also finds value in that all students must go out to one general education class from the very beginning of the program. This allows the students an opportunity to understand what is being worked for, to know what a general education class looks like, and the appropriate behaviors for that setting; however, students in the program still have the safety of the BRAIN room and the additional supports, including the teaching of social skills.

Mrs. Summers also believes the program provides for greater equity among students. She has found that disciplining all students the same is inherently unfair, but sometimes that is

difficult to defend to the larger community. Many times principals feel they must be consistent in handing out discipline to students and have few options when dealing with students who have emotional and behavioral disorders.

I feel like the BRAIN program gives you a little gray area so that you can have other consequences. You can level down, you can take away privileges, or you can do some other things without having to go straight to suspension or in-school suspension, which is just not effective with some of our students. (Mrs. Summers, interview, November 2, 2018)

In addition to the highly structured elements of the BRAIN program, Mrs. Blevins also provides a safe place by focusing on consistency of implementation. According to the behavior specialist, “Our BRAIN teachers at the intermediate sites are really structured, and they only give students one option. For example, if it’s time to go, they say, ‘OK, let’s get going.’ There is no other option” (Interview, October 10, 2018). The students in Mrs. Blevins’s classroom are clear about expectations and expected behaviors throughout the day.

At Cascade Intermediate, BRAIN students begin the day with a social skills lesson and end the day with reflection and self-evaluation, or what is called Morning Meeting at other sites. Mrs. Blevins has re-arranged the structure of the day to accommodate the schedule at Cascade.

“We start out our day with what we call BESST, which stands for Behavioral, Emotional, Social, Self-regulation, and Teamwork. So the students get lessons in all of those skills, and it’s incorporated into a movement room and movement time” (Mrs. Blevins, interview, November 2, 2018). Mrs. Blevins has been able to flex the program to fit the needs of the school and students. Her creativity has allowed additional time to work with students on improving self-

regulation and social skills, and this has provided contact with BRAIN students throughout the day to ensure students are meeting the goals.

Level system. The level system at Cascade is based on five levels (see Table 2). At Level I the students spend the majority of the day in the BRAIN classroom. Students are allowed to attend one core class, and one Life App, but it must be the BRAIN Life App which includes social skills during Morning Meeting. The students are required to eat breakfast and lunch in the BRAIN classroom. The only change for Level II is the addition of one core class.

At Level III, the students begin to earn more privileges and are allowed to attend three core classes, and two Life Apps classes, one of which is by personal choice. At this level, students are allowed to eat breakfast and lunch in the cafeteria. The only difference between Level III and Level IV is an additional Life Apps class.

At Level V, students are out to all classes during the day, breakfast and lunch are in the cafeteria, and recess is allowed without additional supervision. It is at this level students begin to transition to a check-in/check-out system instead of being required to attend Morning Meeting. At Cascade, the teacher has discretion in how long the transition period is.

Points system. The points system at Cascade is based on a 3-point scale. The scorecard used at Canyon is the same as at Summit. The students earn up to three points on each of the three goals for every class period attended. Three points are earned if the appropriate behavior is observed three out of three times; two points if the behavior is observed two out of three times; one if the the behavior is observed one out of three times; and no points if the appropriate behavior is not observed.

Students must earn a certain number of points in order to maintain at a level or advance to the next level. Students have the ability to earn seventy-two points daily and must remain at a particular level for a minimum of ten days. Once students have maintained a high

enough point level for ten days, a request to level up may be made. The request to level up is a handwritten letter, addressed to the principal, which is then discussed by the BRAIN team for approval.

Goals. The goals at Cascade are written by the BRAIN team at the site with assistance from the district BRAIN team. The goals are written in the following three categories: social development, on-task, and self-regulation. An example of a goal written for social development is as follows: Student will remain calm in situations where peers have upset them by taking deep breaths, walking away from or ignoring the student initiating inappropriate behavior, asking for a break, talking to a teacher about possible solutions with 85% accuracy. An example of an on-task goal is student will follow school/classroom rules and adhere to teacher expectations with no more than two prompts for a request with 85% accuracy. Finally, an example of a goal for self-regulation is student will utilize problem-solving skills (e.g. deep breaths, taking a break, and/or talking about the behavior with an adult) in order to improve the ability to manage and take responsibility for personal behavior with 85% accuracy.

Additionally, Mrs. Blevins sets aside time during lunch for a “lunchtime study.” During this time, she talks with students about the day and allows each student to set personal goals. “During our lunchtime study, they get to set two of their own goals...it’s just kind of another way to check in with them through the day” (Mrs. Blevins, interview, November 2, 2018). At each of the student’s desks are two “sticky notes” on which these goals are written. On Student A’s desk there are two notes. One says, “Say good things about people,” and the other says, “Stop calling people names.” At Student B’s desk, one says, “Learn how to spell without the Chromebook,” and the other says, “I want to get 3’s all day.” At Student C’s desk, one says, “Finish all my work today,” and the other says, “I would like to be a S.W.A.T officer.” Finally, at Student D’s desk, there is only one note, and it says, “Be respectful to people.” The notes are

placed as reminders of their personal goals. When the students have achieved the goals for the week, each name is placed on a space on the connect four board.

The Morning Meeting

Morning Meeting is held throughout the day at Cascade Intermediate. The students in the BRAIN program begin the day in the Behavioral Emotional Social Self-regulation and Teamwork (BESST) Life App. BESST is held in the RUBBLE room at Cascade, and the students rotate through the different centers. According to Mrs. Blevins,

They work on motor planning, which is connected to behavior and academics, so we are building their brain functioning in that center. In another center, we'll work on reflexes and exercises which is also a brain development center. There is a cardio center and a center for core strengthening. At the core strengthening center we work on lessons for social skills and self-regulation skills. (Mrs. Blevins, interview, November 2, 2018)

There is also a check in time during lunch when Mrs. Blevins talks with each about progress towards the student's individual goals. Finally, at the end of the day, the students return to the RUBBLE room and continue with additional social skills lessons and review scorecards for the day. A one-on-one conference takes place with the teacher or teaching assistant to review self-scores and compare the scores with the teachers' scores for the day.

At all of the other sites, Morning Meeting is held to review scores from the previous day. At Cascade, scores for the day are reviewed at the end of the same day. Often times this can create negative behaviors with students who may not be emotionally ready to confront the behavioral issues of the day, as there has been no time to reflect on negative behaviors without emotion. Mrs. Blevins has not experienced negative outcomes as a result of this structure and attributes that to the students having so many opportunities for discussion throughout the day.

According to Mrs. Summers it is working to have the meeting in the afternoon as it allows students to, “reflect at the end of the day, rather than waiting until the following day. It just makes it more immediate or current” (Mrs. Summers, interview, November 2, 2018).

The setting. At the end of the day, all of Mrs. Blevins students meet together in the RUBBLE room. Students know the routine as each of them grabs a clipboard from a basket, and goes to the cardio center to begin exercising. As students are exercising, each are also completing the daily scorecards and talking with each other. The students appear happy from the day and are laughing and talking while working on scorecards. After five minutes, a timer goes off, and Mrs. Blevins asks each student to check the board for the order of rotations. Students begin to move to different centers in the room and read the tasks to be performed.

At one of the centers, two students are sitting on exercise balls while playing a card game. While moving around each student takes turns asking the other student questions from the cards. This is the core strengthening center where students work on building core muscles while playing games and learning about social or self-regulation skills. At another center, a student is jumping on a mini-trampoline while counting off numbers. While all of this is going on the teacher is sitting with another student, reviewing the score cards from the day. Mrs. Blevins and the student talk quietly about the scores and the student’s progress toward his goals. Every five minutes a timer goes off, and the students check the board again to find the next center.

Self-evaluation. Mrs. Blevins chooses to keep student’s scores private by sitting together and talking one-on-one, while all others are actively engaged in the activities. Mrs. Blevins listens to each student as they tell her about the day and then offers suggestions in a positive, kind way. The following is a script of a conversation Mrs. Blevins had with a student regarding the score cards on December 13, 2018:

Mrs. Blevins: "Student B, come on over. What could you have done better today?"

Student B: "I talked too much today. I finished my work, and the teacher let me play on the iPad, but we were talking a lot."

Mrs. Blevins: "How do you think you talking to him effects his work?"

Student B: "No, that is not what happened. Steven was talking to me, and I was just talking back to him."

Mrs. Blevins: "What should you have done to handle that situation better?"

Student B: "I could stop talking to him even if he is talking to me."

Mrs. Blevins: "That is a good idea. Do you know what else you could do? You could ask the teacher if you could move seats while everyone finished their work."

Student B: "OK, I'll try that next time."

As Mrs. Blevins talks with each student about scores, she remains calm and positive in addressing any negative behaviors. This conversation helps the students process through negative behaviors and offers alternative behaviors for the student to try the next time.

Skills training. Mrs. Blevins has done a lot of research on the importance of the neurodevelopment of children through movement; this research led to the creation of the RUBBLE room. By helping students build brain functioning through reflexes and exercise, Mrs. Blevins believes students can improve executive functioning skills and learn to self-regulate cognitive and emotional skills. In addition to the RUBBLE room, a variety of curricula is utilized, aimed at teaching students social skills and self-regulation. Specifically, Mrs. Blevins develops lessons from the following commercial curricula: *Zone of Regulation*, *BrainWise*, and *Social Skills 101*. *The Zone of Regulation* is geared toward helping students gain skills in consciously regulating actions, which in turn leads to increased control and problem solving abilities.

Replacement behaviors and coping skills. Besides utilizing a variety of curricula, Mrs. Blevins schedules each day to have many more contacts with BRAIN students and spends much of the day teaching students additional ways to cope. She explains:

Something I've learned along the way is that they may not like how an individual requests something from them, but they still have to follow the instructions... I used to recommend to teachers that they just ask nicely, but not everybody can do that. Sometimes teachers can be a little bit crass, but it doesn't matter. We have to learn to deal with gruff people in life. (Mrs. Blevins, interview, November 2, 2018)

Positive reinforcement of appropriate skills. Mrs. Blevins has a system of positive reinforcement to acknowledge students when good choices are made. She explains, "When I see students making great choices, such as working hard on a paper, staying focused if there is a distraction, or saying kind words to someone, I give them one or more BRAIN Bucks to reinforce positive behavior" (Mrs. Blevins, interview, November 2, 2018). The students are then able to cash in BRAIN Bucks for tangible items, such as a positive letter home, a snack, or ten minutes of free time using technology.

Manifestations of Hope

Principals. According to Mrs. Summers, one of the most important outcomes for students in the BRAIN program is the sense of self-efficacy built while in the program. When asked about successful outcomes for students in the program, Mrs. Blevins became emotional and explained:

I think the program has high expectations of accountability for our students, and they feel capable of it...They have felt so out of control of everything; they feel their parents don't see them, their teachers don't see them as being capable of being good at things,

of doing a good job. That's why they are so proud of themselves when they say things like, "My mom is going to be so proud of me, and she never has been before." You see it on their faces. They finally have hope because they know we're proud of them. (Mrs. Summers, interview, November 2, 2018)

Teachers. Mrs. Blevins has hope for students and sees the growth in positive behaviors and that students are finding success in and out of the classroom. Mrs. Blevins recently did a lesson on values and asked the students to pick three values from a list. After having picked out the top three, students were then asked to pick out the top one and share the choice with the class. Mrs. Blevins shared her experiences with the students on that day.

They are just such amazing children. I want them to find things in life that are going to feed their soul. I want them to grow and help others because they have so much to give. They have been in the trenches. They have experienced trauma, but they can grow and help their own kids or other kids, and that is the success I want for them. (Mrs. Blevins, interview, November 2, 2018)

Students. One of Mrs. Blevins's students entered the program near the end of November, 2018. Earlier in the school year, the faculty wasn't sure the student needed the BRAIN program, but as negative behaviors escalated, the teachers noticed the student's learning was being impeded, as well as others in the classroom. According to Mrs. Blevins, the student was screaming in every single class, every single day, and would become very angry when answers given were wrong. As a result, the first goal for the student was to address the immediate goal of not yelling at others. She explained:

He has been better for three weeks, but I have been upping the consequences of him not holding things together. In the beginning it was about removing stressors for him, but now it is more about applying program pressure. He is no longer allowed to talk to

others in a disrespectful manner. He still tries to push it, but he is reminded quickly of how to talk to others and is doing much better. (Mrs. Blevins, interview, November 2, 2018)

Redwood Middle School (7-8)

Redwood Middle School is located on the south side of the district and is currently the only site in the district serving students in seventh and eighth grades in the BRAIN program. The school has a current enrollment of 800 students and 46 certified teachers. The BRAIN program was first implemented here during the 2015-2016 school year. At the beginning of this school year, the program served seven students, six from Redwood Middle School and one from the other middle school in the district. By December two students had leveled out of the program, and one more student from the other middle school entered the program.

The site BRAIN team at Redwood is composed of the principal, the BRAIN teacher, Mrs. Williams, and the paraprofessional, Mrs. Reynolds. Mrs. Reynolds was hired in 2015 specifically for the BRAIN program. Responsibilities included record keeping for the program, keeping track of student scores and entering data for the purpose of progress monitoring, as well as working with students in the program, and advocating for them with the general education teachers. Due to involvement in the program from the beginning, Mrs. Reynolds has experienced firsthand the evolution of the program from a site based program to a district program, including the benefits and challenges that evolution has had on Redwood Middle School.

The Right Teacher

At the middle school level, it is imperative to find a teacher that is patient and non-confrontational. According to Ms. Adams, the district behavior specialist:

At the middle school, you have to be the most flexible as a lot of times you are getting those defiant and non-compliant behaviors. So it's important to find the right fit as a teacher...You don't have to fight every battle. (Ms. Adams, interview, October 10, 2018)

The teacher who started the program at Redwood worked with students who had emotional and behavioral disorders for many years and understood how to deescalate situations while still holding students accountable. The teacher worked in the program for three years before becoming frustrated with the loss of control over the program as it evolved into a district program and stepping down. Mrs. Williams, the department chair for the Special Education Department, agreed to assume the responsibility of the BRAIN teacher for the 2018-2019 school year. Mrs. Williams has worked in special education for many years with students at many different levels and works well with students who have emotional and behavioral disorders.

Building and repairing relationships. By the time students with emotional and behavioral disorders enter middle school, each has had approximately seven years of challenges related to schooling. Almost all of these students have been suspended from school, hospitalized, and have typically had negative interactions with teachers and principals. Parents have become frustrated with the school system and do not believe the school is supportive of parents or children. Parents have lost trust and hope that their child will ever be given a fair chance. Therefore, one of the primary challenges for the BRAIN teacher is to begin repairing broken relationships with students, teachers, and parents.

Students. Mrs. Williams builds relationships with students through advocacy. Because of negative relationships with school, students need to feel that someone is fighting for them. She explains:

Because of our small number of students, we have a lot of ability to interact with our students one on one and to develop some of those positive relationships with them. Even the ones who are resistant know that we're not going to quit on them, that somebody is fighting for them, and a lot of them just need to know that. (Mrs. Williams, interview, October 10, 2018)

Mrs. Williams also believes that the counseling component of the program, which happens once a week and is administered by a male counselor from the local family counseling agency, is an important part of helping students build positive relationships. "The outside counseling makes a huge difference...We're fortunate in a classroom full of boys that we have a male...For some of them, that's a key that they need. A male involved in their life in some way" (Mrs. Williams, interview, October 10, 2018).

Teachers. Most teachers have had experiences with students who have disruptive behavioral disorders, which can cause major disruptions to the learning environment. In some cases, these encounters have included blatant disrespect and defiance. Sometimes teachers find it difficult to forget those encounters and start fresh the following day. Because of this, Mrs. Williams must balance supporting the teachers and the students in finding ways to repair these broken relationships. One of the program requirements at the middle level is to require the students to make amends with the people hurt during an outburst. After the student has been removed from the situation and has calmed down, the student is required to discuss the event with Mrs. Williams or Mrs. Reynolds and then apologize to the teacher or students who have been affected. This exchange takes place in private and allows both parties to talk and discuss how to avoid the outburst in the future.

The Right Environment

Setting. The BRAIN room at Redwood Middle School is located in the center of the building and is a standard sized classroom. It is well decorated with pictures and positive and upbeat sayings. There are two areas in the room with area rugs: one with a small stool, lamp, and reading area, and the other with a bean bag near the front of the room. There are four rectangular tables with a teacher desk and a semi-circular table for Mrs. Reynolds. On the wall behind Mrs. Reynolds's desk is a chart with each of the student's names, used for tracking daily points.

Across the hall from the BRAIN room is the refocus room or Blue Room. This is a large, dimly lit room with blue padded walls. Cabinets with doors removed are at one end of the room. During the first year of the program, one of the students tried to rip the doors off the hinges and use them as weapons. The room is completely empty and a safe place for students having emotional outbursts.

Safe place. The highly structured environment of the BRAIN program provides a safe place for students at Redwood. Many of the students at Redwood Middle School have been with each other since starting school and have become quite familiar with each other. This can be positive in building relationships but detrimental for those students with emotional and behavioral disorders. By having a safe place in the BRAIN room or Blue Room, when a student loses control of emotions, the student no longer feels humiliated as each is given the time and space to regain control. It is difficult for students at the middle level to take responsibility for negative behaviors and to discuss the behaviors with others. However, due to the structure of the program, there is a safe place to talk about behaviors and learn about strategies to help self-regulate. Mrs. Williams explains, "They know it's OK to have a bad day. They can come in and have a meltdown, but it's safe in their eyes" (Mrs. Williams, interview, October 10, 2018).

Level system. The level system at Redwood is based on five levels (see Table 2). Level I, the students are in the BRAIN classroom for all core classes and lunch. Every student at Redwood has two electives throughout the day. For students in the BRAIN program, one of the electives is Morning Meeting, held first hour every day, while the other elective is of the student's choosing. At Level II, students are allowed to attend three core classes in addition to an elective class but must remain in the BRAIN room for lunch. At Level III, students are allowed to attend all classes during the day but must still return to the BRAIN classroom for lunch. At Level IV, students are allowed to go to lunch with peers but must stay in the cafeteria. It is not until Level V that students are allowed to eat with peers and may go outside and play games with others during the lunch period.

Because the program is individualized for students, the BRAIN teacher has found that sometimes students may not be ready to level out to three classes at Level II or to all classes at Level III, so the levels can be adjusted, based on the needs of the students. Additionally, there are times when a student will move to a Level III and will begin to self-sabotage. Then Mrs. Williams will meet with the site BRAIN team and will pull the student back into the BRAIN room for a class or two, depending on the needs of the student.

Points system. The point system at Redwood is based on a 3-point scale. Students earn three points for full compliance with no need for re-direction and two points for compliance with limited re-direction. If the student is asked to take a time out, one point is received; however, if the student is sent to the Blue Room for de-escalation purposes, the student receives no points. Students must earn a certain number of points to maintain at a certain level or advance to the next level. Students have the ability to earn seventy-two points daily and must remain at a particular level for a minimum of ten days. Once the students have maintained a high enough point level for ten days, a request to level up may be made. When a

request is made to level up, the student completes a form with explanations regarding the appropriateness of the request, as well as any privileges being sought.

Goals. Student goals are written by Mrs. Williams with assistance from the behavior specialist as needed. The goals are written in three broad categories as at other sites within the district: social development, on-task, and self-regulation. An example of a goal written in the category of social development is “When frustrated or upset, Student A will utilize coping skills to work through the problem.” In the category of on-task, an example goal is, “Student A will follow classroom rules and expectations (e.g. beginning tasks when assigned, accepting redirection, and interacting respectfully with others) with one or no prompt.” Finally, an example of goals written in the category of self-regulation at the middle level is, “Student A will appropriately participate in class (e.g. raising hand to speak, listening to others, waiting his turn and not interrupting) with one or no prompt.

The Morning Meeting

The setting. Morning Meeting at Redwood is held during the first period of the day and is required for all students in the program. It is held in the BRAIN room and is directed by the BRAIN teacher, Mrs. Williams. The students are allowed to stay at the rectangular tables in assigned seats, but the meeting is held as a group meeting with a lot of discussion about behaviors and coping strategies. According to Mrs. Williams, there is value in conducting the meeting in this way:

It contributes to changing that behavior because they all start to see that they’re all facing some of the same things...He may need the support of his peers to remind him, ‘Hey, you know that’s not how we handle that. There are some other things that you could do.’ They do a good job of supporting each other...giving them advice on what has worked for them. (Mrs. Williams, interview, October 10, 2018)

Self-evaluation. Students in the BRAIN program at Redwood are required to self-score on every goal during every class period. Teachers are also required to complete score cards every class period and submit those scores to Mrs. Reynolds by the end of the day. Morning Meeting at Redwood always starts with a review of the scores from the day before. Mrs. Williams allows the students to begin by talking about self-scores from the previous day and then compares those scores to the scores assigned by the teachers. Discrepancies are discussed with information regarding replacement behaviors that could be utilized to handle the situation differently. Mrs. Williams also finds it helpful to end each Morning Meeting with something positive, “I always make sure that regardless of how they scored the day before...They need to have hope and feel good about themselves before they start the day” (Mrs. Williams, interview, October 10, 2018).

Skills training.

Replacement behaviors and coping skills. In teaching replacement behaviors and coping skills, Mrs. Williams uses the *BrainWise* curriculum but has found students at this level actually respond better to discussions involving peers in the classroom. Mrs. Williams believes students have the cognitive ability to self-reflect and make better choices for better outcomes. She states, “Some of these kids truly don’t recognize the part they play in the behavior and don’t recognize the difference between their behavior and another peer’s behavior” (Mrs. Williams, interview, October 10, 2018). Because of this, the discussions during Morning Meeting are about helping students recognize negative behaviors and then teaching students how to cope and modify negative situations and behaviors.

In order to teach coping skills, we first have to help them acknowledge the fact that everybody has problems, that we can’t judge based on an outward appearance what

those problems may be, and that our attitude...can be the difference maker in whether or not we come up with a solution to it. (Mrs. Williams, interview, October 10, 2018)

Once students face the fact that negative behaviors are impeding success and take responsibility for the behavior, only then can the students really learn to self-regulate and make better choices.

Positive reinforcement of appropriate skills. At the middle level, positive reinforcement of appropriate skills is integrated into the level system. Students at this age want social time with peers, and when students become aware this social time is a privilege to be earned, the motivation to succeed is enhanced. However, because these students are teenagers, the site BRAIN team has added in additional privileges at each level that also serve as additional motivation for positive behavior. For example, students may decorate BRAIN binders at Level II, bring a backpack at Level III, and request to bring a cell phone at Level IV.

Manifestations of Hope

The first year of the BRAIN program at Redwood Middle School determined whether or not this program would be successful for kids who had never achieved success in school. By December of 2015, it was clear the program provided hope for students as seen through the eyes of the district administrators, teachers, parents, and students. A presentation was developed in which district administrators, parents, teachers, and students were interviewed regarding personal feelings about the program and shared to all principals in the district. The manifestation of hope was evident and because of this hope, district administrators agreed to extend the program to other sites and other grade levels.

School Psychologist. One of the school psychologists for Park Public Schools, Martha, knew these kids well, and because of her relationships with the students and their families, she knew they were in crisis and in danger of losing all hope in education. During a video interview,

Martha talked about personal experiences with these students and the first year in the program.

“I think these students are being educated. Not only is it behavior management, not only is it attending school...but they’re being educated. So I think of the “warm fuzzies” of seeing them successful” (Martha, video interview, December 15, 2015).

Teachers. Mrs. Williams believes the program is bringing hope to students by helping them to understand that they aren’t alone, that all people have struggles, and that it is normal. She explains:

I don’t think they recognize that others around them, including adults, have bad days, so I think that’s affirming for them, and I think it makes them feel more normal because...they feel like they are all alone, and that nobody else ever feels that way. (Mrs. Williams, interview, October 10, 2018)

Mrs. Williams also sees hope in the way students begin to recognize the negative behaviors that are detrimental to learning and take personal responsibility for correcting these behaviors:

I had a student who marked himself down this morning, and when asked why he said, ‘I was talking in class when I shouldn’t have been; I should have been listening to the instructions.’ However, there was no report from the teacher regarding any negative behaviors...It was interesting though, and I hope maybe a glimpse at him starting to recognize his own behavior and self-regulate. (Mrs. Williams, interview, October 10, 2018)

Students. Students at the middle level express hope by learning to self-regulate negative behaviors and returning to the normal routine of the day. During an observation on December 3, 2018, a student became angry in a classroom after an item was broken

accidentally. The student had asked to be excused to go to the Blue Room to calm down. While in the Blue Room, the following conversation took place between the student and the paraprofessional, Mrs. Reynolds:

Student A: "I'm so angry! If that kid had just moved, then my bag wouldn't have fallen, and my mouse wouldn't have been broken!"

Mrs. Reynolds: "I understand, but you also know that accidents happen, and you can't let those things effect your entire day."

Student A: "I'm the one who's always wrong, I wish I could be right just once. I just put on a fake face and pretend to be walking around happy, but no one knows how bad I feel. I put on an innocent smile because I don't want people feeling bad for me!"

Mrs. Reynolds: "Look, you are a great kid. I know second hour didn't go your way, but we have to find a way to get through it. Why don't you go back in there and try to engage and help your partner with the lab?"

Student A: "I don't know if I can."

Mrs. Reynolds: "OK, look. I'm just going to have you come back to the BRAIN room and work with me."

Student A: "No, I really don't want to do that. I want to go back to class so I can do the lab and not get behind."

Mrs. Reynolds: "OK, do you think that is something you are ready to do now?"

Student A: "Yes, I'm ready."

Mrs. Reynolds: "Great, now let's see some kind of smile."

The student then smiled at Mrs. Reynolds, was calm, and returned to class to re-engage in the lab. There were no other issues throughout the day. Many times, students just need the time and space to gain self-control and re-engage with the day.

Table 2

Level System Summary-BRAIN Program

Site	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Pinedale	*BRAIN room all day *30 min. in classroom (w/assist.)	*30 min. reading *30 min. math (w/assistant)	*additional 30 min. of Science or Soc. Studies (limited assistant)	*additional 30 min. reading *elective *regular lunch *field trips w/assistant	*5a – all privileges like all students (no assistant) *5b – homeroom all day	*out of program
Aspen	*BRAIN room all day *30 min. in classroom (w/assist.)	*30 min. reading *30 min. math *recess (w/assist.)	*additional 30 min. of science or social studies (no assist./check-in only)	*60 min math *All electives *Friday assembly	*5a – out to most classes *5b – out to all classes except morning meeting	*no morning meeting *check and connect only
Summit	*BRAIN room all day *one elective class (w/assist.)	*additional core class	*additional core and elective class *allowed backpack * hallway/ bathroom privileges	*all classes in gen. ed. *allowed to bring lunch from home *allowed concession food	*all privileges earned	N/A
Cascade	*BRAIN room all day *one elective and core class (w/assist.)	*additional core class	*additional core and elective class *allowed breakfast and lunch in café.	*additional elective class	*all privileges earned/same as all peers *check in and check out	N/A
Red-wood	*BRAIN room all day *one elective class (w/assist.)	*3 core classes *remain in BRAIN for lunch	* attend all classes *remain in BRAIN for lunch	* lunch with peers	*all privileges earned/same as all peers *check in/out	N/A

Summary

Chapter Four presented an overview of Park Public Schools, including community support and demographics. The story of the BRAIN program at each of the five schools was presented through themes in order to fully describe how the program is implemented and sustained in Park Public Schools. Chapter Five analyzes how the BRAIN program at the five schools supports positive classroom behaviors for students with emotional and behavioral disorders through the lens of self-regulated learning theory.

CHAPTER V

ANALYSIS OF DATA

Data were collected from a variety of sources including observations, interviews, document review, and artifacts. This chapter presents data given in Chapter Four that were analyzed through the lens of the three phases of self-regulated learning theory: forethought or planning phase, performance or action phase, and self-reflection phase.

Forethought/Planning Phase

Self-regulated learning (SRL) explains how students manage thoughts, behaviors, and emotions to successfully navigate learning experiences (Zumbrunn, Tadlock, & Roberts, 2011). During the forethought and planning phase, students analyze the learning task and set specific goals toward task completion. Additionally, students employ strategic planning in selecting specific strategies for meeting specific goals. Motivation is important during this phase as students determine how much effort they are willing to put toward achieving the goal. If the student does not see value in the learning goal, the less likely time and effort will be spent in setting goals and planning strategies for accomplishing those goals.

Task Analysis

Goal setting. Research suggests that encouraging students to set short-term goals for learning can be an effective way to help students track their progress (Zimmerman, 2008). For all students in the BRAIN program, with the exception of students in the early childhood program at Pinedale, Park Public School District requires behavioral goals written in the following three areas: social development, on-task/work completion, and self-regulation. The goals must be specific, written in a positive tone, and measurable. For example, a student will begin a task when assigned and complete the assignment within set time limits with no more than five prompts. At the early childhood level, goals are written for specific disruptive behaviors that have been observed in the general education classroom. A significant challenge to writing goals for this age level is determining what is developmentally appropriate for students this young.

At the early childhood and elementary levels, students have little input in writing goals as this task is handled almost exclusively by the teacher and BRAIN team. At the two intermediate schools, the BRAIN teachers gather input from parents and students in writing goals but also allow for students to write their own goals independent of the district required goals. Mrs. Capps at Summit works with students weekly in setting short term individual goals, depending on what students feel their current needs are. Additionally, Mrs. Blevins at Cascade meets with students during lunch time when the students set two goals for the week. These goals are written on “sticky notes” and posted by each student desk as a reminder. At the middle school level, Mrs. Williams meets with students upon entering the program and works with the students to write goals in the three required areas, allowing for the students to have input.

Strategic planning. Planning and goal setting are complementary processes, as planning can help learners establish well thought out goals and strategies to be successful (Schunk, 2001). In addition to writing goals, the teachers work with students in providing strategies for implementation to achieve the goals. Beginning at the elementary level, students are taught coping skills and strategies to utilize for each of the behavioral goals. Typically, the strategy for achieving the goal is written into the goal itself; for example, student will utilize coping skills when experiencing anxiety or difficult situations by using calm breathing and counting.

Self-Motivation Beliefs

Self-regulated learning is controlled by an interconnected framework of factors that determine its development and sustainability, and motivation is a critical factor in this framework (Bandura, 1991; Pintrich & Zusho, 2002; Zimmerman, 2008). If students are not interested or do not see any value in learning strategies to control behaviors, there will be little effort expended toward setting goals and planning strategies for self-regulation. An important part of motivation is students' self-efficacy beliefs, outcome expectations, and intrinsic interest in achieving the goal.

Self-efficacy beliefs. A student's confidence in the ability to successfully complete tasks plays an important role in goal attainment, especially during the forethought and performance phases (Zimmerman, 2008). Evidence of positive self-efficacy was observed at every grade level and manifested in hope. For example, at the early childhood level, I observed this when students were overtly excited about progress towards goal attainment or when a student made the following statement, "I turned my day around, I am so proud of myself!" At all other levels, a positive sense of self-efficacy was observed through interactions between the teacher and students.

At the elementary level, Mr. Johnson listened to upset students, displaying an understanding of the frustrations each endure, and telling the students how proud he was of them for using the coping skills each had been taught. Even after an emotional outburst, one student was able to respond with kindness and words of appreciation and return to the normal routine of the day. At Summit Intermediate, Mrs. Capps espoused a philosophy of allowing students the freedom to make mistakes, ensuring each knew he was cared for, and advocating for students when they struggled. Mrs. Capps stated by treating students in this way, students learn to have patience with themselves and gain confidence in the ability to control negative behaviors. At Cascade Intermediate, Mrs. Summers stated, “You see it on their faces. They finally have hope because they know we’re proud of them, and they know they can do it.”

Outcome expectations. When students believe the goal is achievable, they will respond in a positive manner and regulate their behaviors (Zimmerman, 2000). The BRAIN teachers write the goals based on the most pressing need at the time and then adjust those goals once the student has achieved success with the goal. Through constant reinforcement of appropriate behaviors, the BRAIN teachers are able to help students master small steps towards larger goals. One example at Cascade Intermediate was of a student who entered the program with a disruptive behavior of yelling at the teachers when frustrated. After working with the student for two weeks, an understanding of appropriate responses to adults, even when frustrated, was finally mastered by the student, and then the teacher was able to write additional goals with strategies for coping with anger.

Every site has experienced students who have negative outcome expectations. The BRAIN team at each site refers to this as self-sabotage. This is a common occurrence for students as they level up and gain more autonomy. Students tend to become less sure of their

abilities to maintain in a general education classroom and begin to revert back to behaviors the student had previously learned to regulate. In order to overcome this phenomenon, the BRAIN teachers adjust the levels for the student to give them the safety and structure needed, while at the same time applying program pressure to allow the student to overcome fears. Typically, as the student and teacher communicate and resolve the issues, the student regains confidence and is successful in leveling out with less support.

Intrinsic interest. Intrinsic interest and volition guide the level of effort and persistence used in employing strategies to self-regulate behaviors (Zumbrunn, Tadlock, & Roberts, 2011). For all grade levels with the exception of early childhood, intrinsic motivation is built into the program. At the elementary level, Mr. Johnson stated, “The program itself creates the motivation for students to want to do well and move through the levels in order to have more time with their peers.” Because peer relationships are important for adolescents, students express willingness to self-regulate because of the detrimental effects negative behaviors have on personal friendships. Mrs. Capps stated, “My students understand the importance of using coping skills as they don’t want to be different from everyone else. They don’t want to be embarrassed or laughed at.” One of her students was ready to level up to Level V, and when asked why a Level V was important to the student, the student stated, “I want to be able to have recess with my friends!” At the middle school level, the BRAIN teacher expressed that students at this age want to have social time with peers. As a result, as students learn this social time must be earned, the motivation to succeed is enhanced.

Intrinsic interest is not a factor at the early childhood level. Mrs. Mathis believes this is related to the fact that students at this age do not understand the importance of peer relationships, nor are they motivated by increased interactions with peers. Students at this level

are motivated by extrinsic rewards. Therefore, Mrs. Mathis has created a reward system to motivate students to regulate behaviors through sticker charts, donuts or ice cream. During an observation, one of her students jumped up and down after learning of 100% goal attainment the previous day and stated, "I am so proud of myself, and I can't wait to do great again today so I can earn my ice cream cone!" The student expressed pride in the ability to achieve the goal, which builds self-efficacy, but was not motivated to persist in working towards future goal attainment by any intrinsic need to earn the privilege of time with peers. Rather, this student was only motivated by an extrinsic need to earn an ice cream cone.

Performance/Action Phase

During the performance or action phase, students employ strategies to make progress on the learning task and monitor the effectiveness of those strategies, as well as personal motivation for continuing progress toward the goals of the task (Zumbrunn, Tadlock, & Roberts, 2011). During this phase, students learn strategies to regulate behaviors, practice those strategies with guided self-reflection provided by the BRAIN teacher, and then reflect on progress towards goal attainment through self-recording and feedback.

Self-Control

Task strategies. Successful learners can implement multiple learning strategies across tasks and adjust those strategies as needed to facilitate their progress towards their desired goals (Paris & Paris, 2001). By modeling how to use new strategies and providing appropriate amounts of scaffolding as students practice, teachers can help learners become independent strategy users (Zumbrunn, Tadlock, & Roberts, 2011). The BRAIN program requires teachers to implement curriculum on a daily basis, centered around the teaching of replacement behaviors and coping skills. BRAIN teachers are allowed some flexibility in choosing the curriculum

believed to be most appropriate for students, but the district has paid for the *BrainWise* curriculum to be used as a basis for teaching replacement behaviors and coping skills.

At the early childhood level, social skills training takes place during Morning Meeting. Mrs. Mathis teaches students the meaning of self-control by continually reminding students about the importance of following the three steps of self-control: stop, think, and act. Mrs. Mathis also uses direct instruction and modeling to teach students the strategies for regulating behavior when angry. Direct instruction involves explicitly explaining different strategies to students, as well as how those strategies are used and what skills are involved in using those strategies (Zimmerman, 2008). During an observation, Mrs. Mathis read a book to students titled, *I Just Don't Like the Sound of No!* She explained, "Hearing the word *no* can make us very angry, and we don't know what to do with those feelings." After some discussion, Mrs. Mathis gave specific strategies that could be used when feeling angry. Explaining each strategy, Mrs. Mathis modeled how to use the strategy and then had the students act out the strategy. When teachers model and explain their own thought processes necessary for completing activities and assignments, students are more apt to understand and begin using those same processes on their own (Boekaerts & Corno, 2005). Research has shown that this type of instruction can be the best initial strategy for encouraging students to be more self-regulative (Zumbrunn, Tadlock, & Roberts, 2011).

At the elementary level, Mr. Johnson utilizes the *BrainWise* curriculum and *Character First* as a basis for teaching coping skills. Additionally, a counselor from the local family counseling agency visits once per week during Morning Meeting and delivers instruction on coping skills and replacement behaviors. During an observation, Mr. Johnson delivered a lesson on self-control by first helping students recall the definition of self-control. Then he directed an

activity to create a visual to assist the students in remembering the importance of being mindful with words and using words to show kindness and respect to one another. After the activity, the students then took turns practicing the skill by offering words of affirmation to each other under the direct guidance of the teacher. By providing guided practice for students, the responsibility of implementing the learning strategy shifts from teacher to student and, according to research, is another way teachers can help improve self-regulated learning and motivation (Lee, McInerney, & Liem, 2010).

At Summit Intermediate, Mrs. Capps primarily uses the *BrainWise* curriculum to teach coping skills during Morning Meeting. Mrs. Capps focuses on the anatomy of the brain to help students understand the reasons behind behaviors in order to learn to self-regulate. In addition to the BRAIN program, Mrs. Capps focuses on the building of healthy relationships. Each day begins with the modeling of appropriate behaviors aimed at building relationships. Mrs. Capps tells the students personal stories and then asks the students to share personal stories with her about the previous evening or weekend. The students are open and share information regarding family relationships as Mrs. Capps teaches them about supportive relationships and helps the students understand how those relationships function. Finally, Mrs. Capps teaches students how to recognize emotional feelings, especially as these feelings escalate, by giving specific examples of appropriate coping strategies and then allowing students to practice those skills as she provides guidance and feedback.

At Cascade Intermediate, Mrs. Blevins uses a variety of commercial curricula including *BrainWise*, *Zone of Regulation*, and *Skills 101*. All of these programs are geared toward helping students gain coping skills in consciously regulating individual actions, which in turn lead to increased control and problem solving abilities. Mrs. Blevins has also done extensive research on

the neurodevelopment of children through movement, which has led to the creation of the RUBBLE room at Cascade. This room is used to help students build brain functioning through reflexes and exercise to help improve executive functioning skills. The room is set up in centers with clear instructions at each of the centers, providing the students with learning activities while working on reflexes or exercise. Mrs. Blevins participates with the students during the activities in order to model the appropriate function at each station. The students then complete the activities under the teacher's direct guidance, thus providing immediate feedback as students complete the tasks.

At the middle school level, Mrs. Williams uses the *BrainWise* curriculum but has found that students at this age respond better to discussions involving peers in the classroom. She stated, "They are at the age that they have the cognitive ability to self-reflect and make better choices for better outcomes." Because of this, during Morning Meeting Mrs. Williams guides discussions among students around behaviors and allows for the students to create solutions to solve each other's challenges. Mrs. Williams guides the discussion and offers suggestions for appropriate replacement behaviors but allows the students to have input into possible solutions.

Self-instruction. Self-instruction is a self-control strategy that students use to keep themselves engaged and motivated to finish the task (Zimmerman, 2000). At the early childhood level, self-instruction is a strategy that is explicitly taught by the teacher. As Mrs. Mathis talks with students regarding behaviors, she ends with, "Remember we want you to be so proud of yourselves, so what do we say?" The students are required to state, "I am so proud of myself," during every morning meeting. By teaching students to have positive self-talk, Mrs. Mathis is reinforcing the importance of positive self-efficacy, which helps keep students motivated to do

well. As students get older and begin learning to self-regulate, self-instruction is evident when the students use the strategies learned and are able to communicate the reasoning for using them. At the middle level, this is evident when a student asks to take a time out when beginning to feel frustrated and receives a two-minute break to regain control.

Environmental structuring. Environmental structuring is the framework for the BRAIN program. The BRAIN program is a leveled system that allows for students with emotional and behavioral disorders to practice newly learned coping strategies in small, structured, safe environments. As students level out to general education classrooms, they practice these strategies and learn to self-regulate behaviors while around other peers in the classroom. The BRAIN team at each school has flexibility in creating the environment in which the program is implemented and establishing levels that best fit the needs of students.

At the early childhood level, Mrs. Mathis has a highly structured environment with procedures for every activity that takes place in the room. The room is welcoming with reminders of appropriate behaviors on every wall. There is also a place in the room designated for students to calm down when needed. For those students who are unable to calm down, there is a de-escalation room in the classroom for students having emotional meltdowns that need privacy while gaining self-control without the humiliation of being observed by peers. The level system is based on six levels, beginning with close monitoring by the BRAIN teacher in the BRAIN classroom. This beginning level is followed by the removal of supports as the student progresses through the levels. As the students level up, supports are removed, providing for independent practice in regulating behaviors, which culminates in autonomy in the general education setting. Mrs. Mathis has mixed feelings about the level system at the early childhood level and believes the students do not know the meaning of going to elective classes, having

never had the opportunity to experience those activities like older peers. As a result, Mrs. Mathis implemented a rewards system to help motivate students to achieve goals in return for tangible, extrinsic rewards.

At the elementary level, Mr. Johnson has created a classroom environment in which students feel safe to return throughout the day if needing a place to calm down. During an observation, one of the students entered the room upset and went to the bean bag chairs in the classroom. He simply informed Mr. Johnson of an issue in a previous class and explained that time was needed to get it together. The level system at the elementary is based on six levels, but they are divided in order to better meet the needs of the students. For example, Mr. Johnson has observed students self-sabotaging at Level V and has broken that level into two parts, allowing the students to spend the majority of the day in general education classes at Level V-A and then moving to general education classes all day at Level V-B. At Level VI, the students move to Check and Connect, where the student is required to check in with Mr. Johnson in the morning to report feelings for that day and check out by reflecting on the day.

At the intermediate sites, the structure of the program provides a safe place for students at this age level. Students begin to change classes regularly and are assigned to core classes and elective classes. Beginning at Level I, students in intermediate school are required to attend one elective class in the general education setting, providing an opportunity for students to experience a general education classroom and a clearer understanding of the privileges each is working toward in the program. This still provides the safety and security of a small, structured environment where the students learn appropriate coping strategies and practice those strategies in a safe environment under the direct supervision of a teacher.

Transition to middle school can be challenging for many students, especially for those with emotional and behavioral disorders. Providing a smaller, structured environment for students with EBD increases the chance of transitioning successfully. There are five levels at the middle school, and after a student has moved to a Level V, a request must be made to level to Check and Connect, where students are no longer required to have Morning Meeting as one of two elective choices. According to Mrs. Williams, many of these students have gone to school with each other since grade school, and because peer acceptance for a middle school student is important, the program offers students whose behaviors may have brought negative attention an opportunity to learn new strategies to help regulate negative behaviors and return to the general education classroom without embarrassment.

Help requesting. Self-regulated learners do not try to accomplish every task on their own but frequently seek help from others when necessary (Butler, 1998). Teachers can promote positive behaviors by providing students with on-going feedback that can be easily understood (Zumbrunn, Tadlock, & Roberts, 2011). The Morning Meeting held at every site is the time for students to receive feedback from the teacher and peers regarding progress toward goal attainment. The Morning Meeting is structured differently at every site, but the goal is to provide feedback to the student on what was done well, what is needed to improve, and which strategies can be used to improve behavior.

At the elementary levels, the BRAIN teacher is primarily responsible for providing feedback to the students. Many times, a student's help-request comes in the form of disruptive behavior that must be addressed by the teacher, rather than the student asking for help. During an observation, a student who had had a difficult morning and believed a consequence of misbehavior was going to be lunch detention, asked Mr. Johnson if the detention was going to

be assigned. Mr. Johnson replied with understanding of the difficult day the student had had, but also recognized all the student had done to regain control by asking for a break and then ultimately finishing the assignment. Mr. Johnson explained how easy it was to become overwhelmed and next time, he expected the student to try and use his words to communicate frustration.

Because of the close relationships the BRAIN teachers build with students, the teachers sometimes recognize a student's needs before the student does. At Cascade Intermediate, Mrs. Blevins recognized a student was more hyperactive during math than any other time of the day. By providing an opportunity for the student to stand at the back of the room during math class; the student was able to self-regulate the behaviors and succeed in a general education math classroom.

At the middle level, Morning Meeting is held during first hour and is a time for open discussion regarding behaviors of the previous day. Mrs. Williams chooses to conduct Morning Meeting in a group setting to allow for better understanding. The students do a good job of supporting each other and discussing better ways to handle situations. By allowing the students to discuss strategies that have worked for them, they learn to request help from their peers.

Self-Observation

For students to learn on task strategies, they must assume ownership for their learning and achievement outcomes (Kistner, Rakoczy, & Otto, 2010). Self-regulated learners take on this responsibility by monitoring progress towards learning goals (Zumbrunn, Tadlock, & Roberts, 2011). Teachers can encourage self-monitoring by having students keep a record of the number of times spent working on particular learning tasks, the strategies used, and the amount of time spent working (Zumbrunn, Tadlock, & Roberts, 2011).

Self-recording. One of the requirements of the BRAIN program is for students to record progress towards goal attainment every day or during every class period, depending on the grade level of the student. Each site has the flexibility in creating the behavior data sheets students use to track progress towards goal attainment. Each site is required to ensure each of the three goals is clearly stated on the behavior data sheet to allow students to self-record progress toward goal attainment.

At the early childhood level, students do not chart progress towards their goals as they do not have the ability to read and record information. The BRAIN teacher and, when appropriate, general education teachers record scores toward each of the three goals for each of the students. The behavior chart is made of symbols, wizard hat, lizard, or iffy face, each indicating progress. The students understand the meaning of the symbols, and when progress towards goal attainment is discussed the following morning, the student knows that if all wizard hats were earned, then 100% goal attainment was accomplished.

At the elementary level, students begin self-tracking progress toward goals. A point system is used based on a 3-point scale: 3 points if the student met the goal, 2 points if student met the goal with re-direction, 1 point if the student had to be re-directed multiple times, and 0 points if the student had to be removed from the classroom. In addition to the student tracking behavioral data, the teachers are also required to complete the data collection sheet and submit it to the BRAIN teacher. The BRAIN teacher then uses this information during the following Morning Meeting.

At Summit Intermediate, Mrs. Capps uses a 5-point scale to track data in order to make each point earned more specific and help students track points more accurately. Additionally, beginning at the intermediate level, students must earn a certain percentage toward goal

completion to remain on the current level or to request to level up. During Morning Meeting, information regarding points assigned by teachers and percentage toward level attainment is discussed with each student. Cascade Intermediate uses the same data collection sheet but uses a 3-point scale. Additionally, at Cascade, student progress toward goal attainment is shared with students at the end of every day.

At the middle level, students track progress on a 3-point scale for every class period. Each general education teacher who has a BRAIN student must complete the data sheet and submit it to the BRAIN paraprofessional by the end of every day. The paraprofessional then tallies the scores in a spreadsheet and writes the information on the board. The whiteboard has each student's name with the points earned the previous day, as well as the points accrued in a particular level. This is a visual reminder for the students and allows the students to see each other's scores. During Morning Meeting the following day, the students' score sheets and the teachers' score sheets are compared and discussed.

Self-Reflection Phase

Self-reflection takes place after the learning event is completed and entails self-judgment and self-reactions (Spruce & Bol, 2015). Teachers can promote self-reflection in the classroom by helping students monitor learning goals and strategy use and then making changes to those goals and strategies based upon learning outcomes (Zimmerman & Campillo, 2003).

Self-Judgment

Self-judgment compares an individual's current performance with a desired performance or goal. It is affected by the standards set and the importance of goals (Schunk & Zimmerman, 1994).

Self-evaluation. In the BRAIN program, self-evaluation occurs during Morning Meeting, which is held at every site. It is during Morning Meeting that students are required to review the self-recorded scores and compare those scores to those of the teachers. The BRAIN teacher then discusses with the students any discrepancies in scoring and possible explanations for the differences.

According to the behavior specialist, early childhood and elementary age students have a difficult time with self-evaluation because it is difficult for these students to take responsibility for negative behaviors. Mrs. Mathis conducts Morning Meeting in a non-threatening way by first communicating positive behaviors and progress toward goal attainment from the previous day, followed by a discussion regarding low scores assigned by teachers. The discussion on lower scores is followed by stories of real life situations with examples of strategies students can use to have a better day.

Mr. Johnson conducts Morning Meeting informally, allowing students to remain in the desks while discussing scores from the previous day. This allows for teaching of appropriate behaviors in a non-threatening way. Mr. Johnson begins by asking the students about the previous day, allowing for discussion about any challenges experienced. The discussion is followed with recommendations for task strategies the students can use in different situations.

At the intermediate level, Morning Meeting is conducted privately, one on one, with the student and the teacher. Mrs. Capps and Mrs. Blevins discuss the importance of keeping students' privacy and not allowing others to have information on each other that could be used for harm. The meetings begin the same way with the teachers asking the students first to explain personal thoughts on the day and to share positive interactions as well as negative ones. The teachers then discuss the scores from teachers and talk about the discrepancies, allowing

the student to offer reasoning. The conversations end with the teachers and students talking about strategies that can be employed to help and the teacher expressing pride in each student's progress.

At the middle level, Morning Meeting is conducted as a group meeting allowing students to offer suggestions to each other regarding behaviors. The meeting is closely monitored to ensure students are supportive and positive with each other. Students openly share advice and strategies used in the past in classrooms in an effort to support each other. Like every other site in the district, Mrs. Williams states, "I will always end on something positive for them. They need to feel good about themselves before they start the day."

As students level out to general education classrooms, the BRAIN teacher and paraprofessionals or teaching assistants make regular visits to the classrooms to monitor students' behaviors. When a student displays an inappropriate behavior, the behavior is addressed immediately through feedback from the teacher. Immediate feedback is useful in helping students understand the behaviors needing to be addressed and strategies to address the behaviors in the environment in which the negative behaviors took place.

Causal attribution. Research supports the hypothesis that effective self-regulation depends on forming positive attributions that promote perceptions of self-efficacy and sustain motivation directed toward learning (Schunk & Zimmerman, 1994). Through modeling and direct instruction, teachers can help students learn to evaluate progress toward goal attainment and assign positive attributes to success (Schunk & Zimmerman, 1994). When students believe they have control over their behaviors either because of ability or effort, they are motivated to continue working towards goal attainment. The BRAIN teachers at each site regularly focused on instilling hope by communicating a positive message of encouragement and pride in students'

progress throughout the day. In fact, a common theme observed during Morning Meetings was the importance the teachers espoused of ensuring the meetings ended on a positive note. The teachers wanted to ensure that students had the confidence in knowing they had the power to make good choices and utilize coping strategies when frustrated. It was important for the teachers that the students understood it was a new day and a fresh start, and most importantly, the teachers believed in the students' abilities to make good choices.

Self-Reactions

Self-reaction allows a person to re-evaluate their goals in conjunction with their attainments (Bandura, 1991). Reactions to performance can be motivating if the student feels progress towards goal attainment is acceptable (Schunk & Zimmerman, 1994). If the student does not feel as if progress towards goal attainment is being made, motivation to try harder may be experienced, or the student may decide the goal is not valuable enough to continue working toward.

Self-satisfaction/affect. The role of the teacher in helping students understand progress towards goal attainment is critical to the success of the student. Through observations, it was evident when students felt a sense of accomplishment as their responses were overt. The students would express satisfaction by jumping up and down or talking about how proud they were of themselves for accomplishing the goal. The teacher constantly guided these conversations with positive words of affirmation, providing the students with hope for a positive day.

Adaptive/defensive. Self-reactions were sometimes defensive, especially when students knew negative behaviors had taken place, and the student was facing difficult conversations related to those behaviors. During observations, some students would refuse to

communicate by either crawling under desks or acting out to the point of removal to the de-escalation room. The teacher was instrumental in allowing the student time to overcome the disappointment and was able to bring the student back into the discussion with a focus on building self-efficacy through utilization of coping strategies for better outcomes.

Summary

Information presented and analyzed in this chapter was collected through interviews, observations, document review, and artifacts and analyzed through the lens of self-regulated learning theory. Through analysis of the BRAIN program, common themes related to self-regulated learning theory emerged.

CHAPTER VI

FINDINGS, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Children and adolescents with EBD face many challenges, including behaviors that can be internalizing such as depression, anxiety, or suicidal ideation, or can be externalizing including defiance, aggression, or violence (Kovacs & Devlin, 1998; Gresham & Kern, 2004). Students with EBD have significant social skill deficits which prevent the establishment and maintenance of positive interpersonal relationships, and academic deficits in the areas of math, reading, vocabulary, and written language (Gresham, Sugai, & Horner, 2001; Lane, Barton-Arwood, Nelson, & Wehby, 2008). Because of these challenges, and without appropriate intervention, children and adolescents with EBD are at increased risk for school failure, serious mental illness, substance abuse, and adult crime (Quinn & Poirier, 2004).

In order to serve students with EBD, school districts are tasked with finding solutions to address the many challenges these students face. Recently, there has been an emphasis on the importance of implementing successful social/emotional learning programs for K-12 students (Jones & Bouffard, 2012). However, because students with the severest forms of EBD continue to be suspended at alarming rates, the importance of creating and implementing programs to teach students how to self-regulate behaviors remains an important challenge for school districts.

Chapter VI presents findings of the study through answering the research questions. Conclusions are drawn from the findings, and implications for research, theory, and practice are addressed. Finally, recommendations for future research are offered, followed by a summary of the study.

FINDINGS

This qualitative case study explored, through the lens of self-regulated learning theory, the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD. The following research questions guided the study:

- 1) How is the BRAIN program implemented and sustained in a selected Midwestern school district?
- 2) What is the interrelationship, if any, of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD?
- 3) How does self-regulated learning theory explain this interrelationship?

Based on the cases presented in Chapter IV and the data analyzed in Chapter V, these research questions are answered below.

Research Question One: How is the BRAIN program implemented and sustained in a selected Midwestern school district?

The BRAIN program was created, developed, and implemented by district administrators in a Midwestern school district to better serve the students in the district who suffered from emotional and behavioral disorders. Implementation of the program began at one site, Redwood Middle School, in the 2015-2016 school year and is currently being implemented at five sites throughout the district, accommodating grade levels K-8. There is consistency among all sites regarding the structure of the program, including goal setting, the level system,

the points system, and Morning Meeting. The BRAIN program is a district coordinated program, with procedures for the consistent implementation of the program at each site. The site BRAIN team is responsible for ensuring fidelity to the program while also meeting the needs of the individual students in the program.

District. The district BRAIN team includes the Director of Student Services, the Behavior Specialist, and the Coordinator for Special Services. This team meets with each site once per month with discussions centered around progress monitoring for each student. The data for every student placed in the BRAIN program are entered by the site BRAIN team on a daily basis. This allows the Behavior Specialist to chart data related to each student, helping to make program decisions for each student. Additionally, the district BRAIN team conducts fidelity checks once per quarter to ensure each site is consistent in the implementation of the program. A copy of the form used when conducting fidelity checks is located in Appendix G.

School Site. The site BRAIN team includes the principal, BRAIN teacher, and at some sites, the paraprofessional or teaching assistant assigned to the program. This team makes daily decisions regarding the implementation of the program at the site.

Goal setting. Every site, with the exception of the early childhood program, is required to write goals for each student in the areas of social development, on-task/work completion, and self regulation. These goals are specific, measurable and individualized to each student. At the early childhood level, the team works to determine developmentally appropriate goals as Mrs. Mathis stated, “Kids at this age cannot learn to self-regulate at 100%, so we really have to balance with what they can actually do” (Mrs. Mathis, interview, November 15, 2018).

Level system. The level system is the structure of the program as students are assigned different levels depending on percentage of self-regulation attained. The system has five basic

levels, but many of the sites have the flexibility to adjust the levels, depending on the needs of the students. The early childhood site uses this system, but Mrs. Mathis does not believe the level system motivates students toward goal attainment, but rather positive reinforcements, including external rewards, motivate students toward better self-control. At the elementary level Mr. Johnson adjusts the levels to accommodate those students who self-sabotage after achieving a certain level. By allowing students to level more slowly, Mr. Johnson believes the risk of self-sabotage decreases as students feel a sense of security by slowing down the exit process.

Points system. In order to level up, students must earn a certain number of points toward behavior goals each day. Depending on the grade level, students self-record scores for each goal on a daily basis. The early childhood students are not capable of self-recording, so therefore Mrs. Mathis records progress towards goals, using illustrations to enable her students to understand progress towards goal attainment. The score cards are then used to discuss students' progress during Morning Meeting.

Morning Meeting. Morning Meeting is a required component of the BRAIN program and takes place at every site. The purpose of Morning Meeting is to discuss student scores from the daily score sheets and compare self-recorded scores with those of the teachers. The BRAIN teacher facilitates this conversation, guides the student and discusses appropriate replacement behaviors and coping skills to help the student self-reflect and work toward goal attainment. Morning Meeting is conducted in various ways at each site.

At the early childhood level, Mrs. Mathis has the students sit together in a group at a round table and talks with them about scores in relation to "wizard hats or lizard brains," which is taken directly from the *BrainWise* curriculum and used to teach coping skills. The meeting is conducted at the beginning of the class period to start the day. At the elementary level Morning

Meeting is held in the morning while students sit at individual desks. The discussions take place as a group, and Mr. Johnson allows other students to help guide the discussion. At Summit Intermediate, Mrs. Capps conducts Morning Meeting in the morning but has each student come to her desk and talk about scores one-on-one to protect the privacy of the students. Mrs. Capps believes students at the intermediate level are sensitive to peers' reactions; therefore, any discussions regarding private matters should be kept in confidence. At Cascade Intermediate, Mrs. Blevins conducts Morning Meeting at the end of the day and believes the students are able to process the current day more easily, allowing students to have a fresh start every day. The morning is reserved for checking in with the students, reminding them of coping skills and preparing them for the day ahead. Finally, at the middle school level Morning Meeting is held in the morning with each student remaining at his assigned table, having open discussions regarding scores between the teacher and peers.

Although the BRAIN program is a district coordinated program, each site has flexibility in implementing the program to meet the individual needs of students. Because of ongoing support from the district BRAIN team and site administration, the program has evolved from one school in 2015-2016 to five sites in 2018-2019. As the district continues to grow, the program should continue to be sustained with proper training of district administrators and staff and flexibility at the district level, allowing for some autonomy in program implementation at each school site.

Research Question Two: What is the interrelationship, if any, of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD?

The BRAIN program supports the facilitation of the development of positive classroom behaviors for students with EBD by providing the right teacher, the right environment, and a

Morning Meeting focused on self-evaluation, all of which work to build a student's sense of self-efficacy for attaining self-regulation (see Table 3).

Right Teacher. Every BRAIN teacher interviewed for this study espoused a passion for working with students with emotional and behavioral disorders. Each had a philosophy of building relationships with students and an understanding that students had to learn to self-regulate behaviors in order to achieve goals. Each of these teachers had a different approach to teaching and interacting with students, but every one of them believed advocacy for the student was the primary role.

At the early childhood level, Mrs. Mathis focused on teaching students appropriate behaviors through modeling and providing for positive reinforcements. The students were required to practice appropriate interactions with each other and with the teacher, allowing Mrs. Mathis to give immediate feedback regarding those interactions. Additionally, Mrs. Mathis worked with other teachers in the building to educate them on the best ways to interact with the BRAIN students and to provide strategies for the classroom teachers to reinforce the replacement behaviors and coping skills being taught in the BRAIN classroom.

Mr. Johnson, at the elementary level, had worked with emotionally disturbed students in a large district before teaching in Park Public Schools. Mr. Johnson exuded patience in his interactions with the students in the classroom, even when the students were challenging authority. Interactions with the students were calm and reassuring, allowing for a safe environment to learn appropriate ways to interact with others. Mr. Johnson advocated for his students through regular classroom visits and conversations with other teachers regarding the needs of the BRAIN students. Finally, Mr. Johnson ensured BRAIN students were appropriately placed with specific teachers to ensure student success in the general education classrooms.

At Summit Intermediate Mrs. Capps built relationships with students by having daily conversations related to student interests. Every day began with the students being allowed to talk about the experiences they had had the following evening or about an event that had taken place. Mrs. Capps listened intently to the stories, modeling the importance of taking time to listen to each other. Mrs. Capps set high expectations for the students in the classroom and stated that her most important task as the BRAIN teacher was to hold students accountable for behaviors, teach appropriate responses, and then allow students to have a fresh start the following day. Additionally, Mrs. Capps worked with other teachers in the building to assist with strategies in managing the behaviors of the BRAIN students.

Mrs. Blevins at Cascade Intermediate has been a special education teacher for fourteen years. Mrs. Blevins has studied the effects of the environment on behavioral disorders and, as a result, has created learning spaces which support students in emotional and behavioral learning. According to Mrs. Blevins's principal, Mrs. Summers, "Mrs. Blevins is the key to it all...She is good at teaching other teachers how to build relationships with students" (Mrs. Summers, interview, November 2, 2018). Mrs. Blevins advocates for students with other teachers by providing general suggestions on how to best support BRAIN students. However, Mrs. Blevins also advocates for allowing students to struggle with teachers who may not be skilled at dealing with challenging students, helping the BRAIN students navigate through difficult situations.

At Redwood Middle School Mrs. Williams describes the importance of advocating for BRAIN students who have suffered with challenges throughout their educational careers. The relationships the students have with teachers and other school personnel have typically been negative; therefore, the BRAIN teacher's primary goal is to work to earn the trust of the students through advocacy, patience, and listening. Mrs. Williams works with general education

teachers to understand the adverse experiences of the BRAIN students and assists teachers with strategies to help students learn appropriate behaviors in order to remain in the academic environment and learn.

Right Environment. The BRAIN program provides structure by requiring that students work toward clearly defined, measurable goals and a level and points system that requires students to meet daily points in order to level up and gain more autonomy. This structure articulates clear expectations for students and provides a safe place to learn appropriate skills aimed at regulating behaviors. Within this structure, teachers have the opportunity to model and teach students appropriate ways to respond and interact with others.

Additionally, every BRAIN program has a de-escalation room at the site. This room is a non-sensory, private environment with padded walls, where students are allowed to regain control without the humiliation of peers or teachers looking on. Most students with emotional and behavioral disorders experience great difficulty in maintaining emotional control at times and need a safe place to release those emotions without the worry of fear or harm. When these students finally calm down, the BRAIN teacher has the opportunity to re-engage with the student and talk through the antecedents to the behaviors, allowing them to teach more appropriate ways to cope with challenges.

Morning Meeting. Morning Meeting is held at every BRAIN site throughout the district. The school sites have flexibility in determining when and how Morning Meeting will be conducted. Most sites conduct Morning Meeting during the first period of the day, while a few sites have chosen to conduct the meeting during the afternoon, as this better accommodates the building schedule. The purpose of Morning Meeting is to promote self-reflection by discussing the students' self-recorded scores on behavior goals as compared to the scores

assigned by the teachers. This discussion promotes appropriate responses to challenges and situations students encounter in the learning environment.

Self-evaluation. Self-evaluation can be difficult for children and adolescents as many do not have the capacity to take responsibility for actions. At times self-evaluation causes emotional distress for BRAIN students, and it takes a great amount of time to allow the students to come to terms with negative behaviors and learn the appropriate replacement behaviors and coping strategies. However, this is an important part of the BRAIN program because students are taught the reasons behind the behaviors, given the opportunity to reflect on the behaviors in relation to expectations in the classroom, and taught replacement behaviors and coping skills to be utilized during times of stress or anxiety. The main goal of the program is to allow the BRAIN students an opportunity to learn the skills through Morning Meeting, practice those skills in a general education classroom setting, and gain better self-regulation.

Skills training. Students must be taught appropriate skills for interacting with others and appropriate reactions to challenges in the general education classroom, while learning to self-regulate behaviors. Although currently each of the teachers responsible for implementing the BRAIN program are either experts in special education or early childhood, there certainly will be occasions when the teacher in charge of the program is not equipped to teach coping skills without help from a viable curriculum. Each BRAIN school site, currently uses the *BrainWise* curriculum, and most of them supplement with other curricula aimed at teaching self-regulation skills.

The early childhood program utilizes the symbols of the *BrainWise* program in helping young students understand the concepts behind impulsivity or Lizard Brain and practicing self-control or Wizard Brain. Students at this age level display a clear understanding of what it means

to use the Lizard or Wizard Brain and can articulate the benefits of one over the other. However, Mrs. Mathis utilizes a number of resources in helping her teach important coping skills. Throughout her classroom charts are displayed depicting appropriate behaviors and incentives to provide rewards for students needing external motivation.

At the elementary level, Mr. Johnson utilizes *Character First* as another program to assist students in learning appropriate coping skills. Mr. Johnson uses the *BrainWise* curriculum to some extent but not regularly as Mr. Johnson feels it is too elementary for his students. Mr. Johnson believes the main goal of the BRAIN program is to teach appropriate behaviors as these students do not have the needed skills when they enter the classroom. Therefore, having the time and opportunity to teach the skills is the primary reason the BRAIN program helps students gain the appropriate behaviors required in the general education classroom.

At Summit Intermediate Mrs. Capps primarily uses the *BrainWise* program but also devotes a large amount of time during Morning Meeting to discuss real-life scenarios with students in an attempt to teach problem-solving skills through situations faced on a daily basis. At Cascade Intermediate Mrs. Blevins has created a curriculum centered around a brain-based learning lab. Here students problem-solve issues while being active and working on innate reflexes. Additionally, by providing multiple contacts with students throughout the day, Mrs. Blevins has the opportunity to coach students with immediate feedback regarding behaviors.

At Redwood Middle School the *BrainWise* curriculum is not utilized on a regular basis. Mrs. Williams does not believe the program is age appropriate for her students and chooses to teach appropriate behaviors and coping skills through discussion and immediate feedback with students.

Manifestations of Hope. As BRAIN students move through the program, most begin to gain confidence in the ability to self-regulate behaviors. As this happens, students begin to express feelings of self-efficacy in the ability to control behaviors and learning. With some success in self-regulation, the students begin to level-up and gain more and more autonomy, culminating in participation in the general education setting with little or no supports. There are times when BRAIN students revert to disruptive or destructive behaviors, but when this happens, the students are pulled back into the BRAIN room and given the opportunity to regain control and learn how to better cope with adversity. This cycle allows students the opportunity to learn to self-regulate behaviors in a safe environment aimed at helping each student cope with challenges encountered every day.

Table 3

Similarities and Differences in How the BRAIN Program Supported the Facilitation of the Development of Positive Classroom Behaviors at the Five BRAIN School Sites

Sites	Right Teacher	Right Environment	Morning Meeting
Pinedale	<ul style="list-style-type: none"> * early childhood teacher * builds relationships with parents through newsletters and communication * builds relationships with teachers through informal de-escalation training 	<ul style="list-style-type: none"> * level system – 6 levels * warm/inviting classroom * appropriate goals written for age level of students * areas in room for de-escalation purposes * focus on extrinsic reward programs to help motivate children this age 	<ul style="list-style-type: none"> * held every morning * group meeting with all students gathered around discussing scores * students do not self-record * <i>BrainWise</i> Curriculum utilized and supported with teacher created materials
Aspen	<ul style="list-style-type: none"> * special education teacher * builds relationships with parents through communication 	<ul style="list-style-type: none"> * level system – 6 levels * areas in classroom for de-escalation * focus on level system and 	<ul style="list-style-type: none"> * held every morning * held with each child at the teacher’s desk or open dialogue while students remain at

		<ul style="list-style-type: none"> relationships for motivation * goals written in three areas for each student * safe place for students 	<ul style="list-style-type: none"> their desks * students self-record * Supplemental curriculum with little focus on <i>BrainWise</i> curriculum
Summit	<ul style="list-style-type: none"> * special education teacher with focus on working with students with emotional disorders * builds relationships with students through daily dialogue * informally trains teachers in de-escalation techniques * advocates for BRAIN students with other teachers 	<ul style="list-style-type: none"> * level system – 5 levels * safe place as classroom is highly structured * focus on level system for student motivation * goals written in three areas * warm environment with pets in classroom for students to care for 	<ul style="list-style-type: none"> * held at two different times of the day to accommodate different grade levels * held with each child at the teacher’s desk or open dialogue while students remain at their desks * students self-record * focus on the <i>BrainWise</i> curriculum
Cascade	<ul style="list-style-type: none"> * special education teacher for 14 years * strong at building relationships with students and advocating for them * conducts informal trainings for teachers regarding de-escalation and active learning 	<ul style="list-style-type: none"> * level system – 5 levels * warm/inviting classroom where students have areas assigned to them * safe place and highly structured * goals written in three areas and students also write personal goals for the week * RUBBLE room created as active space to stimulate learning 	<ul style="list-style-type: none"> * held throughout the day with the last hour of the day dedicated to reviewing scores * held with each child privately * students self-record * focus on neurodevelopment training * numerous curricula provided by teacher
Redwood	<ul style="list-style-type: none"> * special education teacher * strong at repairing relationships with students disillusioned with school 	<ul style="list-style-type: none"> * level system – 5 levels * highly structured * goals written in three areas 	<ul style="list-style-type: none"> * held every morning * held as a group allowing for input from peers * students self-record * <i>BrainWise</i> curriculum utilized

			with additional supplements provided by the teacher
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Research Question Three: How does self-regulated learning theory explain this interrelationship?

Self-regulated learning is a process that assists students in managing their thoughts, behaviors, and emotions in order to successfully navigate their learning experiences (Zumbrunn, Tadlock, & Roberts, 2011). This process requires students to independently plan, monitor, and assess their learning; however, few students naturally do this well (Zumbrunn, Tadlock, & Roberts, 2011). The BRAIN program provides a structure in helping students learn to self-regulate behaviors through goal setting, the teaching of coping skills and replacement behaviors, provision of a teacher to closely monitor progress and provide for immediate feedback, and an environment in which students evaluate their own performance toward the goals and adjust as necessary.

Forethought/Planning phase. According to self-regulated learning theory, it is in the forethought phase students set goals toward completing the learning task. In the BRAIN program, goals are written in three general areas focused on behavioral skills. The BRAIN teacher discusses behavioral goals with the students and provides written strategies for accomplishing the goal. The teacher models the appropriate replacement behaviors and coping skills necessary to achieve the goals.

Performance phase. The BRAIN program provides a structured environment in which students practice the strategies being taught. To avoid overwhelming students with EBD, BRAIN students are slowly introduced back into the general education classrooms as they learn to

control their behaviors. It is expected BRAIN students will have emotional and behavioral setbacks but are allowed the opportunity to refocus in the BRAIN room and continue to learn how to cope in the general education environment.

Self-reflection phase. The self-reflection phase of self-regulated learning theory takes place during Morning Meeting. It is during this time that BRAIN students are given the time and opportunity to review self-reported scores related to behavioral goals as compared with teacher reported scores. The BRAIN teacher provides guided discussion on discrepancies in the reporting of the scores and instructs the BRAIN students on appropriate replacement behaviors and coping skills to practice.

During this phase BRAIN students, depending on the level, either have a positive or negative emotional response. For students at lower levels, it is at times challenging for them to accept responsibility for negative behaviors, and the BRAIN teacher must spend a significant amount of time in teaching students how to cope. At the conclusion of Morning Meeting, the BRAIN students go out to the general education classrooms and practice the skills discussed in the meeting under the direct supervision of the BRAIN teacher or teaching assistant. Students who have progressed through the levels generally have a positive experience during Morning Meeting and are learning to self-regulate and have a positive sense of self-efficacy towards goal attainment. These students need little support from the BRAIN teacher and have learned positive classroom behaviors through self-regulation.

Conclusions

The goal of the BRAIN program, created by district administrators in a selected Midwestern School District and implemented as a pilot program during the 2015-2016 school year, was to create an environment in which students with severe forms of EBD could learn to

self-regulate their behaviors and find academic success in a general education classroom. Due to the success of the program at Redwood Middle School, the program expanded to additional school sites, accommodating for grade levels K-8 and becoming a district-run program during the 2017-2018 school year. Now the BRAIN program is successfully being implemented with consistency in five school sites in the district.

The BRAIN team at each site writes specific behavioral goals for each student and teaches coping skills and replacement behaviors aimed at students learning to self-regulate behaviors to have positive experiences in the general education classroom, enabling students to learn. The structures of the program including the level and points system, student self-reporting of daily scores, Morning Meeting, and a teacher trained in de-escalation and behavioral modification techniques. The sites do experience high levels of autonomy in flexing the program to meet the needs of the individual students. Some examples include the ability of each site to adapt the levels for students and the flexibility in using alternate curricula to teach replacement behaviors and coping skills.

There are some elements of the program clearly established by the District BRAIN team, including enrollment procedures for students into the program. This process is clearly streamlined with checklists and forms required to be completed during the referral process. The decision to admit a student into the program is controlled by the District BRAIN team. Additionally, it is during BRAIN team meetings with district administrators that student requests for leveling up are approved. These recommendations must be supported by progress monitoring data gathered by the district Behavior Specialist.

The BRAIN program supports the facilitation of the development of positive classroom behaviors for students with emotional and behavioral disorders by providing the right teacher

and right environment for students to learn to self-regulate behaviors. At each site, the BRAIN teacher is either a special education teacher, a teacher who has worked with students with EBD for an extended amount of time, or is specifically trained in the field of early childhood education. Each of the teachers works to build and repair relationships with students, teachers, and parents. The teachers understand the challenges associated with dealing with students with EBD and advocate for them with others, teach other teachers strategies to use in engaging with BRAIN students, and engage parents in the education of their children.

The BRAIN program provides the structure that allows the BRAIN teachers to work with these students in a safe environment, teaching social/emotional learning skills in order to appropriately navigate the educational environment. The BRAIN program provides the time for students to learn these appropriate behaviors and to reflect and self-evaluate their progress toward their goals. Additionally, the program provides a safety net for BRAIN students to practice appropriate skills and receive immediate feedback regarding this practice. As students learn to self-regulate behaviors through repeated practice, each develops a sense of self-efficacy and hope which many have not felt before.

Self-regulated learning theory helps to explain the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors. Through the cycle of forethought, performance or practice, and self-reflection, students learn to self-regulate behaviors and regain control in the general education classrooms. As this cycle continues, students become more confident in their abilities and are intrinsically motivated towards greater autonomy in controlling the behaviors.

Implications

The findings from this study have implications for research, theory, and practice.

Examples of these implications are delineated below.

Implications for Research

School safety and security continues to be a primary concern for school districts across the United States. There are many causes for school violence, and unfortunately, those acts of violence are often carried out by students with emotional and behavioral disorders. As there continues to be a lack of funding for education and, more specifically, mental health, school districts are faced with creating programs aimed at intervention and education for students with EBD. Findings from this study confirmed findings from previous research regarding the need for systemic programs focused on social/emotional learning for students with emotional and behavioral disorders.

Using self-regulated learning theory espoused by Zimmerman and Campillo (2003), Zimmerman (2000), and Pintrich and Zusho (2002) as the theoretical framework for this study expanded the research base to include the application of theory on the learning of self-regulation for students with severe forms of EBD, who require services in a more restrictive environment. The study compared the elements of the BRAIN program with the three phases of self-regulated learning theory. Findings indicated there was an interrelationship between the facilitation of the development of positive classroom behaviors for students with severe EBD and the BRAIN program, and this interrelationship could be explained through self-regulated learning theory.

Implications for Theory

Self-regulated learning (Zimmerman and Campillo, 2003; Zimmerman, 2000; and Pintrich and Zusho, 2002) was used to describe the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with severe EBD. This study contributed to self-regulated learning theory by focusing on how students with EBD can learn to control behaviors through the process of goal setting, practice, and self-reflection, which had not been done previously. This study shows the use of theory to explain motivation for students with severe EBD in learning to self-regulate behaviors.

Sociocultural theory created by Lev Vygotsky (1978) may be useful in explaining the role of the BRAIN program in supporting positive classroom behaviors for students with EBD. Sociocultural theory focuses not only on how adults and peers influence individual learning, but also on how cultural beliefs and attitudes impact how instruction and learning take place (Kozulin, 2003). The culture in each of the school sites implementing the BRAIN program was supportive of students with EBD. The principals and teachers implementing the program understood the importance of teaching appropriate behaviors in helping students learn to self-regulate. The teachers implementing the program interacted with the students by showing patience, passion, empathy, and caring and advocated for students to other teachers and staff; this was an important part of the culture at each of the schools in the study.

Implications for Practice

While the findings of this qualitative study are not generalizable and may be transferable in part only to similar contexts, this study can have implications for district and school leaders. As school districts begin to focus on restorative justice programs like PBIS, it is important to understand the significance of more intensive programs to address the needs of

students with EBD. Because of the sometimes violent and aggressive nature of these behaviors, many districts resort to punitive discipline such as suspension. Suspending students with EBD does little to teach appropriate behaviors or coping skills and only serves to further alienate students from the educational environment. Because safety in schools remains a priority, it is important for school districts to address the needs of students with EBD through programs aimed at self-regulation rather than exclusion from the school environment.

For these programs to be successful, educators at district and local levels must work to create safe environments in which students have the structure and time to learn how to cope during times of stress and interact with peers and adults in appropriate ways. These skills can be taught but must be taught by caring, compassionate teachers who are trained in de-escalation techniques. Administrators should ensure teachers with compassion and empathy are selected for these programs during the hiring process. School leaders must ensure time is provided during the school day for students to reflect on their behaviors and learn the appropriate replacement behaviors and coping skills. School leaders must also be advocates for these students and work to train all teachers and staff who come into contact with students with EBD appropriate strategies for de-escalation and for engaging students in academic learning.

In implementing programs such as the BRAIN program, fidelity of implementation is an important concern. Principals and teachers at each of these sites implementing the expressed the importance of flexibility to meet the needs of individual students; however, differences in implementation may have had an impact on the findings.

Recommendations for Future Research

The following recommendations for future research are provided as possible extensions to this study. This research could be applied to other districts experimenting with similar

programs to address the needs of students with EBD. The need for these programs is great, and during interviews with participants for this study, many had previous experiences with similar programs; therefore, studies using self-regulated learning theory as a lens to analyze similar programs could provide additional insight into the strengths and weaknesses of the programs.

This study only focused on teacher and administrator perceptions of the BRAIN program and did not involve the perspectives of students in the program. Therefore, a longitudinal study of students in the program could be useful in better understanding the evolution of self-regulated learning. For those students entering the program in kindergarten, a study including the educational journey of the student through high school could provide additional information regarding the effectiveness of the BRAIN program.

Finally, the Behavior Specialist collects enormous amounts of data regarding each individual's progress toward goal attainment. This quantitative data could help identify specific strategies useful in helping students achieve goal attainment and could serve as a longitudinal study on each student.

Summary

Children and adolescents with emotional and behavioral disorders who are not appropriately supported will face lifelong challenges. Restorative justice programs are becoming more common in educational settings and provide support for those students with behavioral and academic challenges through education rather than through punitive justice such as suspensions and expulsions. However, there are students with severe cases of EBD who require more intensive, structured programs that promote self-regulation and teach specific coping skills. These students need more time and structure than can be provided in a general education classroom. The BRAIN program was created to address the needs of this particular group of

students whose behavioral challenges had created a level of adversity that prohibited success in school.

Chapter II presented an in-depth review of the literature regarding current programs throughout the nation aimed at addressing the needs of students with EBD. These programs have proven effective in helping students learn appropriate behaviors; however, students with EBD continue to be suspended at disproportionately higher rates compared to other disabled peers. Therefore, the need for more intensive programs is necessary for those students with severe cases of EBD. The BRAIN program was created by district administrators in a selected Midwestern school district to address the needs of a particular group of students who had never been successful in school and were about to enter the seventh grade. These students needed an intensive program aimed at teaching replacement behaviors and coping skills to learn to self-regulate behaviors and remain in the general education environment. The purpose of this study was to explore through the lens of self-regulated learning theory the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with EBD.

Chapter III described the qualitative case study methodology selected for this study. All five school sites implementing the BRAIN program in Park Public Schools were chosen for this study. Data collection occurred during the 2018-2019 school year and included observations, interviews, document review, and artifacts. I observed BRAIN team meetings and Morning Meetings at all five sites. I conducted interviews of all site principals with the exception of Redwood Middle School as I am the principal, the BRAIN teachers at all five sites, and the Behavior Specialist for the district. I collected information from BRAIN team agendas, emails, and pictures of BRAIN classrooms. Collected data were analyzed using methods of data

triangulation (Lincoln & Guba, 1985). Selection of self-regulated learning theory framework occurred prior to conducting the study and provided a lens through which to analyze the data.

Chapter IV presented the implementation of the BRAIN program at each of the five sites in the district. Themes emerged from the coding of data that were consistent among all school sites implementing the program. These themes were described using thick, rich descriptions of the interactions among the participants at the school sites. Chapter V analyzed the themes of the BRAIN program at each site through the lens of self-regulated learning theory espoused by Zimmerman and Campillo (2003), Zimmerman (2000), and Pintrich and Zusho (2002) and includes the following three phases of self-regulation: forethought/planning phase, performance/action phase, and self-reflection phase.

Findings revealed the BRAIN program was implemented with consistency among all school sites in the district and was sustained due to district support and flexibility in program implementation at the school site level. The selection of a BRAIN teacher with expertise in behavioral management and a caring and compassionate attitude was critical to the success of the program. Additionally, the structure of the BRAIN program provided a safe environment for students to learn appropriate coping skills and replacement behaviors and the time to self-reflect and evaluate progress towards goal attainment. These elements of the program enabled students to develop positive classroom behaviors which allowed the students the opportunity to remain in the general education classroom and focus on academic learning. Chapter VI concluded with implications for research, theory, and practice and recommendations for future research.

Researcher Comments

I have been a principal at the secondary level for fifteen years. For the first eleven years of my practice, I struggled with how to handle students with emotional and behavioral disorders. There never seemed to be any answers, and the only options available were suspend the student or try to convince district administrators to hire a teaching assistant who could assist the student throughout the school day.

When I arrived at Park Public Schools, I was approached by district administrators who had the same concerns, but they had an idea for the creation and implementation of a program they had observed at a treatment facility in the community. I wanted to do anything I could to help these students find success in the classroom, so I was up for anything. The pilot year was incredibly challenging as I found a large portion of my day spent trying to help these students find success, while at the same time supporting the teachers dealing with the behaviors in the classrooms. After four years of implementation, I believe we have helped many students find success but not all.

For many students with EBD, there is an underlying mental illness. The BRAIN program does not have the capability to address mental illness; therefore, some students will continue to face challenges that simply cannot be overcome. This is incredibly difficult for me as an administrator, but it is even more devastating for those teachers who work with those students every day. One of the most significant challenges for the BRAIN program is finding ways to support these teachers' emotional well-being so they do not "burn out." After interviewing each BRAIN teacher, I sensed a profound sadness in those unable to change the outcomes for all students. One of the teachers expressed it by saying, "What I've had to experience in the classroom this year is hard, and I've always had very hard jobs, but this is the hardest job I've

ever had. I wake up every morning and just say to myself, 'All I have to do is just go, go to school and love them, then everything else will fall into place.'"

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APPENDICES

APPENDIX A

Letter of Permission for Access

October 29, 2018

Dear _____, Superintendent of Park Public Schools

In fulfillment of the research component required of students in Oklahoma State University's Doctor of Education, I am seeking your permission to gain access to the staffs of _____. I would also like to interview _____, Behavior Specialist for the District.

I would like to conduct research fall of 2018, and spring of 2019, that will involve interviewing four principals, five special education teachers responsible for the implementation of the BRAIN program, and the behavior specialist. The primary method of data collection will be digitally recorded interviews, direct observations of BRAIN classrooms, and documents. While students may be present during observations during the school day, they will not be interview subjects, and my role as researcher will be strictly as observer. I will not participate in the classroom activities.

Upon receiving approval from the Institutional Review Board, the study will commence in the fall of 2018. Data collection will extend through spring semester. Any necessary follow-up interviews will be conducted to ensure credibility; member checks of the transcribed interviews will ensure accurate representation of the subjects' words and ideas. Data gathering and analysis should be complete by March of 2019.

If you are willing to allow me to proceed with this research, please indicate so with your signature below. If you require additional assurances, please contact me for further discussion.

Email address: kathryn.knowles@okstate.edu Cell phone: 405.412.0191

Sincerely,

Kathryn Knowles

Superintendent's Signature _____

APPENDIX B

Letter of Introduction

(letter to be hand delivered to each participant, at each site)

To Participant:

My name is Kathryn Knowles. I am a doctoral student at _____ University, pursuing a degree in School Administration. I am conducting a research study as part of the requirements of my degree, and your site has been selected for my study. I have been a principal in Park Public Schools district for four years.

I am conducting a case study to better understand the BRAIN program and its relationship, if any, to facilitating the development of positive classroom behaviors. The purpose of my study is to explore, through the lens of self-regulated learning theory, the interrelationship of the BRAIN program and the facilitation of the development of positive classroom behaviors for students with severe emotional and behavioral disorders (EBD). The resulting analysis should be insightful to school personnel in working with students with EBD.

I have been granted access to _____ School by the Superintendent, _____. I will be occasionally present at the school during the fall semester of 2018 and spring semester of 2019. I will attend some BRAIN meetings, morning meetings, and the BRAIN classroom. I will be conducting interviews of principals and teachers who are responsible for implementing the program. The data collected from the interviews will be kept strictly confidential. If you decide to participate in this research, the name of your school nor your name will be revealed in my dissertation and all information will be kept confidential.

If you have any further questions about this study, please respond to my email at _____ or call _____.

Sincerely,

Kathryn Knowles

APPENDIX C

Informed Consent

The BRAIN Program and Promotion of Self-Regulation for Students with Emotional and Behavioral Disorders: A Case Study

Investigator: Kathryn Knowles, Doctoral Candidate, Oklahoma State University

Purpose:

You are being invited to participate in a study on the BRAIN program and its relationship to supporting positive classroom behaviors for students with emotional and behavioral disorders. The purpose of my study is to explore, through the lens of self-regulated learning theory, the interrelationship of the BRAIN program and the development of positive classroom behaviors for students with severe emotional and behavioral disorders (EBD). Participants will be asked to share their insights regarding the BRAIN program, its implementation, and its role in supporting positive classroom behaviors for students with EBD in five selected schools.

Procedures:

As a participant in this study, you have been purposefully selected to participate in an interview or survey, where you will be asked questions regarding implementation of the BRAIN program at your site. I will record the interview on my laptop so that I can later transcribe the interview. I will provide a copy of the transcribed interview to you so that you can verify the accuracy and content of the interview. The survey will be hand delivered to you and I will collect the survey instrument two weeks after delivery, or when you have completed it.

Risks of Participation:

There are no known risks associated with this project which are greater than those ordinarily encountered in life.

Benefits:

There are no direct benefits to you. The result of this study will inform university programs, administrators and teachers of the role of the BRAIN program in supporting positive classroom behaviors for students with EBD.

Confidentiality:

The records and results of this study will be kept private and confidential. Any written results will not include any information that will identify you. Pseudonyms will be assigned to all participants in the study. Consent forms will be kept separate from all other documents. Research records will be stored on a password protected computer and only the researcher will have access to the records. Immediately following the interview, all transcriptions will be completed by the researcher to ensure maximum confidentiality. As soon as transcription is complete, the data files will be permanently removed from my computer. Data will be destroyed two years after release from the IRB.

Compensation:

No compensation will be provided for participation in this research.

Contacts:

If you have questions about this study, please contact:

Kathryn Knowles

Dr. Ed Harris, Advisor

7905 Scotch Lane

or

Oklahoma State University

Tuttle, OK 73089

308 Willard Hall

(405)412-0191

Stillwater, OK 74078

kathryn.knowles@okstate.edu

(405)744-7932

ed.harris@okstate.edu

If you have questions about your right as a research volunteer, you may contact:

Institutional Review Board

Oklahoma State University

219 Cordell North

Stillwater, OK 74078

(405)744-3377

irb@okstate.edu

Participant Rights:

Your participation in this study is voluntary, and you may choose to discontinue participation at any time with no risk or penalty.

Signatures:

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

Signature of Participant

Date

I certify that I personally explained this document before requesting that the participant sign it.

Signature of Researcher

Date

APPENDIX D

Interview Questions

- (RQ. 1) 1. Describe a typical day in the BRAIN program.
- (RQ. 1,2,3) 2. Describe Morning Meeting. What is the purpose?
- a. Who conducts this meeting?
 - b. Do you feel the Morning Meeting has value?
 - 1. In what ways?
- (RQ. 1,2,3) 3. How does the BRAIN program contribute to student outcomes? For example, personal responsibility, classroom behaviors, self-regulation.
- (RQ. 2,3) 4. Do you feel the BRAIN program is meeting the needs of its students?
- a. In what ways?
- (RQ. 1,2) 5. Overall, what do you feel are the strengths of the program? What are the challenges or limitations?
- (RQ 2,3) 6. In your experience with BRAIN students, what is considered a successful outcome?
- a. Any examples?

APPENDIX E

	When given a task or demand, ___ will comply within 10 seconds with 2 or fewer prompts. Daily % _____	___ will remain safe at all times (e.g no aggression, property destruction, elopement or verbal aggression [swearing, threats, etc.]). Daily % _____	When presented with a frustrating situation, ___ will utilize learned coping skills with 2 or fewer prompts. Daily % _____	<u>Comments</u> <i>Please make a note as to "why" they scored anything but a Wizard hat.</i>
7:40-8:00	  	  	  	
8:00-8:45	  	  	  	
8:45-9:15	  	  	  	
9:15-10:00	  	  	  	
10:00-10:45	  	  	  	
10:45-11:15 Lunch	  	  	  	
11:15-11:45 Recess	  	  	  	
11:45-12:15 FLEX	  	  	  	

APPENDIX F

Student Data Collection Chart at Aspen Elementary

STUDENT DATA COLLECTION

NAME:

WEEK OF:

Subject Area	Monday	Tuesday	Wednesday	Thursday	Friday	Weekly Average
MORNING WORK						
READING BLOCK						
MATH BLOCK						
SCI/SOC BLOCK						
BEHAVIOR INTERVENTION						
LUNCH						
RECESS						
WRITING / JOURNALING						
ENRICHMENT/ SPECIALS						
TOTAL POINTS						
	27	27	27	27	27	
AVERAGE						

- 0 points: I did my own thing and didn't meet my goals! **@**
- 1 point: The teacher had to redirect me over five times, but I did some things right. ☹
- 2 points: I met my goals, but the teacher did have to redirect me a few times. ☺
- 3 points: I was AMAZING and did everything I was supposed to! ☺

Social Development Goal:

On-Task / Work Completion Goal:

Self-Regulation Goal

APPENDIX G

B.R.A.I.N. Fidelity Checklist for Administrators

School/Program: _____ Date of Observation: _____

Teacher: _____ Observer: _____

1	2	3	4	5
Ineffective and/or no evidence of implementation of the program	Implementation of program needs improvement (inconsistent and unpredictable)	Sufficient implementation of the program (minimum standard)	Highly effective implementation of the program (consistent and predictable)	Superior implementation of the program (above and beyond what is expected)

Are the following program elements observable and/or clearly documented?

I. Environment

Category:	Indicator:	Score:
Organization	The classroom is well organized, and clear of excess clutter.	
Communication	The teacher gives appropriate feedback on student behavior (redirections, prompts, praise, etc.).	
Consistency	The teacher provides feedback and redirection on a consistent basis to and between students.	
Structure	Rules and expectations are clear, direct and displayed in the room.	
Climate	Instructions/demands are developmentally appropriate.	
Positive Behavior Supports	Positive behavior supports and language are used.	
Flexibility	The teacher is flexible and able to adjust intervention/educational approach when needed.	

Objective Mean Score: ____

II. Appropriate use of the BRAIN components

Category:	Indicator:	Score:
Level System	The teacher is knowledgeable about the levels in the program.	
	The teacher has knowledge/easy access to the current level of each student, and their current level of performance.	
Refocus	The teacher uses Refocus appropriately and is knowledgeable about how to assign and remove a student from Refocus.	
Chill-zone	The teacher uses the 'chill-zone' appropriately and when needed.	

Objective Mean Score: ____

III. Data

Category:	Indicator:	Score:
Self-monitoring	The teacher implements a self-monitoring system, and evaluates student self-monitoring data with the student daily.	
Data collection	The teacher collects data for every student, daily via the BRAIN score sheet.	
	Data is graphed weekly.	
Data validity	All data collected is accurate and valid.	

Objective Mean Score: ____

IV. Promotes Social/Emotional Development

Category:	Indicator:	Score:
Coping skills	Teacher promotes the appropriate use of coping skills with the student when needed.	
Check-in	The teacher utilizes the check-in period daily with each student.	
De-escalation	The teacher effectively uses de-escalation techniques.	
Redirection	The teacher redirects target/inappropriate behavior and offers appropriate replacement behaviors.	

Objective Mean Score: ____

V. Communication

Category:	Indicator:	Score:
Parent Contact	Parents/guardians are contacted (at least) weekly with the student's progress.	
	The teacher encourages and promotes parental growth by providing information on trainings and further parent educational opportunities.	
BRAIN Team	The teacher attends site and district BRAIN meetings.	
	The teacher is a participating member of the site's BRAIN team-offering input, suggestions, and actively problem solves.	
	The teacher reaches out to appropriate personnel when help is needed.	

Objective Mean Score: ____

Summary of Scores

Objective	Mean Score
Environment	
BRAIN Components	
Data	
Social/Emotional Development	
Communication	
Total Mean Score:	

Teacher Comments:

VITA

Kathryn Diane Knowles

Candidate for the Degree of

Doctor of Education

Thesis: THE BRAIN PROGRAM AND PROMOTION OF SELF-REGULATION FOR STUDENTS WITH EMOTIONAL AND BEHAVIORAL DISORDERS: A CASE STUDY

Major Field: School Administration

Biographical:

Education:

Completed the requirements for the Doctor of Education in Educational Administration at Oklahoma State University, Stillwater, Oklahoma in August, 2019.

Completed the requirements for the Master of Science in Educational Administration at University of Oklahoma, Norman, OK in 2002.

Completed the requirements for the Bachelor of Science in Social Studies Education at at University of Oklahoma, Norman, OK in 1995.

Experience:

Mustang Public Schools – August 2014 to Present

- Principal, Mustang High School – August 2019
- Principal, Mustang Middle School – August 2014 to July 2019

Moore Public Schools – October 1995 to June 2014

- Principal, Highland East Junior High
- Assistant Principal, Moore High School
- Assistant Principal, Highland West Junior High
- 9th Grade World History Teacher – Brink Junior High

Professional Memberships:

Association for Supervision and Curriculum Development, Cooperative Council for Secondary School Administrators, Oklahoma Middle Level Educators Association