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Teacher Perceptions and Experiences with Self-Regulation Strategies in General Education Classrooms

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LOYOLA UNIVERSITY CHICAGO

TEACHER PERCEPTIONS AND EXPERIENCES WITH SELF-REGULATION
STRATEGIES IN GENERAL EDUCATION CLASSROOMS

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

PROGRAM IN SCHOOL PSYCHOLOGY

BY

SOFIA FLORES-PEREZ

CHICAGO, IL

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ABSTRACT

General education teachers are now serving students with both special education needs and regular education students within a general education environment. Inclusionary practices are increasingly becoming common practice. However, teacher prep-programs concentrate on lesson planning and not enough training is emphasized on classroom management or behavior/academic intervention strategies. There is a dearth of qualitative studies gaining teachers perspectives on this phenomenon.

This qualitative study will seek to gain insight about teachers' experiences, perspectives, and practices regarding implementation of self-regulation strategies within a general education setting. The research questions will gain insight on what strategies could look like in a general education classroom, teacher's training and experiences with behaviors and self-regulation strategies, and the supports needed for implementation of strategies in general education settings to support all students. The results of this study could help school psychologists better collaborate with teachers and develop feasible interventions for general education settings.

This study is framed through a phenomenological framework and case study design. Data will be collected through observations, semi-structured interviews, and analysis of documents provided by general and special education teachers across grade levels (Early Childhood, Elementary and Middle School).

CHAPTER ONE

INTRODUCTION

Teacher-preparation programs often lack concentration of teaching classroom management or self-regulation strategies for students in general education classrooms. Courses tend to emphasize on planning of lessons; however classroom management is insufficiently addressed (Merrit & Wheldall, 1993) and teachers are often not prepared to manage student behavior due to lack of exposure of content (Freeman, Simonsen, Briere & MacSuga-Gage, 2014). In interviews with teachers, they noted the need for additional classroom management skills and felt dissatisfied with their training in this area (Conderman, Johnston-Rodriguez, Hartman & Walker, 2012; Merrit & Wheldall, 1993; Smart & Igo, 2010). Teachers voiced that they did not receive adequate training and needed more skills to manage groups of students (Conderman et al., 2012; Merrit & Wheldall, 1993). In addition, teachers indicated they would have expected to have more training (Merrit & Wheldall, 1993; Smart & Igo, 2010) and coaching opportunities before entering the field; 82% of teachers interviewed believed they learned classroom management skills after being hired (Merrit & Wheldall, 1993). According to Freeman et al. (2014) most states require some form of classroom management training for new teachers; however, the requirement does not specifically include research-based classroom management practices.

Self-Regulation

Self-regulation can be defined to include various components. For this study, the following research-based self-regulation strategies were studied: planning (assessing challenging behaviors and creating steps or goals to improve those behaviors), goal setting (target a realistic goal, create plan for completion, monitor progress), self-instruction (language to regulate behaviors, such as self-talk, describe steps to organize or calm down, counting, breathing), self-monitoring (self-observation or self-recording to evaluate performance through graphing, for example), and self-evaluation (student assesses intervention or behaviors) (Menzies & Lane, 2011; Rafferty 2010).

Self-regulation skills develop from the early years into adulthood. Further, self-regulation skills in elementary and middle school can predict future adjustments or maladjustments into adulthood (Eisenberg & Sulik, 2012). Bandura (1991) described self-regulation as a multifaceted phenomenon operating through a number of five cognitive processes including setting standards, self-monitoring, evaluative judgment, self-appraisal, and affective self-reaction. To qualify specifically as self-regulated, students' learning must involve the use of specified strategies to achieve academic or behavioral goals on the basis of self-efficacy perceptions (Zimmerman, 1989).

Based off the five *cognitive processes* (setting standards, self-monitoring, evaluative judgment, self-appraisal, and affective self-reaction) identified by Bandura (1991) teachers could support students in their learning of such self-regulation strategies to improve academic and behavioral outcomes within the classroom setting and beyond. Specifically, teachers may implement the following self-regulation strategies to support students: planning, goal setting, self-instruction (self-talk), self-monitoring, and self-evaluation (Menzies & Lane, 2011; Rafferty,

2010). Bandura's (1991) five cognitive processes and similarly the five self-regulation strategies identified for this study place emphasis on students' abilities to identify challenging behaviors, create realistic goals, create a plan to achieve goals, self-teach behaviors, monitor behaviors, and analyze/evaluate overall plan effectiveness. Teacher instruction and use of self-regulation strategies based off the five cognitive processes identified by Bandura could be beneficial to support students' behavioral management and academic success. In addition, current Cognitive Behavioral Therapy (CBT) strategies that are the current dominant based psychoeducation strategies for teaching self-regulation skills are rooted in Bandura's theory. This study sought to understand teacher perceptions and experiences of implementing self-regulation strategies within general education classrooms.

Gathering information about teachers' perceptions and use of self-regulation strategies could provide school psychologists with more insight on general education teacher's skills and needs, expanding the school psychologists' role in collaborating with teachers and selecting thoughtful interventions as a component of Multi-Tiered Systems of Support (MTSS). School psychologists play an essential role in promoting and supporting development within the core components of MTSS, including data-based decision making, evidence-based interventions, implementation fidelity, and systemic problem solving (Eagle, Dowd-Eagle, Synder, & Holtzman, 2015). Identifying general education students needing additional supports, does not mean the student automatically becomes eligible for special education (Menzies & Lane, 2011), however all students may benefit from the MTSS supports.

Significance of Study

Bandura (1991) addressed self-efficacy and explained that people form beliefs of what they can do, they anticipate the likely consequences of prospective actions, they set goals for

themselves, and they otherwise plan courses of action that are likely to produce desired outcomes. Through exercise of planning, people motivate themselves and guide their actions in an anticipatory way (Bandura, 1991). However, research is not describing how these self-regulation strategies are perceived by classroom teachers and whether or not they exist in their training.

Self-regulating strategies have shown to be effective towards increasing academic achievement (Menzie & Lane, 2011; Raver et al., 2011) and positive behaviors (Raver et al., 2011); however, there is a gap in the literature exploring teachers' perspectives on these strategies as well as their use in classrooms. Studies in the past have focused on self-reported measures and quantitative survey data in attempts to gather self-regulation data (Cho, Wehmeyer, & Kingston 2012; Cleary, Gubi and Prescott, 2010; Stang, Carter, Lane & Pierson, 2009). Little research exists regarding teacher's perceptions, teachings, and overall implementation of specified academic and behavioral self-regulation strategies, especially exploring these components through a qualitative framework. More qualitative research needs to be conducted to explore teacher understanding, practices, challenges and feasibility of teaching evidence-based self-regulation strategies to support academics and behaviors for students enrolled in general education classrooms.

Self-regulation strategies such as self-monitoring, self-instruction or self-talk, and goal setting could be implemented to support not only special education students, but also general education students within the general education environment to help students struggling to manage their academic and attention/disruptive behaviors (Menzie & Lane, 2011). As some examples, teaching and modeling for students breathing strategies, self-monitoring techniques, self-motivation, flexible use of learning strategies, appropriate self-seeking, attention control,

planning, self-evaluation, and goal setting approaches are self-regulation strategies that might be implemented in a general education classroom (Zumbrunn, Tadlock, & Roberts, 2011). More research is needed to identify teacher's understanding of such strategies as well as implementation of the described practices within the classroom setting. In addition, teacher insight could help school psychologists further develop classroom interventions using an MTSS framework.

In addition, research is lacking regarding teachers' perceptions of supports needed and feasibility of implementing these strategies as daily classroom practices. Systems-level consultation within a tiered framework requires both knowledge of MTSS intervention components and effective implementation practices (Eagle et al., 2015), both acquired by school psychologists in their training. Therefore, gaining these perspectives could guide school psychologists with teacher consultation on trainings and supports for implementing effective classroom interventions that highlight self-regulation strategies for academics and behaviors.

According to Fried (2011) the development of regulation is important for both students and teachers and more needs to be done to understand the effects of the use of specific regulation strategies, particularly in relation to teacher strategy use for themselves and their students (Fried, 2011). Teachers could potentially help students self-regulate and also address classroom behaviors through the use of evidence-based self-regulation interventions previously mentioned. Teacher's modeling of self-regulation strategies along with reminders and visual tools could foster these skills. For example, teaching and modeling breathing strategies, self-monitoring techniques, self-motivation, flexible use of learning strategies, attention control, planning, self-evaluation, and goal setting approaches are some self-regulation strategies that could be

implemented in a general education classroom (Zumbrunn et al., 2011). In some cases, teachers may be unknowingly implementing such strategies.

Teacher modeling of self-regulation strategies is very important and could promote the student's replication of such strategies. The gap between evidence-based interventions and their application in actual school settings cannot be narrowed if teachers, those who actually implement the interventions are not informed that such interventions exist or trained in their use (Stormont, Reinke, & Herman, 2011). As previously mentioned, this information is necessary to help students gain tools that would help them self-regulate their emotional and academic behaviors independently.

Core self-regulation strategies are important components of universal social-emotional learning curriculums, but when students exhibit significant developmental deficits in these areas; Tier 2 and Tier 3, programming should focus on these same core life skills. More intensive interventions should use similar language and strategy definitions as presented in classroom-based interventions (thus a more intensive teaching of universal curriculum and teachers should be coached to prompt and reinforce utilization of self-regulation strategies taught in more intensive interventions. Thus, the classroom teacher continues to have a central role even if the student is receiving upper level Multi-Tiered Systems of Supports. The MTSS models encourage implementing strategies such as the ones previously discussed as class-wide Tier 1 systems of support. In general, such social-emotional learning programs are not being implemented universally; this study tries to understand teacher's understanding and practice of self-regulation strategies along with learning more about barriers that are challenging the implementation of self-regulation strategies in general education classrooms. In addition, this new information

could provide insight into how school psychologists may better collaborate with teachers when choosing interventions within the MTSS framework.

Problem Statement

Smart and Igo (2010) indicated that inclusion of students with special education is increasingly becoming standard and regular education teachers would need to receive training that previously was dedicated toward special education teachers. For example, trainings on interventions and strategies similar to those related to self-regulation would also be beneficial for general education teachers and students. As more schools are pushing for an inclusion model of instruction, more general education teachers are being assigned to serve general education students along with students with special education needs (Smart & Igo, 2010). Little is known regarding teacher's promotion of self-regulation strategies in the classroom. To date, there have been little qualitative research understanding teachers' perspectives, experiences, and implementation of self-regulation practices in general education classrooms. In addition, little information is known about the collaborations and supports needed to increase implementation of self-regulation strategies in general education classrooms.

More research is needed to determine teachers' knowledge and use of evidence-based self-regulation techniques and materials used in instruction in addition to their insight on how strategies could be implemented in their daily classroom routines (Cho et al., 2012). Given the dearth of information regarding teachers' self-regulation practices in general education classrooms, a qualitative study could help better understand the extent to which teachers have received training in self-regulation strategies, their background knowledge of strategies, the extent to which they teach and model self-regulation strategies to address academics and behaviors, as well as understand challenges that hinder the teachings of self-regulation within the

general education classroom curriculum. Teaching and learning of self-regulation strategies and implementing the strategies at a Tier 1, class-wide level could be very useful for teachers and all students (Hoff & Ervin, 2013) falling within the MTSS framework.

Purpose of Study

The purpose of this qualitative research study is to explore general education and special education teachers' knowledge, experiences and perceptions regarding teaching students' self-regulation strategies for academics and social-emotional behaviors within general education classrooms as well as obtain insight on how to promote the implementation of self-regulation strategies within general education classroom settings. Self-regulation strategies can serve as positive intervention strategies to benefit student academics and social-emotional behaviors.

This study is qualitative in nature, as the researcher sought to gain more insight about teachers' experiences, practices and perspectives regarding implementation of self-regulation strategies for academics and social-emotional behaviors across grade levels (Early Childhood, Elementary and Middle School) within a general education setting. Specifically, the following self-regulation strategies were studied: planning, goal setting (target), self-instruction (self-talk), self-monitor monitoring (self-observation or self-recording), and self-evaluation (assess intervention or behaviors) (Menzies & Lane, 2011; Rafferty, 2010).

Research Questions

The research questions are as follows.

1. What do self-regulation strategies look like for academics or behaviors within a general education setting?
2. To what extent do teachers explicitly teach self-regulation strategies to their students in to support academic performance or behavior?

3. What experience/perception/knowledge do teachers' have of self-regulation strategies for academics or behaviors?
4. What supports do teachers need to implement self-regulation strategies within a general education setting?

Research Objectives

This study explored knowledge and implementation of self-regulation strategies within general education environments. General and special education teachers for this study were recruited from early childhood (PK-2nd grade), elementary (3rd-5th grade) and middle school (6th-8th grade) settings from a Midwestern suburb. The researcher sought at least five and no more than seven representative teachers from three grade-level groups; early childhood (PK-2nd grade), elementary school (3rd-5th grade), and middle school (6th-8th grade) for a total of nine teacher participants. Once teachers were recruited, semi-structured teacher interviews were the first source of data collection. The second source of data collection included classroom observations and each observation took approximately 60 minutes. Classroom observations provided data about observable academic and behavioral self-regulation approaches implemented within general education classroom settings. Classrooms selected for observation were randomly assigned. A third data source was the collection of documents/visuals artifacts of self-regulation strategies sought during interviews and classroom observations and were also included within the analysis.

Conceptual Framework

Qualitative methods were used to investigate this research topic. Qualitative researchers are interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute their experiences (Merriam, 2009). According to

Creswell (2009), qualitative researchers tend to collect data where participants experience the issue under study. Through a phenomenological framework/case study design, the lived experience of teachers regarding their experiences, perceptions, and practices with self-regulation strategies within a general education setting will provide rich data to enhance self-regulation supports within classroom settings. Gathering information by directly speaking with participants and observing them in their usual settings as they behave and act naturally is a major characteristic of qualitative research (Creswell, 2009).

Assumptions

Assumptions for this study include that the qualitative/case study framework best fits the purpose of this study. For example, past research on this topic has focused on quantitative measures and have not sought out to observe classrooms or interview teachers about their perception or implementation of specific self-regulation strategies. In addition, another assumption would be that teachers as volunteer participants were honest in their responses. An additional assumption would be that the volunteer participants would feel more comfortable participating in this study in their natural classroom setting environment. A final assumption would be that visuals of self-regulation strategies would be readily available throughout classroom environments.

The researcher sought to gain more information regarding teachers' understanding of the above-mentioned self-regulation strategies within a general education classroom setting as well as obtain information regarding current practices of the practices and feasibility for implementation within a general education classroom setting.

Study Rationale

Research is frequently conducted in lab or special education settings; however, this qualitative study involved interviewing early childhood, elementary, and middle school general education and special education teachers to gain an understanding of their perceptions of self-regulation strategies within general education classroom environments. This study specifically inquired about teachers' knowledge and practices of some of the following self-regulation strategies for academics and behaviors: planning, goal setting, self-instruction (ex., breathing, self-talk), self-monitoring, and evaluation (Menzies & Lane, 2011; Rafferty, 2010).

The study included teacher interviews, observations of classroom environments to examine self-regulation strategies implemented within general education classroom routines. The study also examined documents or visual artifacts that may support self-regulation strategies within the classroom environment. Information gathered from the study could help school psychologists consult with teachers in developing interventions that could be feasibly implemented within classroom settings and supported in the MTSS framework. Gaining this new perspective is especially important as general education teachers are now serving students with special education needs along with students receiving supports through the MTSS framework. Teacher discussions of self-regulation strategies could offer an outlet to voice perceptions, practices, and challenges self-regulation strategies implementation. The next chapter will discuss in more detail the existing literature.

CHAPTER TWO
REVIEW OF THE LITERATURE

Definition of Self-Regulation

Self-Regulation

Self-regulation can be defined to include various components (i.e., adaptive self-management of behaviors and adaptive management of emotional arousal and life stressors). For this study, self-regulation can simply be represented in three phases: planning, performance, and self-evaluation (Ness & Middleton, 2007). These phases are universal for both academic and behavior practices. For example, a student trying to manage a behavior may need to plan or think of a tool to help them engage in an appropriate approach. The student will then implement the tool to engage in the appropriate manner. After the situation is over, the student will then need to self-reflect or evaluate the episode and their response to the challenge. For example, changing an academic or behavior task to increase (or decrease) the difficulty level or changing the academic setting from a noisy to a quiet place to study is expected to affect self-regulated learning (Zimmerman, 1989). Also, a student trying to manage homework completion may need to plan or create a list of homework tasks. The student will then need to implement their plan and then evaluate their efforts.

Self-Regulation Strategies Overview

Theories

In an overview of self-regulation strategies, the following theorists will be reviewed; James, Piaget, Vygotsky (as cited in Fox & Riconscente, 2008), and Zimmerman (1989). Fox and Riconscente (2008) explored metacognition and self-regulation in relation to the theories of James, Piaget, and Vygotsky. The authors discussed the complexities of defining self-regulation, as there is not one well-defined universal definition. James' view of self-regulation was identified as activities of the self, Piaget's view of self-regulation as knowledge of others and objects, and Vygotsky's view of self-regulation as verbal or language activities (as cited in Fox & Riconscente, 2008).

James' investigations (as cited in Fox & Riconscente, 2008) of himself determined explorations of the consciousness, attention, the self, and will. James' views (as cited in Fox & Riconscente, 2008) further described self-regulation as an activity of the self-controlling attention and behaviors. He described a chain of logic connecting thoughts and actions, so that when a firm idea comes to mind, that fires an action or habit and it keeps occurring until a whole sequence or activity has been completed. Therefore, behaviors are either automated similar to habits or they require effort in terms of will (Fox & Riconscente, 2008).

James' theory (as cited in Fox & Riconscente, 2008) relates to self-regulation in the schools because teachers are trying to teach students to recognize or identify a problem and think about an appropriate strategy to implement, and then evaluate the practice. Self-regulation takes the role of intention, and then the deliberate direction of thoughts and problem-solving actions (Fox & Riconscente, 2008). Self-regulation involves a student being able to organize and

systemize thoughts and problem-solve or choose between multiple behaviors (Fox & Riconscente, 2008).

Teachers could help in the development of behaviors so student solutions to problems may become automated as James described in his theory. Teaching of self-regulation strategies could produce behavioral and academic benefits. However significant change is unlikely to occur within a few weeks or months of intervention efforts; large amounts of commitment and effort are necessary to witness significant improvements (Pelco & Reed-Victor, 2007). When embarking on the mission of teaching self-regulation, teachers must be aware that focused efforts to promote self-regulation in students may take a longer term view as it takes time for self-regulation to emerge as there is a process from converting a thought into an appropriate behavior or habit (Fox & Riconscente, 2008). Therefore, self-regulation could be produced once children are capable of directing their own thoughts and actions and regulating their own desires and emotions (Fox & Riconscente, 2008). The intentional teaching of such strategies could evolve toward student implementation of practices with minimal effort.

Piaget's theory (as cited in Fox & Riconscente, 2008) described self-regulation as deliberate control of one's thoughts and actions including knowledge of others and objects. Piaget's theory incorporated perspective-taking and progressing through the developmental stages so that one developed awareness of interaction with and attempts to control objects and others in the environment, which is similarly related to self-regulation (as cited in Fox & Riconscente, 2008).

Similar to James' theory, Piaget's theory (as cited in Fox & Riconscente, 2008) connects with being in the schools because it promotes problem solving skills and independence. For example, once students are specifically taught self-regulation strategies, the next goal would be

to identify thoughts/feelings/behaviors and then choose a strategy that would best impact not only the student, but those in the environment as well; which may include other peers or teachers in the classroom.

Vygotsky's theory emphasized the importance of communication or language as a critical component in a child's knowledge of his own thoughts and processes (Piaget, 1964/1968, as cited in Fox & Riconscente, 2008). Vygotsky explained that overall attention including voluntary attention, the development of control of one's own behavior all require external and internal language indicating that self-regulation (deliberate control of one's own attention, thoughts, and actions involved internalizing of language-based social interactions (as cited in Fox & Riconscente, 2008).

Vygotsky's theory relates to self-regulation in the classroom along with James' and Piaget's theories because they all indicate that a student needs thoughts, skills or language to organize, problem-solve, and determine next steps of implementation. The theorists also emphasize the importance of teaching strategies or skills, and teachers could serve as mentors to scaffold a certain learning goal from "actual level of knowledge" to a student's "proximal level" Cooper (2007). Schools could be ideal places to support development of self-regulation as well as the implementation of self-directed language (Fox & Riconscente, 2008).

In addition to the above-mentioned theories, Zimmerman (1989) described students' use of self-regulated learning strategies depended not only on their knowledge of strategies, but also on metacognitive decision-making processes and performance outcomes. Similar to the theorists previously discussed, Zimmerman implied the importance of the teacher's role not only expanding the student's knowledge about self-regulation strategies, but also their role in guiding the student through the intervention. Therefore, students need to be specifically taught self-

regulation strategies and with repetition and guidance from teachers, the self-regulation behaviors could develop so that the students engage in automated positive behaviors to solve problems.

Although the theorists reviewed have various discussions in relation to self-regulation, all theories need to be re-examined when thinking about how expectations for classroom behaviors are related to the implementation of self-regulation strategies. Self-regulation strategies are techniques for making strategic planning that most engage in without a lot of effort (Menzies & Lane, 2011). For example, James (as cited in Fox & Riconscente, 2008) and Zimmerman (1989) similarly discussed that a student needs to be specifically taught a strategy instead of expecting the student to already have the behavior strategy as part of the student's habitual behaviors. As Zimmerman noted, it is essential for teachers to move in the direction of intentionally teaching the self-regulation skills so that they can at some point become automatic, as James (as cited in Fox & Riconscente, 2008) described instead of requiring a large amount effort. Therefore, a teacher's role is very important in specifically teaching self-regulation strategies, repetition are essential and the student needs a significant amount of support until the self-regulation strategy becomes as James referred, habitual (as cited in Fox and Riconscente, 2008).

Piaget's theory (as cited in Fox & Riconscente, 2008) discussed the importance of a student's self-awareness as well as having a purpose to engage in self-regulation behaviors. Therefore, a teacher's role may include helping a student identify the academic or behavioral problem. Once the student is aware of the problem, then the teacher can help the student develop a plan and a goal to help purposely improve the behavior of concern. Piaget and Vygotsky (as cited in Fox & Riconscente, 2008) both described the teacher's role as essential in providing students with language to identify thoughts and behaviors so the students may become more self-

aware. In addition, the teacher's role also includes being a support to scaffold a student until the student can independently connect self-regulation strategies.

Bandura's (1991) concept of self-efficacy, which underlies both the potential for self-control and the idea that it can be taught and enhanced, further emphasizing the concept that these are skills that can be defined and instructed within a curriculum.

Self-Regulation Needs in the Classroom

Teachers are facing an increasingly diverse population of students with a large range of needs in addition to large class sizes of 20-30 plus students (Rafferty, 2010). With the practice of inclusion, general education classroom instruction is composed of general education students along with students receiving special education services. With more students in the classroom with varying needs, teachers are more likely to encounter students with self-regulation needs.

A student's ability to self-regulate could impact the way the student is viewed by teachers (Portilla, Ballard, Adler, Boyce & Obradovic, 2014). Therefore, learning and implementation of self-regulation strategies are essential for students who may be struggling with academics or managing behaviors. Menzies and Lane (2011) looked at self-regulation strategies as a secondary support to meet the academic, behavioral, and social needs of students identified at risk for behavioral issues. Their research found some students avoided schoolwork and engaged in disruptive behavior because the student possibly did not know how to complete the work, therefore requiring an academic intervention. Another reason for student schoolwork avoidance/disruptive behaviors could be because the student engaged in behaviors that disrupted task completion, even though they understood how to complete the task. In the second scenario, the student behavior resulted in requiring a behavioral intervention (Menzies & Lane, 2011). A third scenario described indicated some students could exhibit a combination of the two

problems; not having the skill to complete work nor the skill to manage behaviors, requiring a combination of academic and behavioral intervention (Menzies & Lane, 2011). Throughout any classroom there could be potential of a teacher struggling with a student that may need supports completing class work, managing behaviors, or a combination of both.

Emotional/Behavioral Self-Regulation

Emotional/behavioral self-regulation is positively related to academic achievement in the classroom (Fried, 2011). Self-regulation interventions can be used to help students manage a variety of social and academic behaviors (Rafferty, 2010). Previous studies have demonstrated that explicitly teaching self-regulation strategies have resulted in improved academics in the areas of writing, reading and mathematics (Menzies & Lane, 2011). Students provided with tools such as checklists or graphing tasks to help with planning/performance and self-evaluation, increased preparedness. In addition, students increased having materials ready and engaged in appropriate classroom behaviors such as sitting at desk and looking at teacher. Productivity and accuracy on academic assignments improved along with increased quiz scores, and improved problem solving (Ness & Middleton, 2007). Student independence and less reliance on teacher prompts can overall be viewed as benefits for teaching students' self-regulation strategies (Rafferty, 2010).

Additionally, research has revealed students with higher levels of inattention and impulsivity at the end of one grade (for example Kindergarten) experienced more conflict with their teachers in the following grade (First grade), indicating the importance of early intervention (Portilla et al., 2014). Early intervention and teachings of self-regulation strategies are extremely important to promote student independence and regulation of academics and behaviors. The implications from the Portilla et al. study indicated a need for self-regulation strategies in

preschool and early elementary as the lack of attention and additional impulsive behaviors decreased the quality of early elementary student-teacher relationships. The lack of attention and increased impulsive behaviors also decreased student engagement in school activities and impacted academic performance. Overall, self-regulation strategies could help with self-monitoring, self-scheduling, self-instruction, problem solving instruction, decision-making, self-advocacy, assertiveness, and communication (Lee, Palmer, & Wehmeyer, 2009).

Strategies

To qualify specifically as self-regulated, students' learning must involve the use of specified strategies to achieve academic (or behavioral) goals (Zimmerman, 1989). As previously discussed, the self-regulation strategies to be analyzed for this study will include planning, goal setting (target), self-instruction (i.e., self-talk, breathing, counting), self-monitoring (i.e., self-observation or self-recording), and evaluation (i.e., assess intervention or behaviors) (Menzies & Lane, 2011; Rafferty, 2010). The selected self-regulation strategies originate from the five cognitive processes (setting standards, self-monitoring, evaluative judgment, self-appraisal, and affective self-reaction) identified by Bandura (1991). The following self-regulation strategies will be described below; planning, goal setting, self-instruction, self-monitoring, self-monitoring of attention, self-monitoring of performance, and evaluation.

Planning

The planning phase involves setting goals and assessing motivation prior to starting a task (Ness & Middleton, 2007). Baseline data collection is important as it can identify the type of behaviors that are challenging as well as determine the frequency of occurrence or the reason for occurrence (Rafferty, 2010). For example, a student having difficulty with homework completion

could use the number of missing assignments prior to the intervention as baseline data. Counting the number of occurrences of a student calling out in class or off-task behaviors are examples of possible baseline data collection needed to establish the frequency of disruptive behaviors prior to the identification and implementation of an intervention. Once a target behavior has been identified, then intervention strategies should be explored that best fit the target behavior.

Teachers could also teach students executive functioning support strategies (Dawson & Guare, 2009). Planning strategies that help with organizational skills such as modeling note-taking and organizing assignment notebooks, planners, folders, backpacks, etc. The teachers could also model how to organize timelines to complete long-term and short-term projects in timely matters. A study by Asaro-Saddler and Saddler (2010) looked at students with Autism Spectrum Disorder that used self-regulation strategies to enhance writing. According to Harris and Graham (1996, as cited in Asaro-Saddler & Saddler, 2010) the self-regulated strategy development (SRSD) was designed to help with planning, goal setting, and motivation. The study found that students who were taught the (SRSD) improved their writing content. Specifically, instruction in planning and writing helped improve the quality of the writing products, in addition the students were able to re-apply and generalize the learned strategies into future assignments (Asaro-Saddler & Saddler, 2010). Although the Asaro-Saddler and Saddler study looked at students with special needs, the self-regulation strategies implemented could also benefit students in general education classroom settings.

According to Harris and Graham (1993, as cited in Asaro-Saddler & Saddler, 2010) teachers could teach or help students understand background for implementing strategies, discuss the strategy, model the strategy, help students memorize the strategies, and support the practice of the strategy until it could be accomplished independently by the student. Teaching and

modeling such behaviors could also help students enhance their self-efficacy skills. Teachers could also teach student self-talk strategies to help student's verbally plan on what to do when confronted with an academic or behavioral predicament.

Goal Setting

Goal setting is another self-regulation strategy that could be used to improve student academic and behavioral performance. Menzies and Lane (2011) described three steps to implementing a goal. The first step is to decide on a goal and to make it realistic within a student's ability level, meaning not too easy and not too difficult; the second step is determining a schedule including the steps needed to complete the goal, and also determine a due date; and the third step is to monitor progress.

When teachers introduce goal setting to students as an explicit strategy and coach them through the process, they are equipping them with a skill that is necessary to school success (Menzies & Lane, 2011). It is essential for teachers to be initially more actively involved in setting goals (Lee et al., 2009). Students will need teacher support and specific instruction on how to create a realistic goal that could be accomplished (Menzies & Lane, 2011). For example, a SMART goal would have to be specific, measurable, attainable, realistic, and timely (Doran, 1981). Working with students in a large or small group setting to help with goal setting could be beneficial for several reasons. Students could work together to help create goals and review checklists to make sure goals created meet the criteria for a high-quality goal.

A study by Palmer and Wehymeyer (2003) created a self-determined learning model of instruction to teach students in Grades K-3 to set a goal, evaluate their progress and adjust their actions based on self-evaluation. The study indicated students as young as five years old could use goal setting to learn tasks as simple as writing their name or counting to 20 (Menzies &

Lane, 2011; Palmer & Wehymeyer, 2003). Although much emphasis has been placed on implementing self-regulation strategies at the middle school level, more research is needed to explore the potential opportunities from earlier implementation.

Goals of appropriate focus and difficulty encourage people to put forth more effort, persist at a task, develop strategies, and attend to the behaviors that are necessary to attain the goal. Bandura (1991) explained social cognitive theory of self-regulation encompassed another major mechanism of self-directedness that exerts strong impact on human thought, affect, motivation, and action. For example, a goal achieved in a short period of time could be more developmentally appropriate than a long-term goal that could take several weeks to achieve (Menziez & Lane, 2011).

Self-Instruction

Another self-regulation strategy is self-instruction, or self-talk, which involves the use of language to self-regulate behavior (Menziez & Lane, 2011). Self-instruction could include planning, thinking about actions needed to complete a task (problem solving), increased attention, completing task, and evaluating/reflecting on a task (Menziez & Lane, 2011). Similar to Vygotsky's theory, self-instruction includes internally verbalizing how to define and approach a problem.

Menziez and Lane (2011) described a five-step model was developed to implement the self-instruction strategy. This five-step model included (1) explaining the strategy and purpose or rationale for its use, (this includes direct teacher instruction and could help with student buy-in); (2) helping students create a toolbox of appropriate self-statements such as "Take it step by step- look at one question at a time," and "Don't worry. Remember to use your plan."; (3) modeling how and when to use self-statements (could be direct teacher instruction modeled throughout the

school day; (4) practicing using self-statements; and (5) encouraging students to use the self-statement strategy (Menzies & Lane, 2011, p.185).

By internally verbalizing how to approach a problem or think about a task, a student could automatically reflect on his or her actions and thoughts. It is a technique that explicitly teaches a student how to acquire and use the skills that improve one's ability to plan, complete, and evaluate a task (Menzies & Lane, 2011). This skill of self-talk encourages a student to actively calm oneself down, clear their mind (for example, taking deep breathes or counting down from 10), and begin the process of problem solving.

Prior research has indicated the self-talk strategy to be effective in promoting positive talk and decreasing negative thoughts. In addition, although not explicitly taught, self-talk also demonstrated academic gains when students additionally increased the number of problems correctly solved (Menzies & Lane, 2011; Kaman & Wong, 2003). For example, a study by Kaman and Wong researched the self-talk strategy to teach students with learning disabilities how to cope with math anxiety. Self-instruction could also result in self-encouragement or validation as a student mentally rehearsed steps on how to complete a task (Menzies & Lane, 2011). Students in the Kaman and Wong (2003) study were provided cue cards to prompt them with different stages relating to coping. For example, students were cued on the card to assess the situation including labeling and planning, recognizing and controlling negative thoughts and replacing them, and reinforcing self for doing a good job (Menzies & Lane, 2011; Kaman & Wong, 2003). In addition, students were provided with cue cards that included self-statements (similar to those described above) to help guide them through each stage.

Self-instruction strategies combine several components previously discussed by the theorists mentioned above. For example, this strategy emphasizes the importance of specifically

teaching the strategy to students as well as highlights the importance of language in providing support and motivation to encourage implementation. Additionally, the self-instruction strategy also includes elements from the planning strategy.

Self-Monitoring

The ability to monitor one's performance while actively engaged in a task is also a critical self-regulation skill. Many students have the ability to evaluate work efforts as they execute a task and subsequently make adjustments so it can be completed with a reasonable degree of accuracy or proficiency (Menzies & Lane, 2011). Self-monitoring could be implemented for either task completion or for monitoring attention (Menzies & Lane, 2011; Rafferty & Raimondi, 2009).

Self-monitoring involves two tasks: observing one's own behavior and recording the behavior (Menzies & Lane, 2011). Self-monitoring or self-observation serves at least two important functions in the process of self-regulation: (1) Provides information needed for realistic goals, and (2) Provides information for evaluating one's progress toward the goal (Bandura, 1991).

Self-monitoring techniques may include self-recording such as writing down the processes and outcomes of one's actions (Cleary & Zimmerman, 2004). Graphing has been shown to be an effective method for self-monitoring and improving school related outcomes and behaviors (Rafferty, 2010). Graphing implements several self-regulation strategies; for example, it could promote student belief that they have power or control over their learning or performance in school (Cleary & Zimmerman, 2004). Graphing could also encourage students to identify information or data to support their area of difficulty or to recognize gains of a strategy (or evaluation-to be discussed more below). Additionally, as self-monitoring sheets are designed,

teachers need to make sure students know exactly what is expected and teachers additionally need to encourage students to use the self-monitoring sheets daily (Lee & Wehmeyer, 2009).

Hoff and Ervin (2013) reviewed a study by Miller, Strain, Boyd, Jarzynka and McFetridge (1993) in which preschool students self-assessed their disruptive behaviors by using thumbs up or thumbs down gestures. Participants of the study earned rewards when their ratings matched their teacher's ratings and resulted in an improvement of on-task behaviors and less disruptive behaviors.

Students who have not shown that they monitor their own work and actions can be explicitly taught the skills (Menzies & Lane, 2011). Self-monitoring or self-observation as a component of self-regulation, when successfully taught could help students' metacognitively plan, self-monitor their progress, and additionally result in the student feeling intrinsically rewarded (Zimmerman, 1989; Cleary & Zimmerman, 2004). When students learn the process of identifying an observable behavior and become trained to analyze experiences, their knowledge becomes helpful in guiding interventions (Zimmerman, 1989).

Self-monitoring could be used as a strategy to help improve a student's attention and performance. James' exploration with control of attention is related to self-awareness and self-knowledge, as they are necessary to support behaviors (as cited in Fox & Riconscente, 2008). These are also strategies a teacher may want students to learn to promote self-regulation. For example, self-monitoring of attention could focus a student's awareness on a task that he or she should be engaged in during class time. In addition; self-monitoring helps eliminate off-task behavior by reminding students that they should be on task (Menzies & Lane, 2011).

A recording sheet could be provided as a strategy to remind a student to stay on task (Menzies & Lane, 2011). For example, Ness and Middleton (2007) completed a study in which a

student receiving services learned a strategy that helped him be prepared for class with materials and focused attention as well as staying on task. The student received a checklist, which he completed prior to the class and then completed again after the class with a staff member. Results from the study indicated an increased percentage of the student being prepared and on task indicating the self-regulation strategy helped increase his class performance (Ness & Middleton, 2007).

A study reviewed by Menzies and Lane (2011) looked at a study by DeHass-Warner (1992) in which four preschool students were taught to self-monitor by asking themselves, “Was I doing my work?,” every time they heard a reminder from a recorder. The students then used a self-recording sheet on a desk to document whether or not they were on or off-task. Students were reinforced with stickers and eventually recording sheets and recording reminders were faded (Menzies & Lane, 2011; DeHass-Warner, 1992). The study indicated that by the end of the intervention, students increased their time on a task and also could work independently.

The ability to monitor one’s performance while actively engaged in a task is also a critical self-regulation skill. Many students have the ability to evaluate work efforts as they execute a task and subsequently make adjustments so it can be completed with a reasonable degree of accuracy or proficiency (Menzies & Lane, 2011). However, success in self-regulation partly depends on the fidelity, consistency, and temporal proximity of self-monitoring (Bandura, 1991).

Evaluation

After effective self-regulated strategies have been taught, then ideally a self-regulated student could evaluate their performance (for example, previous test scores), analyze performance and determine weaknesses (for example, poor plans or attention), and then make

adjustments based off the information (for example, create an outline before starting work or studying for a longer period of time) (Cleary & Zimmerman, 2004).

A study reviewed by Menzies and Lane (2011) looked at a study conducted by Rafferty and Raimondi (2009) in which students self-monitored their mathematics performance. Students were taught to use an answer key to check their performance on math problems and graph the number they had correct, therefore they had a visual of their progress. The intervention reportedly increased the percentage of time on task (Menzies & Lane, 2011; Rafferty & Raimondi, 2009). Similarly, students could gather the information from the self-observations and apply it toward evaluating the effectiveness of the strategic plan and to improve future learning attempts (Cleary & Zimmerman, 2004). The self-evaluation phase involves student analysis about what was learned and whether the learning approach or strategy implemented was effective (Ness & Middleton, 2007).

Ideally, the goal would be to have the intervention faded out once the student demonstrated that the targeting behaviors have become a part of their daily routine or habit; however, it is important to slowly wean the student off the intervention (Rafferty, 2010). If the student demonstrated a decline in behaviors once the intervention was taken away, then the intervention would need to be re-enforced (Rafferty, 2010).

Overall, self-regulation skills are extremely important in achieving school success. When approaching a self-regulation intervention, it is important to identify a target behavior (focus on one behavior at a time) and define the target behavior, which may include describing what the desired behavior looks like and trying to stay positive in the process (Rafferty, 2010). Self-regulation involves a student's ability to think about a task or action beforehand, monitor task or action during implementation, and then reflecting to make future actions (Menzies & Lane,

2011; Zimmerman, 2000). Components of self-regulation need to be integrated in models of classroom learning (Pintrich & DeGroot, 1990) because self-regulation is a predictor of positive academic performance. Additionally, as reviewed in the studies above, most of the self-regulation strategies require a verbal and/or visual tool to help guide the learning of strategies. For example, a plan may need to be written in an outline or verbally itemized, creation of goals may need a visual to help create a SMART goal, toolboxes or cue cards with visual reminders for breathing techniques, or counting to 10 could be displayed in classrooms, graphs or a checklist may also be created to help students monitor progress. This study sought out tools or materials utilized to address self-regulation strategies within general education classroom settings.

Student Engagement

Student motivation and engagement are key components when facilitating and implementing self-regulation strategies. For example, several studies have described the importance of three elements: students' self-regulated learning strategies, self-efficacy perceptions of performance skill, and commitment to academic (or behavioral) goals (Zimmerman, 1989). A key component to implementation of self-regulation strategies is capturing student engagement when teaching skills within the classroom environment. Past studies have described students exhibiting dysregulated and disruptive behaviors in the classroom to be less engaged and exhibit negative academic and social outcomes (Raver et al., 2011). Overall, self-regulation skills have been found to relate to better adjustment and less maladjustment in childhood and adolescence (Eisenberg & Sulik, 2012). Once a behavior has been identified, then important next steps include a student being a part of the discussion of the target behavior and reason for the intervention, along with teaching the student how to implement the intervention. Appropriate goals could encourage students to develop strategies,

put forth more effort, and persist at a task, as well as increase attention to reach the goals (Menzies & Lane, 2011).

Self-regulated learning (SRL) is viewed as proactive processes that students use to acquire academic skill, such as setting goals, selecting and deploying strategies, and self-monitoring one's effectiveness, rather than as a reactive event (Zimmerman, 2008). The SRL process emphasizes the necessity of student engagement throughout the self-regulation process.

A study by Pintrich and DeGroot (1990) looked at how motivational and self-regulated learning strategies were related to student performance on classroom academic tasks. Students were asked to complete motivational, cognitive strategy, and self-regulation scales and in addition, data were also collected through student assignments. The Pintrich and DeGroot study found motivational components and self-efficacy were positively linked to student cognitive engagement and academic performance in the classroom.

Highly self-regulated learners approach learning tasks in a mindful, confident manner, proactively set goals, and develop a plan to attain those goals (Cleary & Zimmerman, 2004). For example, students who believed they were capable were more likely to report use of cognitive strategies and to persist more often at difficult or uninteresting academic tasks (Pintrich & DeGroot, 1990). According to Bandura (1991), satisfaction in personal accomplishment becomes the reward and even simple feedback of progress can enhance performance motivation once self-satisfaction becomes invested in the activity. Self-reinforcement is helpful for students to keep track with current and future self-regulation tasks; some students may even prefer a tangible reward (Lee & Wehmeyer, 2009).

Eisenberg and Sulik (2012) described another way to increase student engagement is to encourage students to work with peers in practicing self-regulation strategies and providing

opportunities to transfer abstract ideas into concrete for adolescents could help as potential interventions that develop self-regulation (Fox & Riconscente, 2008).

Incorporation of play into education for younger children could be another avenue to explore when developing self-regulation in younger children (Fox & Riconscente, 2008). For example, in a lab study, Tominey and McClelland (2011) conducted a study in which preschool students received a circle time games intervention to strengthen behavioral self-regulation as well as looked at how it impacted academic success. Students actively participated in an intervention that implemented six different games to promote self-regulation. Students received the intervention twice a week for eight weeks. The games emphasized attention and working memory in which students were asked to follow through with changing multi-step directions (Tominey & McClelland, 2011). The study found significant gains in behavioral self-regulation for students in the treatment group. In addition, practicing of attention, working memory, and inhibitory control skills helped students be ready for literacy instruction resulting in higher academic gains in that concept (Tominey & McClelland, 2011).

Teacher Role in Teaching of Self-Regulation Strategies

Along with student engagement, the teacher's role in implementation and teaching of self-regulation strategies is essential for the way teachers should interact with students (Zimmerman, 1990). Positive teacher-student relationships are important (Portilla et al., 2014). Further research emphasizing the significance of emotions and emotion regulation in the classroom could assist teacher's own emotional development and also their ability to facilitate healthy emotion development of their students (Fried, 2011).

Teacher modeling on self-regulation strategies is extremely important. James stressed the importance of teaching helpful strategies so they could become habitual as early as possible (Fox

& Riconscente, 2008). The impact of modeling on self-regulation is given particular emphasis. For example, teachers could promote well-developed adaptive habits to their students so they could become voluntary or habitual practices of students despite distractions supporting control of attention (Fox & Riconscente, 2008). Therefore, teachers must teach students strategies or appropriate habits, as James described, before the student is expected to implement self-regulation strategies or appropriate habits. For example, via direct teacher instruction and modeling of the intervention, the students would have to be explicitly taught (repeated as many times as necessary) how to for example self-talk, or self-monitoring strategies such as how to monitor and record behaviors, how to graph (Rafferty, 2010). Teachers could also instruct students how to properly goal set and coach them along the process (Menziez & Lane, 2011).

According to Zimmerman (2008), one German study found teachers could be trained on how to teach self-regulation learning during a five-week math assignment intervention. These results implied that similar interventions might be effective in other areas of students' academic functioning such as note-taking, test preparation, reading for comprehension, and writing (Zimmerman, 2008). The type of feedback students received from teachers would also influence their ability to reflect on performance outcomes. For example, students might need help analyzing why they were not succeeding and further discuss strategies needed to improve performance (Cleary & Zimmerman, 2004).

There are very limited studies examining teachers' understanding or use of self-regulation strategies for academics or behaviors. More research is needed to explore the teacher's role in teaching these self-regulating strategies to encourage academic and behavioral performance in the classroom through multi-tiered systems of support.

Self-regulation strategies could be explicitly taught at all tiered systems of support and overall guide classroom management strategies. Teachers trained on strategies to help implement clearer rules and routines, rewarding positive behavior, and redirecting negative behavior, resulted in classrooms with more effective regulatory support and better management after one year of intervention (Raver et al., 2011). In addition, teachers did not receive professional development for academic instruction, therefore implying the academic gains were solely attributed to the social-emotional intervention (Raver et al., 2011). Finally, further research on emotions and emotion regulation in the classroom could help to address the importance of emotions and not only assist teacher's own emotional development but also their ability to facilitate healthy emotion development of their students (Fried, 2011).

Overall, modeling effective classroom management techniques are important in facilitating self-regulated learning because they could foster a positive learning environment, which promotes self-regulation. In addition, students have made more cognitive self-regulation gains in classrooms where teachers engaged in positive behaviors such as expressing approval or encouraging desirable behaviors (Fuhs, Farran & Nesbitt, 2013).

Multi-Tiered Systems of Supports Models

Self-regulation strategies could be helpful in helping students individually, however implementation of self-regulation strategies at the Tier 1, class-wide level could be more practical and less time-consuming for teachers (Hoff & Ervin, 2013). It is important to note that when self-regulation strategies are implemented at the class-wide level, reinforcement strategies should be focused on the group, instead of individual students (Hoff & Ervin, 2013).

A study by Hoff and Ervin (2013) implemented a class-wide self-regulation intervention in three general education classrooms, while simultaneously keeping track of the behaviors of the

most disruptive student in each class. During a selected period of the day, teachers and students tracked behaviors on a five-point scale. Teacher and student ratings were analyzed and additional points were received if ratings were unanimous or if there was a minimal discrepancy (Hoff & Ervin, 2013). After a certain number of points had been earned, students earned a class reward (Hoff & Ervin, 2013). The findings from the study determined that the evidence-based class-wide intervention was an effective strategy to reduce disruptive behaviors class-wide, including those behaviors of the most disruptive student in the class (Hoff & Ervin, 2013). This study is important because although teachers found the data collection and paperwork to be time consuming, it demonstrated that implementation of a class-wide self-regulation intervention could be feasible (Hoff & Ervin, 2013).

Much of MTSS assessment is progress monitoring; teachers use data to determine whether they need to change their instructional procedures or interventions (Fuchs & Fuchs, 2006). At each problem solving level, the process is the same; a problem is identified, causes for the problem are identified, a goal-directed intervention is placed, intervention is implemented, student progress is monitored, data is analyzed to determine the effectiveness of an intervention and whether or not a new plan needs to be put in place (Fuchs & Fuchs, 2006). There are various similarities between the process of self-regulation and the MTSS framework, such as identifying a problem, implementation of an intervention, monitoring the intervention, and evaluating if the intervention is being implemented with fidelity, monitoring if the intervention is working or if something needs to be modified or if a new intervention needs to be tried. Teacher insight regarding their knowledge of the strategies would be beneficial to explore, particularly because teachers may not be aware that they may be engaging in the processes.

Teacher's Perceptions of Self-Regulation Strategies

Three studies have been conducted that have surveyed teachers about their perspectives and implementation of self-determination, which included components of self-regulation such as goal setting, self-instruction, self-monitoring, and evaluation. A quantitative study completed by Stang et al. (2009) explored the perspectives of general and special education teachers regarding promoting self-determination in elementary and middle school students. This study surveyed general and special education teachers in 41 different elementary/middle schools. The study sought to find out the extent to which teachers valued and provided instruction in each of the seven self-determination domains, which included; choice making, decision making, goal setting and attainment, problem solving, self-advocacy and leadership skills, self-awareness and self-knowledge, and self-management and self-regulation skills (Stang et al., 2009). The study found both general and special education teachers reported all self-determination domains to be significantly valued. In addition, teachers reported providing instruction with skills related to self-determination, problem solving, self-management, and self-regulation.

The study indicated grade level was not significant in determining values or practices; however, there was a difference in the reported implementation of strategies between general and special education teachers, with special education teachers reporting a higher level of implementation. However, a limitation of the study was that classrooms were not observed to verify teacher perceptions. Therefore, teachers may have provided more desirable responses in the survey. In addition, the study did not focus on the type of skill implementation reportedly taught in the classrooms (Stang et al., 2009). The study indicated future studies could further explore practices by direct observation in the classroom to determine the specific practices being taught, as well as exploring how prior trainings impact implementation of strategies in the

schools as well as seeking insight from paraprofessionals as well. The study also suggested asking teachers to rank-order the instructional importance in the classrooms (Stang et al., 2009).

Another quantitative study by Cho et al. (2012), surveyed special education teachers to determine their perceptions of the importance of teaching self-determination in classrooms and also whether they taught self-regulation strategies and also the frequency of the teachings. The survey asked if teachers taught or had taught any of the following six self-regulation strategies; self-monitoring, self-evaluation, self-reinforcement, self-instruction, goal setting, and self-scheduling. The survey also asked teachers to identify the importance of the following seven components; choice making, problem solving, goal setting, self-advocacy and leadership, self-management, self-awareness/knowledge, and decision making (Cho et al., 2012). Some of the findings indicated that when teachers perceived a category important, they were more likely to teach the component such as self-reinforcement or self-scheduling. However, similar to the study described above, Cho et al. did not observe teachers in their natural settings, therefore teachers may have again answered questions in a desirable way. A qualitative study could also further inquire the reasons some categories or strategies were perceived more important than others.

Cleary et al. (2010) surveyed urban and suburban school psychologists to determine whether student motivation and self-regulation was important in their professional activities and the frequency of implementing self-regulation assessments and interventions. The study sought to find out more about the school psychologist's practices, knowledge, needs or interests for conducting motivation and self-regulation assessments and interventions (Cleary et al., 2010). Results indicated school psychologists perceived student motivation and self-regulation to be extremely important from both urban and suburban settings, however they were not frequently involved with the development or implementation of motivation and self-regulation interventions

and were not familiar with self-regulation assessments (Cleary et al., 2010). A qualitative exploration on teacher's practices, knowledge, needs or interests regarding self-regulation interventions would be beneficial to initiate dialogue between teachers and school psychologists and to create interventions within a MTSS framework.

Recommendations from Previous Research

Researchers have suggested qualitative methods to further investigate how teacher-child interactions and different types of classroom activities facilitate self-regulation behaviors (Fuhs et al., 2013). In addition, Fuhs et al. suggested observing classroom emotional climate, learning environment, the quality of instruction, student engagement, teacher support (positive/negative), teacher tone, teacher's verbal and nonverbal exchanges with students and sequences of interactions in different classroom activities to get a better picture of various classroom practices. Smart and Igo (2010) suggested a classroom observation component utilizing an observational protocol for data could be triangulated with teacher interview data to get better descriptions of teacher practices.

Cho et al. (2012) reported limitations in their study included that only special education teachers had been surveyed, therefore perceptions between special education and general education students could not be compared. Therefore, a comparison of special educator and general educators' use of self-regulation strategies could also be further explored.

Little research has been conducted seeking teacher's perceptions of self-regulation strategies. The few studies that exist have focused on quantitative data to explore teacher perceptions. Limitations from solely collecting quantitative data may include insufficient knowledge of the instructional materials used in instruction (Cho et al., 2012). In addition, there are lack of classroom observations and they are needed, as current research focuses on teacher

self-reports, which could have had a social desirability bias (Cho et al., 2012) and specific self-regulation intervention approaches may not be examined (Cleary et al., 2010). Also, if teachers are not trained and monitored for implementation fidelity then there is no way of knowing whether supports are effective or not.

Tominey and McClelland (2011) suggested the development of interventions that could be translated to classroom settings and easily implemented by teachers is extremely important to assist in providing students with the self-regulation skills needed so they could be ready to learn. More information is needed on teacher's knowledge and perceptions of these interventions to help develop interventions that could feasibly be implemented within general education classroom settings.

Recommendations from previous research indicate a qualitative study could gain more insight on teacher's perceptions of self-regulation strategies, in addition to observing classroom environments that could also gain further information regarding teacher/child interactions and more data regarding the specifics of interventions being implemented in classrooms. In addition, previous research has suggested that gaining information from both general and special education teachers could be warranted. The next chapter will discuss how the previous research and recommendations will be developed in the methods of this study.

CHAPTER THREE

METHODS

Setting

This study took place in a Midwestern school district with eight schools serving students in grade levels PK-8 with total enrollment of 4,800 students across eight schools. Of the eight schools, letters of cooperation were provided by three buildings; two early childhood/elementary schools and one middle school building. According to district's student and family demographics; 24% of the districts families are students of low income, 17% of students are English Language Learners (ELLs) and 13% of students receive special education services through an IEP. Student racial/ethnic demographics indicated 62% White, 2% Black, 14% Hispanic, 19% Asian/Pacific Islander, .1% Native American and 3% Multi-Racial/Ethnic. Of the participating schools the students and family demographics are as follows; School A-19% low income, 7% ELL, 19% students receiving special education services, 61% White, 2% Black, 16% Hispanic, 17% Asian/Pacific Islander, 0% Native American and 4% Multi-Racial/Ethnic. School B-29% low income, 27% ELL, 14% students receiving special education services, 61% White, 1% Black, 15% Hispanic, 18% Asian/Pacific Islander, 0% Native American and 5% Multi-Racial/Ethnic. School C-15% low income, 13% ELL, 16% students receiving special education services, 78% White, 1% Black, 8% Hispanic, 8% Asian/Pacific Islander, 0% Native American and 5% Multi-Racial/Ethnic.

Recruitment

District recruitment participants of this study were recruited during the Winter/Spring of 2019. A targeted school district from a Midwestern suburb was contacted in the Summer/Fall of 2018, however a response was never received. Because a response was never received after multiple attempts, the researcher then contacted a second school district from a Midwestern suburb in the Fall of 2018 and received approval to collect data in that school district. The participating school district included teachers educating preschool through eighth grade students. A requirement to participate in the study was that the participant had to be a general or special education teacher in the district that granted consent to conduct research. Student teachers and teacher assistants were not eligible for this study. The researcher sought out at least five and no more than seven representative teachers from three grade-level groups for a total of 15-21 teacher participants. The following is considered a grade level; early childhood (PK-2nd grade), elementary school (3rd-5th grade), and middle school (6th-8th grade). To enhance representation across the district, specifically no more than four would be recruited per each grade level group or school. Only one special education teacher per grade-level group per school would be included in the study. Interested teachers were selected on a first come first serve basis. The researcher finished up with the recruitment of nine teachers-one special education teacher, two middle school teachers, one elementary school teacher, and five early childhood teachers.

Following obtainment of IRB approval from the researcher's university, the district administrator received an email from the main researcher introducing herself, and explaining the purpose of the study, asking for permission to collect data from within the district. In addition, the district administrator who was asked to participate received a written letter (see Appendix A) and an informed consent form including the purpose of the study and details regarding data

collection (see Appendix B). The researcher allowed the district up to two weeks before following up to determine if they agreed to allow teachers in the district to participate in the study. Upon receiving three letters of cooperation from the second school district, the researcher filed an amendment with the university IRB explaining the addition of the participating district. Once the researcher received the letters of cooperation from the district, the researcher began recruiting participants within the school district.

Teacher Recruitment

The researcher recruited teachers within the cooperating school district during staff meetings that occurred either before or after-school. Recruitment of teachers occurred in the Winter/Spring of 2019. The principal of each school provided the researcher with time at the beginning or end of the staff meeting to present. The researcher described the purpose of the study as well as described the low level of harm involved during the interview, observation, and potential analysis of documents/visual materials. The researcher shared and reviewed the recruitment letter (see Appendix A) and reviewed procedures as described in the informed consent form (see Appendix B). All attendees had the opportunity to ask the researcher follow-up questions.

Interested teachers were asked to either contact the researcher directly after the meeting via e-mail. The researcher left her contact information with all attendees of the meetings. Researcher contact information was also included in the staff meeting notes. The researcher sent a follow-up e-mail to interested participants and worked on scheduling interviews and possible observations. All attendees received a written description and purpose of the study as well as a description of the participant's potential role in the study (i.e., interview, observation, document/visual material analysis) (see Appendix B). Scheduling was at times complicated and

appointments were sometimes made three to four weeks after initial contact due to scheduling conflicts of the researcher and participant.

Study Participants

Target participants for this study were general or special education teachers from a Midwestern suburb with district and participant consent to participate in research. The target participants for the study were at least five general or special education teachers from three grade-level groups. The following is considered a grade level; early childhood (PK-2nd grade), elementary school (3rd-5th grade), and middle school (6th-8th grade). A minimum of 15 and a maximum of 21 teachers were to be recruited for this study. All participating teachers taught in a general education or special education classroom or provide push-in supports for students receiving special education services within a general education classroom.

Ultimately, nine teachers participated in the study-one special education teacher, two middle school teachers, one elementary school teacher, and five early childhood teachers. However, teachers had experiences teaching across multiple grades, for example some of the middle school teachers had experiences in the elementary schools and some early childhood teachers had experiences in the elementary schools. All teachers met the criteria of providing informed consent to participate in the study and teaching in a general education setting or providing special education services within a general education setting. Student teachers and teacher assistants were not eligible for the study. Data regarding their teacher experiences are presented in Table 1.

In a phenomenological or hermeneutic methodology, researcher provide a very detailed profile for each participant including general background information, observations of the researcher, and raw data (Heppner & Heppner, 2004, p. 316). A total of nine participants

volunteered for the study. The participants of this study consisted of eight general education teachers and one special education teacher within an early childhood, elementary school and middle school setting.

Table 1. List of Participants

Participant Number	Years Teaching	Experience Teaching Grade Level	Gender
Teacher #1	13	General Education: Second Grade	Female
Teacher #2	11	General Education: Third Grade and Kindergarten	Female
Teacher #3	4	General Education: Middle School	Female
Teacher #4	16	General Education: Middle School; Grades; First-Sixth, French Teacher	Female
Teacher #5	20	General Education: Kindergarten	Female
Teacher #6	13	General Education: First-Second Grade, Dual language	Female
Teacher #7	11	General Education: Second-Fifth Grade	Male
Teacher #8	14	General Education: Second, Fourth, Fifth Grade	Female
Teacher #9	12	Special Education: Resource Teacher; Bilingual; Grades Kindergarten-2, Middle School	Male

Research Design/Phenomenological Framework/Case Study Design

According to Creswell (2009), qualitative studies do not always employ any specific theory. Although some qualitative studies, such as those that contain phenomenology may not have a specific theoretical orientation, they do contain opportunities for the researcher to build from the experience of the experience. For example, a theoretical orientation may develop from the information gathered through the data analysis of the study. In addition, understanding lived experiences could mark phenomenology as a philosophy as well as a method (Creswell, 2009).

This study was qualitative in nature, as the researcher sought to learn more about teachers' knowledge and teaching of self-regulation strategies as they relate to behaviors and

academics. Phenomenological research could be described as a strategy of inquiry in which the researcher identifies an experience about a phenomenon as described by participants (Creswell, 2009). Similarly, an instrumental case study, seeks to understand a specific issue, problem, or concern with cases. A collective case study selects multiple cases to describe an issue. Data for this study were collected via a phenomenological and case study framework. Data for this study was collected from multiple sources of information; observations, interviews, and documents/visuals. Specifically, the researcher analyzed data to interpret a central phenomenon. The researcher additionally sought to identify themes or issues to study in each case (Creswell, 2009). This study attempted to obtain insight from several teachers to gain a better understanding of teaching practices that potentially promote self-regulation strategies within general education classroom settings.

Creswell (2009) further explained that the phenomenological framework and case study process could both involve studying a small number of participants over a period of time. For this study, the researcher looked at general education and special education teachers and their teachings in a general education setting as a group. While engaging in this process, Creswell discussed the importance for the researcher to set aside his or her own personal bias in the process and objectively try to understand the participant's perspective.

Qualitative researchers are interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute their experiences (Merriam, 2009). According to Creswell (2009), observing participants in their natural settings, allows the researcher to personally gather information and increase the understanding of the participant's perspective. Through a phenomenological and case study framework, the lived experience of teachers regarding their daily approaches towards behaviors and academics with

students in a general education setting provides rich data on the extent to which their practices are related to self-regulation strategies as well as understand possible reasons for the absence of strategy implementation. Identifying the successful self-regulation approaches as well as understanding where teachers could benefit from more knowledge or support could help promote healthier learning communities for teachers and students within general education classrooms.

Researcher's Role

The primary researcher has three years of teaching experience, as well as six years of experience as a school psychologist. The researcher did not have prior acquaintance to the nine participants of the study.

Creswell (2009) explained that researchers are “key-instruments” in qualitative studies because they collect the data themselves through observations, interviews, and examining documents. In addition, researchers often create their own protocols or questionnaires to implement. The researcher in this study created the protocol with assistance from a faculty sponsor. The main role of the researcher would be to observe and gather information (Merriam, 2009).

According to Creswell (2009), it is important for researchers to recognize that their backgrounds shape their interpretation. Creswell suggested it is essential for the researcher to be self-aware and insightful as to how personal experiences and culture may influence the interpretation of the data. Creswell further explained, the process of qualitative research as largely inductive, with the inquirer generating meaning from the data collected in the field. As a former teacher and current school psychologist, it was necessary for the researcher to recognize personal bias and to stick to the protocol when interviewing participants in order to diminish swaying responses in a particular way geared by the researcher. However, the researcher's

personal experience may also induct a more insightful and meaningful interpretation of participant's experiences. Creswell explained that the researcher's intent is to make sense of (or interpret the meanings others have about the world. In addition, Creswell explained that the role of the researcher is to interpret findings shaped by their own experiences and backgrounds. The researchers gather the information found and interpret it while referencing own personal experiences, culture and background.

Procedures

The researcher sought out to obtain 15 participants to be recruited, however ultimately, nine prospective participants participated in the study. Each participant received an informed consent via email for their participation in the study (see Appendix B). nine participants for the study. The researcher contacted each participant via email and if needed telephone to schedule an interview for the study. If the participant was randomly assigned by draw to also participate in the classroom observation, then the researcher and the participant also scheduled a date and time for the 60-minute classroom observation.

Upon scheduling the interviews, the researcher met each participant in their classroom setting. Interviews were conducted before or after school. The researcher sat down with the teacher and thanked the teacher for volunteering to participate in the study. The researcher reviewed the protocol with the participants and obtained written consent. The researcher audio-recorded all interviews to be transcribed after the interviews had been completed and to be coded after transcribed. The researcher conducted semi-structured interviews that ranged from 12-51 minutes long. Teacher interviews for this study were conducted at the teacher's home school building. Teachers in this study were asked 12 semi-structured interview questions with additional sub-questions (see Appendix C). The semi-structured interview questions were

developed after reviewing past literature and gaps in literature. Additionally, the four research questions informed the development of the interview protocol (see Appendix C). The semi-structured interview questions focused on how teachers viewed behaviors in the general education classrooms and specific questions regarding implementation of strategies. Semi-structured interview questions were developed based on literature and researcher's understanding of literature and how self-regulation strategies are used or developed. Additionally, semi-structured interview questions were developed so teachers could give perspectives (Creswell, 2009). The researcher wrote down field notes during the interviews. After the interview was completed, the researcher thanked the participant for their participation in the study. The primary researcher conducted all interviews.

Classroom observations were the second source of data collection. General education classrooms were randomly assigned to partake in the observation portion of this study. One teacher from each of the consented buildings was observed. Observations were conducted in the teacher's classroom. Participant numbers were put in a hat for each building and one number was selected to be observed. Each randomly assigned participant allowed the researcher to observe in one classroom observation for a total of up to one hour of classroom observations. Classroom observations occurred after the interviews. Participants received reminders of the classroom observations (if participant was randomly assigned) and interview via e-mail a week prior and a day before the meeting. According to Creswell (2009), data in qualitative research is collected where participants experience the issue or problem under study. Classroom observations were conducted in three general education classroom settings that also serviced special education students within a general education setting.

Classrooms consisted of one teacher. Classroom assistants were not staffed in the classrooms, unless a student with special education services was assigned a classroom aide to assist with the student. Special education resource teachers were also assigned to service students needing special education services within the general education classroom. For this study, interviews and observations were conducted in natural classroom setting in the school building of each participant. The researcher used an observation protocol (see Appendix D) for each observation of this study. The protocol had two columns, one designated for descriptive notes (to capture setting, events, and activities) and a second column designated for reflective notes (to capture personal thoughts, ideas, and impressions) (Creswell, 2009). In addition, the researcher specifically looked for self-regulation strategies presented within the classroom setting; self-regulation strategies may be presented verbally or visually. The presence of self-regulation visuals, documents, and language was also observed. The researcher was introduced to the class and the researcher sat in an area in the side of the classroom to not get in the way of the natural classroom routines. The researcher moved from her area if students entered her space. Upon completion of the observation, the researcher thanked the teacher for the observation. The primary researcher conducted all observations. It is important to note that while only three classrooms were observed with students to observe teacher practices of self-regulation strategies; all eight general education classroom environments were observed for the purpose of documenting visuals or classroom artifacts.

Documents/visual artifacts were gathered during observations and/or interviews. The researcher walked around each classroom and took pictures of the visuals and sensory adapted furniture that were within the classroom setting. Additionally, some teachers provided the

researcher with student handouts that were also used as part of the analysis of visual/artifact documentation. Documentations and visual/artifacts were photographed for further analysis.

Documents/visual artifacts were collected either after the interview or before the classroom observation. Each photograph and handout were labeled with teacher participant number and itemized number, for example T1-A1, meaning Teacher 1-Artifact 1, this labeling system continued for all collected artifacts. It is very important to gather up-close information by directly speaking with the participants and observing them in their usual settings as they behave and act naturally (Creswell, 2009). In addition, it is best if interactions occur over time. In this study, the researcher and participant were in contact up to two times (once for the interview session and once for classroom observations, if participant was randomly selected). The primary researcher collected and analyzed all documents/visual artifacts.

Measures/Instrumentation

The researcher specifically looked at the use of self-regulation strategies as variables to analyze between participants and grade-level groups. The self-regulation strategies to be analyzed included; planning, goal setting, self-instruction, self-monitoring, and evaluation (Menzies & Lane, 2011; Rafferty, 2010).

Interviews

Interviews were a form of data collection in this study. In person interviews were conducted one-on-one between the researcher of this study and each research participant. Advantages of interview data collection could include gathering of information for when a participant is not observed; and the researcher can control the questions of potential information sought (Creswell, 2009). Disadvantages of collecting data through interviews could include; a bias of responses due to the presence of the researcher and some interviewees may not be

comfortable expressing perceptions, or they may not all be verbally articulate to express ideas. Creswell explained the goal of the research was to rely as much as possible on the participant's views of the situation being studied. He also further suggested making questions broad, open-ended and general so participants could lead the direction of the information shared and provide unforced personal insight and views. Semi-structured interviews are in the middle, between structured and unstructured (Merriam, 2009). All of the questions are more flexibly worded and there is a combination between specific information desired from all participants and more open range of information (Merriam, 2009).

Observations

The researcher in this study also collected observational data. Advantages of observations may include the following: the researcher may obtain first-hand experience with the participant(s), information would be collected as it occurs, and could provide opportunities to explore topics that could be uncomfortable (or unknown) for participants to discuss (Creswell, 2009). Disadvantages of observations may include the following: the researcher may be seen as intrusive and private information may be observed that the researcher cannot report (Creswell, 2009). Observations offer firsthand accounts of situations under study and when combined with interviews and document analysis, provide a holistic interpretation of the investigated phenomenon (Merriam, 2009).

Documents/Visuals/Artifacts

In addition to the above-mentioned instruments, the researcher also sought out documentations and visuals related to self-regulation strategies as were available. For example, documents or visuals such as postings of self-regulation strategies within the classroom environment were identified and analyzed (see Appendix E). Documents that were sought out

included a written-out plan, which could include some baseline documentation (Rafferty, 2010), for example missing assignments, visual schedules to assist with planning or written-out goals (Menzies & Lane, 2011). Visuals that included prompts for self-talks (Menzies & Lane, 2011), breathing, or counting could also be placed in the classroom environment. Tools such as timers or student checklists/self-monitoring sheets (Lee & Wehmeyer, 2009; Menzies & Lane, 2011) or graphs (Menzies & Lane, 2011; Rafferty, 2010; Rafferty & Raimondi, 2009) could also be considered self-regulation documents that were sought out. Advantages of including such data could include that it may be viewed as an unobtrusive method of data collection (Creswell, 2009). Disadvantages may include that such documents or visuals may not be easy locate (Creswell, 2009). The researcher sought to obtain documents/visuals during interviews and classroom observations.

Field Notes

The researcher jotted down field notes during the interviews. During classroom observations, the researcher sat in the back of the classroom and collected data using qualitative field notes. The field notes are highly descriptive and included enough detail so that the reader would feel that they are there and see what the researcher sees (Merriam, 2009). Field notes include the following: verbal descriptions of the setting, people, or activities, direct quotations of things said, and observer comments (Merriam, 2009). Field notes or the researcher's records are formatted in an unstructured or semi-structured manner (Creswell, 2009). Field notes were also used to support the triangulation of the data.

Data Analysis/Validation Procedures

Data sources to collect from for a qualitative study include interviews, observations, and examination of documents (Creswell, 2009). In this study, each participant engaged in an interview. In addition, a few randomly assigned participants also participated in a 60-minute classroom observation session. Additional documentation were collected for analysis, such as self-monitoring tools (i.e., checklists, graphs) or visuals (i.e., timers, visual schedules).

The researcher transcribed audio recordings of each of the collected interviews. All audio recordings were transcribed verbatim. After all nine recordings were transcribed, the researcher jotted down codes next to certain quotes.

According to Creswell (2009), qualitative research involves collecting data in the participant's setting and gathering the data to create general themes. After general themes have been created, it is up to the researcher to interpret the meaning of the data within addition to comparing the themes with personal experiences or with existing literature on the topic (Creswell, 2009). The data from the study was analyzed after collected. Open coding was used to analyze the data. According to Merriam (2009), open coding, sometimes referred as analytical or axial coding, consists of a coder reading a transcript and jotting down codes. Initially, the list could be very long, however once codes are written, they could be evaluated again and possibly combined or grouped into one code to develop categories or themes. All themes, patterns, and well-developed interpretations will stem from the data analysis.

Development of Codebook

The researcher followed the components of consensual qualitative research methodology in that the researcher used open-ended questions that developed into domains or topic areas and then core ideas or brief summaries (Hill, Thompson, & Williams, 1997). A cross analysis was

also conducted between the nine interviews, three observations, and collection of documents or visual artifacts. The researcher read the first transcript and created the initial stage of the codebook. The researcher read the first four transcripts and created a codebook and themes. The initial codebook had 10 domains or codes with 60 core ideas. The researcher shared the codebook with the dissertation advisor and domains and core ideas were re-labeled and re-organized resulting in 10 domains or codes and 62 core ideas. The researcher met a third time with dissertation chair and the codebook was finalized with four themes and 20 codes that assisted in answering the four research questions. All transcripts were re-coded with the final codebook revision.

In addition, the researcher analyzed field notes and additionally data collected throughout the 60-minute classroom observation sessions as well as analyzed all documentation/visuals collected from the observations and interviews. Field notes and other qualitative data collected were analyzed using the methods described above for interviews and were also applied to the analysis of the observations and documentation/visuals collected. The researcher used the same codebook to code and analyze the interviews, observations, and documentation of visuals/artifacts. Another limitation of the study was that due to capacity, there was only one coder, the researcher did not have a research team to assist with the coding, however triangulation of three data sources and across subjects was completed in the analysis.

Triangulation in this study occurred, as three methods of data collection were conducted. All three data sources were coded using the same codebook and developed into the same themes. Triangulation uses multiple sources of data comparing and cross-checking data collected through observations, interview, and follow-up interviews with the same people collected throughout different times (Merriam, 2009). What someone shares in an interview can be checked against

what is observed on site or what is read about or discussed via the examination of the vignettes (Merriam, 2009). All of the data from the interviews, observations, and document analysis were combined to develop themes, patterns, and generalizations that were interpreted simultaneously to create parts linked to a whole (Creswell, 2009). The purpose of collecting multiple forms of data is because qualitative researchers gather information from multiple sources instead of relying on one single data source (Creswell, 2009). The researcher's job is to review and organize all of the data and create categories and themes across all data sets.

The researcher used the same codebook to analyze all three data sources; interviews, observations, and visuals/artifacts. All data sources were used to create codes, themes and generalizations that were interpreted as a whole in the next chapter. The identified domains and core ideas facilitated in answering the four research questions. Four themes were developed from 20 codes.

Table 2. Codebook

Theme 1: Experiences with self-regulation strategies	Core Idea	Description
	Core Idea: Self-monitor	(i.e., graphing, timer, visual schedule, checklist, recording sheet).
	Core Idea: Planning, Goal Setting, and Self Evaluation	(i.e., reviewing baseline data, identifying target behavior, creating verbal or written agenda checklist, creating long term/short term timeline, note-taking, organizing assignment notebooks, planners, folders, backpacks, teacher models or visuals, review of previous test scores, review of plans, goals, outlines, graphs)
	Core Idea: Self-talk and Breathing	(i.e., scripts, "I can" statements, counting, visuals for breathing)
	Core Idea: Executive functioning	(naming executive functioning)
	Core Idea: Evidence-based Program	(reference to evidence based packaged programs)

Theme 2: Multi-Tiered Systems of Support		
	Core Idea: Inclusion	(naming inclusion or practices with students in special education in a general education setting)
	Core Idea: Class Dynamics	(describing impacts of behaviors on the class as a whole)
Theme 3: Experiences with behaviors		
	Core Idea: Academic	(naming academic components such as math or reading)
	Core Idea: Sensory	(naming sensory, describing need for movement break or adapted furniture or access to fidgets)
	Core Ideas: Verbal and Attention Seeking/Impulsivity	(examples of verbal behaviors, naming attention seeking or impulsive behaviors)
	Core Idea: Internalizing Behaviors	(describing anxiety or behaviors that are not physical such lacking motivation).
	Core Idea: Emotional Regulation	(naming dysregulation or describing melt-downs)
	Core Idea: Physical/Extreme Intense Outlier Behaviors	(describing physical behaviors such as hitting, biting, throwing, kicking, elopement, hurting others, describing and naming student as outlier)
Theme 4: Experiences/Needs with Supports		
	Core Idea: Support of Special Education Teacher	(naming special education teacher)
	Core Idea: Support Services	(naming school psychologist, social worker, occupational therapist, speech/language pathologist)
	Core Idea: Support of Administrator	(naming administration)
	Core Idea: Literature/Technology	(naming books, or technology such as email, google)
	Core Idea: On the job experience	(describing a past experience or saying on the job experience)
	Core Idea: Support of Classroom Assistant	(naming a classroom aide or associate)
	Core Idea: Plan	(discussing plan time)

CHAPTER FOUR

RESULTS

The purpose of this study was to get a better understanding of teachers' experiences with self-regulation strategies across early childhood, elementary, and middle school general education classroom settings. The study sought to gain perspectives from general education teachers. This chapter describes the findings of the data analysis and is organized by triangulation of three pieces of data: teacher interviews, classroom observations, and analysis of artifacts obtained from the general education classroom settings. The data was synthesized into four themes stemming from 20 codes to answer the four research questions.

Findings from Data

The first section of the findings will emphasize answering the first two research questions:

1. What do self-regulation strategies look like for academics or behaviors within a general education setting?
2. To what extent do teachers explicitly teach self-regulation strategies to their students to support academic performance or behavior?

The second section of the findings will emphasize answering the last two research questions:

3. What experience/perception/knowledge do teachers' have of self-regulation strategies for academics or behaviors?

4. What supports do teachers need to implement self-regulation strategies within a general education setting?

Theme 1: Experiences with Self-Regulation Strategies

Participants shared some of their experiences with self-regulation strategies. The strategies they described focused around five core ideas: (1) Core Idea: Self-monitor, (2) Core Idea Planning, Goal Setting, and Self Evaluation, (3) Core Idea: Self-talk and Breathing, (4) Core Idea: Executive functioning, and (5) Core Idea: Program.

Core Idea: Self-Monitor

All nine teachers shared their experiences specifically with the self-regulation strategy of self-monitoring. For this study, self-monitoring looked at self-observing and self-recording behavior or performance (Menzies & Lane, 2011) (ex. graphing, timer, visual schedule, checklist, recording sheet). Non examples: Student is not tracking behaviors. Student is not tracking assignments. Student behaviors are not being documented. Student does not have a timer to monitor progress. Student does not have a visual checklist or schedule to follow during a task. The majority of teachers demonstrated a form of visual schedule and some shared that some students received an individual schedule based on need. Others talked about the use of checklists and shared whether or not they found them to be useful for their classrooms.

Teacher 1 shared her experience with the use of a visual schedule as an individual and class wide strategy:

I think I have always had a visual schedule. That's just what you need...this year I don't have anyone that needs an individual one (schedule), but other years I have...some kids have a file folder or a clipboard or whatever, it just depends on the years or the kids.

Six teachers also expressed the use of technology to help with self-monitoring to support individual students and also class wide. Teacher 1 explained:

Some of them (students) have timers and some of them set timers on their iPad, sometimes I will have a class timer. Whenever I give a direction, I give a time limit, like you have two minutes to do this or if I want everyone to come to the front, I'll say, we'll count back from 10, so everyone kind of chimes in and does it together and I always count back instead of counting up so that you always know when the end is coming.

Additionally, Teacher 1 shared, "Kids check in, 'how are you feeling today?' where they can just type in and email that real quickly because they have one to one iPads here."

A classroom observation was conducted in Teacher 1's classroom. A morning meeting was observed where all the students sat in a circle with their reading logs and their snack. Teacher 1 asked each individual student to share how many minutes they had read over the past week. Each student was called upon and each student shared the number of minutes they had read and the teacher entered the number on her laptop and discussed whether each student had met their goal or not for that week. Teacher charted the weekly reading logs for the students on her laptop. Students also had chart of their weekly reading logs on their handout. Teacher 1 appeared to be very organized and had several systems in place to support students with their self-regulation of academics and behaviors.

All nine teachers expressed the practice of using tools such as charts for self-monitoring, however two teachers expressed disliking self-monitoring tools such as behavior charts due to feasibility or due to personal philosophies. Teacher 2 explained challenges she encountered as a Kindergarten teacher:

I have to think about what I think would be realistic and what will work in my classroom and just my personal philosophy, for example, I don't love behavior charts, that's not really something I would ever go to unless I had to do it. If someone recommends a behavior chart, I am always like eh...let me think about it because it is not really something that I feel really helps most kids, especially Kindergarteners. I have to think about the student and I think you know once you have been teaching for 11 years you kind of have gone through enough things to kind of know what works and what doesn't work.

Similarly, teacher 6 also disliked using charts in the classroom based from personal experiences and philosophies:

I try really hard not to do charts I try to more keep more data for myself, so if I need help...., it seems less structured, but it's actually so much more that I'm giving them then when I used to long ago have a clip chart...you know, it's just garbage for 95% of my class, you know, there's one kid who's like, 'I'm going to do well because of the clip chart'....some kids will, I have used in the past that they've been able to tally when they are following directions or when they hear me give them a compliment...and I can add to that when I notice (snaps fingers) they are doing like they are on task, you get a little tally on your desk, tip, there you go and then they can turn that in for you know an extra recess. I try to do it as small as possible though...some teachers are very into using charts, I think they are just, I just I want kids to be doing as much as possible with a group all together.

Teacher 6 also expressed disliking the use of charts as a tool to communicate with home and she described unintended consequences of using charts:

I have one student...if he had a chart that went home everyday, he would be in huge trouble and it was causing an issue, so we just said, ok, we won't send it home, for the child and the parent because there were consequences at home...I've had kids who did have some kind of chart...and we photo copied it and sent it home, so they (parent) could see, but it's hard to read through that and like what does that mean, that could be tough.

However, Teacher 5 expressed utilizing tools such as charts and timers in her classroom to help with self-regulation, and she also expressed the need to conduct some trial and error in order to successfully implement the strategy:

I used visual schedules, I used timers...and pictures of the student doing the thing, that we want them to do in the correct manner, a lot of charts. Oh my gosh, I have so many kids on charts, I actually have a thing over there...but it all takes time...the other thing too, is you create a visual schedule, and then you know it might be too much and too complicated, so then you kind of have to go back to the drawing board and make it very very simple...I need to be able to adjust and tweak so it works for the student...because, for example like with the visual schedule, if a student isn't even looking at it or isn't putting moving the things or whatever, just seeing it, I feel like because they will probably have a visual schedule for the next couple of years possibly.

Teacher 8 also expressed using some trial and error along with reflection on past experiences to determine the self-monitoring tools to implement:

I think that's a big problem actually, we don't have a specific way to teach it, it's more like I just notice what is going on or I just you know so then you go through your repertoire of strategies and it's like a checklist or you know the different things depending.

Similarly, Teacher 7 expressed utilizing self-monitoring checklists for students along with visuals and some repetition:

These are the things they (students) need and then these are like the more things they need, so they can check out, like X student has not yet, this is still a draft (Showing example of checklist) so now he (student) knows which parts he needs to work on...in second grade I also try to have some visuals of that too, so those are some things from the checklist and then I just like keep mentioning them all the time.

Additionally, Teacher 7 gave examples of how he modified self-monitoring tools for different grades as he had prior experience teaching fourth and fifth grade and now teaches second grade. For example, Teacher 7 described how he could use technology with the students in the older grades and how the students in the younger grades needed more support organizing and keeping track of paper checklists and folders:

They (students) just have to finish it by the end of the week and while they are working on that, that's when I have like small groups and then they can check that off, if they finish it then they have other things they can do too, but that's kind of like the modified version of what I did when I taught fourth and fifth grade. It's simplified, but in fourth and fifth grade, we had a website where they would go to and it was a longer term kind of thing, but for this age level, I think one week is enough...so those are some of the things I use for to help them monitor or keep track. When I taught fourth and fifth grade it was more the kids kept track of them like the folders, they would keep track of, I would not hold onto this checklist they would be responsible for it. I mean those things were not in my hands, but in second grade, they are not quite, I mean look at these things (showing student checklists), you know, some of them are still (chuckles) looking at some organizational issues.

While two teachers expressed disliking the use of checklist and charts, the teachers that described implementing them in the classrooms also alluded to the amount of time and effort that it takes to implement the checklists or charts. For example, teachers described needed to self-reflect on past practices to determine strategies that had worked in the past or had not worked in

the past, the teachers alluded to the need of using trial and error approaches with implementation of the tools. Some teachers also discussed the need to modify the tools based on grade level or student need. The implementation of a checklist or chart also requires time to create the materials whether they are created with technology or creating visual paper products.

Core Idea: Planning, Goal Setting, and Self Evaluation

All nine teachers shared their experiences specifically with the self-regulation strategy of planning or goal setting. For this study, planning looked at assessing challenging behaviors and creating steps or goals to improve those behaviors (Ness & Middleton, 2007) (ex. reviewing baseline data, identifying target behavior, creating verbal or written agenda or checklist, creating long term/short term timeline, note-taking, organizing assignment notebooks, planners, folders, backpacks, teacher models or visuals). Non examples: Student not following daily routine-this could include specifically asking teacher what to do next or getting up from seat or roaming the classroom. Not having daily routine, clear rules or expectations posted in classroom. Student not knowing what activity or expectation comes next. For this study, goal setting looked at targeting a realistic goal, created plan for completion, monitor progress (Menziez & Lane, 2011) (ex. reviewing and discussions to create-attainable, realistic, and timely goals, create agendas and review checklists, teacher models or visuals). Non examples: Not having schedule, daily routine, clear rules or expectations posted in classroom. Not verbally explaining or visually posting clear expectations of assignments or behaviors. For this study, self-evaluation looked at how student assesses intervention or behaviors (ex. review of previous test scores, review of plans, goals, outlines, graphs, checklists) (Cleary & Zimmerman, 2004). Non examples: Student does not have a media to determine progress such as visual or verbal reminder of plan, goal, outline, graphs, checklists. Student is not specifically asked to review progress.

Teacher 3 described how she focused on modeling to her students how to plan backwards:

For the first month, I would model that as kids were doing it, I would have like jotting down in their assignment notebook, and writing down even if was no homework, I would right down no homework so it wasn't left blank...it's a piece of paper that I print off and give to every single kid, and it says, you know, what day is your test, how many days beforehand do you want to start studying, ok, and then you go up those many boxes...what does studying look like? Here are some tools that you can use to study, flashcards, and we have an online study guide, asking your peers to test you, asking your parents to quiz you, whatever, kids come up with them in whole group...they fill in their sheets, backwards planning.

Additionally, Teacher 3 was observed in her classroom with students. Teacher 3 appeared to be very organized and had several systems in place. Each student entered Teacher 3's classroom and it was very evident that there were routines and structures in place. The students knew what was expected of them. The students enter the classroom every day and do the same five things. The teacher had a visual reminder of the five daily things as well as had a projection on the board with reminders to submit assignments. The teacher also provided verbal reminders of classroom expectations. Teacher 3 allowed time for the students to settle in and although noisy, the students moved around with a purpose as they knew the five expectations they had to complete. The teacher then grouped the students into teams and the students collaborated on a class project. The teacher worked with one group of students and a resource teacher pulled out a different group of students. When the students came back from working with the resource teacher, they were assigned to join in new groups. Teacher 3 was very reflective in her interview and appeared to have the desire to learn more and support her students.

All eight of the teachers provided artifacts or visual representations of how they support their students with planning most in the form of a handout to help organize the students academically or behaviorally. Some tools could be used for multiple purposes, such as planning,

goal setting, self-monitoring, and self-evaluation. For example, one weekly one-page handout could be broken down into four sections; student self-check that assignment was completed, behavior self-monitoring tool, teacher and parent evaluation of assignment, and reminder of upcoming assignments.

Another example was a reading log that helped students set a goal, and monitor daily, weekly, and monthly progress. Additionally, the student had to identify whether or not their goal was met and had to sign off on their log as well as parent signed off on the log. This artifact also contained a parent component to help with self-monitoring of a goal or assignment. Self-monitoring component modeled by teacher language including motivational sentence for student to challenge self. Another artifact analyzed also demonstrates multiple components of self-regulation strategies. For example, one handout included an area for self-instruction that included sentence starters, which identified a problem and a solution, which could also lead to self-monitoring and self-evaluation. The second component of this handout included a visual of written and pictorial cues for student to engage in self-instruction or identify different reading strategies to solve the reading problem, therefore this handout could be used to assist a student in self-regulated behaviors and academics.

Core Idea: Self-Talk and Breathing

Seven teachers shared their experiences specifically with the self-regulation strategy of self-talk or breathing. Six of the teacher experiences were presented through artifacts or visual representations in the classroom settings. For example, handouts, books, posters or visuals with scripts, phrases or sentence starters to encourage students to share their thoughts and calm down or regulate their behavior. Teacher 1 shared a handout that was used as a check-in for students to describe “I feel...” on a daily basis. Teacher 2 shared a book with phrases that promoted self-

talk. Teacher 2 also shared self-talk phrases that were targeted for reading, for example, “I can look, I can think, I can learn, I can read.” Teacher 3 had visuals with self-talk examples posted in the classroom, for example, “Say-Focus, Say-Ignore distractions, Say-What do I do next, and Say-Calm down.” Similarly, Teacher 6 and Teacher 7 had posters on their walls with self-talk phrases and also calm down strategies, such as stop, name feeling, and calm down strategy, such as breathing, counting, or positive self-talk. Teacher 7’s classroom had very calm environment with plants, and few items on the wall, however everything posted was essential, such as multiple color-coded mood identifier, self-reflection scales, calm down strategies, and simplified behavior and academic expectations.

Teacher 6 additionally shared an example of modeling self-talk and using breathing as a tool to help calm down:

I talked about that today, I was like ‘friends, I am in the yellow zone and I am going to take some deep breathes because I’m, I feel it coming up here’(hand above head)...and so I model that as much as possible because they were driving me crazy, but it’s really, something I value a lot I think it’s so important and so I put the time into my schedule everyday.

Teacher 7 described facilitating help from the school psychologist and also taking components from another program to practice some mindfulness with the general education classroom.

I am pretty good at asking people for help, so like our school psychologist, I’ve had her come in to do lessons throughout the year and she did mindfulness lessons with them (students) and so we started that at the end of last year and then I tied that together with our second step program and I found the second step lessons that went along with the mindfulness and kind of taught them together.

Core Idea: Executive Functioning

Three teachers shared their experiences specifically with executive functioning by saying executive functioning in their interview. While the other five teachers possibly alluded to

executive functioning, the researcher did not code it as executive functioning because the researcher emphasized using the participants words as much as possible to support specific data from the transcripts (Hill et al., 1997). Teacher 3 a middle school teacher shared:

In science those quizzes that they take are open notes, so we review note taking, I mean science has done that already, but these kids if they are working on executive functioning, something hasn't clicked or hasn't worked for them yet...now I have to prepare you (students) for (chuckles) life beyond this classroom, it's not always going to be like that, so here are some you know work ethic um executive functioning skills, focusing a lot on that while also trying to put in some LA (language arts). I have an executive functioning binder, it was a whole 8 to 3 o'clock deal...and a lot of kids in my class are in special education and they legally have some more executive functioning written in their IEP...I have an executive functioning block that I run every other day.

Teacher 8 shared that some students need help with modeling of executive functioning because some students are unable to organize themselves on their own.

Last year I had one (student) that was easily able to do it on his own and was really motivated and he could do it a variety of things and then he could with teachers and things like that, but then I have also had some (students) that need help with like the executive functioning part of it too, and so they don't always remember or they can't organize it.

Teacher 7, a middle school teacher also shared the need to explicitly teach executive functioning now as a second-grade teacher, but also drawing from his experience with teaching it in upper grades.

Here its like they all of executive functioning (chuckles), in second grade they are still like 'Lulululu', um, but in fourth and fifth grade and third grade too, that's when a lot of that stuff for me, you started to see the kids that really needed support with that (executive functioning)... I can't remember what it was called, but everyone got a binder like that was the same kind of a thing, I think every student at the middle school had to do that in sixth grade, so we sort of adopted some of that so they could be ready for it, but I don't remember the name of it...I think there are some kids that do need some more help, so its more me just taking a little extra time to help out, have someone else help them out...but at this point in the year (end of school year), not so much but at the beginning of the year maybe a little more.

Core Idea: Evidence-Based Program

Six of the teachers that participated in the study specifically identified research based programs that they had received professional development training on or had access to manuals that helped provide the teachers with tools or structures to support the implementation of self-regulation strategies within the regular education classroom.

Teacher 3 shared,

I went to a professional development held by the school um that was done by X, and we went through, some aspects of it, of each section, and it was phenomenal, and it has changed a lot of things, so I am going to point to my left on the board (chuckles), um there is (sample of program component).

Teacher 5 shared, “We got X resources. X book. I did like a lunch and learn to learn about it.”

When discussing a second program, Teacher 5 shared, “I didn’t have any training on X, but that’s pretty, that’s pretty laid out.” Teacher 8 shared,

Just a lot of professional development, I feel you need to be taught how, I need it to be modeled for me like almost how I teach kids you know? I need a lot of ongoing coaching and support and more professional development.

Theme 2: Multi-Tiered Systems of Support

Participants shared some of their experiences with self-regulation strategies that revolved around multi-tiered systems of support. The multi-tiered system of supports they described focused around inclusion and class dynamics.

Core Idea: Inclusion

Eight teachers shared inclusion experiences with students unidentified as needing special education services. Teachers also reflected on the challenges of exploring the possible identification of younger age students. All nine teachers shared inclusion experiences with students identified as needing special education services.

Teacher 1 explained challenges of having students identified and not identified as needing special education services in her classroom.

The biggest was a couple of years ago, I had two ED kids, that one was diagnosed, and one was not yet, we went through that process. This year is the first year that I don't have a high special ed cluster of kids, where in the years past I've had anywhere from three to five heavy IEP kids and that academic challenge is different.

Teacher 2, a Kindergarten teacher that also had experience teaching third grade explained how servicing a student that is already identified is smoother as supports are already in place for the student. However, in the younger grades, students are most likely not identified as needing special education services and more problem solving is needed to support the younger student.

By third grade it's either something that they have been working on for a lot of years, or something they have been identified for like if they have ADHD or things like that, so it almost becomes you are just continuing on what they have already been doing rather than in Kindergarten when you are just trying to figure out for the first time because they haven't been evaluated, they don't, you know parent's don't know what to expect yet....in Kindergarten it's a little bit different because they do need the time to adjust and just kind of be in the class for a while but if I feel if within like after you know the first few months of school I have a student who really isn't.

Teacher 5 had similar experiences with Kindergarten as Teacher 2, "Especially with Kindergarten, I think that kind of you know trumps it up a little bit because kids do come in and they are often unidentified in terms of language or any kind of learning differences."

Teacher 6 also had similar experiences as Teacher 2 and Teacher 5:

Sometimes they may have gotten interventions all of first grade and they seem to be helping but there's no, but then they move onto second grade and there's no documentation or it's not, because they don't have an IEP, it doesn't have to follow them from grade level to grade level. So they may have been able to get extra support in first grade that it may be harder in second grade...or we sort of start new with the paperwork. So I always beg people to document everything because I want the kids to get the help that they need....and there's also sometimes, I mean sadly, but every year and there are so many teachers that I've talked to have said this because so much comes back on the classroom teacher, well what are you doing.

Expanding on Teacher 6's reflection on documentation of data, Teacher 9, a special education teacher discussed the need to support general education teachers with data collection.

Data has to be manageable for a gen ed teacher solo, so the ideal thing is to always have support in there with that gen ed teacher, but what can legit a gen ed teacher with 25 other students in front of them, that can they legit manage and if its not a lot of data at first, you have to be ok with that because you have to start somewhere. So whatever data can be given or whatever we can get, that's going to be our starting point, so we are going to get that for six weeks and then once we have that and we can show this person has worked hard to get data on their own and then its like ok, now we need more, well now we need more resources, this teacher needs help, so I'm going to go in there, an associate is going to go in there and somebody else is going to go in there because he or she has already worked hard for 6 weeks to get us this data. So that's why its always like to make sure its manageable to take that first step because without that first step, you can't grow it further and get more resources from your district, because that's one thing I see, many brilliantly thought out plans totally crash and burn because they were way too, ambitious you know.

Teachers reflected that when a student is identified it is sometimes easier on the general education teacher as a student that is identified potentially is included in the general education classroom with more supports from a special education teacher, social worker or an extra classroom assistant to help with the student's needs.

For example, Teacher 4 shared:

I have had students earlier on that were more that were pushed in. I had a student that was on the spectrum one of my first few years here and that I think that the district wants to make sure that they are getting the support and what they need and the regular curriculum and so, this is sort of an extra and he enjoyed being in the class and so it was more of an experience for him than the academic. It has phased, out, but earlier on when I was here, I may have had an associate (classroom assistant) or two.

Core Idea: Class Dynamics

All nine teachers shared how inclusion experiences impacted class dynamics. Teachers discussed how it is sometimes difficult to plan for a student that may need more accommodations or self-regulation strategies when the teacher does not receive advanced notice.

Teacher 1 reflected:

I think the biggest barrier is not knowing enough beforehand of the caseloads sometimes like what's going to work, like this worked in first grade and but it's a different group of kids or it's a different teacher and things get changed, things like that. Also, with special ed kids, it's not like one system works for a long time, so it's constantly changing up the routines, what's going to work and trying to figure out what is that one behavior you want to change then and then often times it's like well I want to change 7, and then figuring out what's what's attainable for the student.

Teachers also reflected on past experiences and how they used those experiences to facilitate problem solving or trial and error of different strategies. Teacher 2 shared:

I think when you are young teacher, you just kind of trial and error, you just have to try some things and see if it works...and even something like with the sunshine notes, like that's just something that I always do, just something kind of I think it's something that I felt this class needed and I was like oh, this is an easy thing I can do for everyone that motivates them that just keeps a really positive atmosphere in the classroom. So part of it is just knowing your kids and knowing your class and just kind of thinking about what your experience has been in the past with other you know techniques you may have used.

Teacher 3 similarly agreed with Teacher 2, with the use of trial and error as class dynamics impacts the tools that are implemented in the classroom "I will try stuff out and see how it goes. And I also know that it will sometimes work depending on the group of students you have".

Teacher 5 described how individual student behaviors could impact the class dynamics and experiences of other students.

I work really really hard to make sure anyone and everyone, all students are welcomed and feel just as much part of our classroom community as anybody else, no matter what you bring to the table, um, however I recently started experiencing kids who have such significant needs and usually its behavioral needs that their impacting the experiences of the other kids and I feel ill equipped even though I have been teaching for so long and even though I have a big tool belt with lots of strategies in it I still, I still feel like I'm still getting kids that have issues that are out of my scope of expertise and so that's where I need more help and support...I think its definitely more in the behavior realm...and now I feel like wait a minute, this isn't safe for the other kids and it's impacting their learning.

Theme 3: Experiences with Behaviors

Teachers shared some of their experiences with self-regulation strategies for academics, however all nine teachers participating in the interviews focused on behavioral changes. The behavioral challenges emphasized nine core ideas; academic behaviors, sensory behaviors, verbal behaviors, attention seeking or impulsive behaviors, emotional regulation, internalizing behaviors, and physical behaviors or extreme intense outlier behaviors.

Core Idea: Academic

Four teachers identified behavior challenges related to academic behaviors including the need to accommodate students needing special education supports. The need to manage behaviors also impacts the ability to teach academics.

Teacher 8 described:

Homework completion comes to mind and you know, I think it's a lot what we expect of kids, they can do it, you know, but I think it is a lot for them plus with whatever else they are dealing with in the world um, but the biggest thing I see is that they just have the X part of it or if their reading skills are lacking or if they don't have that background and that seems to stem into everything else, it's all based on reading.

Teacher 9 described:

The most important challenge facing them (general education teacher) and I don't say that it's easy and I don't say that teachers are wrong for them (general education teacher) to feel this way, but I've had many teachers say, 'How can I, my job is to make them better reading and writing and better math kids.

Teacher 9 continued to explain how accommodating student academic work could help improve the relationship with the student and help the student with their academic success.

“They (student) might give me academic product that does not match their ability and that's where you just have to be ok with that because you were regulated, you were in the room, you engaged, but it's so hard.”

Core Idea: Sensory

Four teachers identified behavior challenges related to sensory seeking behaviors.

Teachers described problem solving and trying to manage the different needs of students that may need additional sensory supports.

For example, Teacher 1 described:

I have a highly sensory needy kid, like he has a lot of sensory needs, and so he's always falling over and his voice monitoring isn't there and personal space isn't there, things like that so that's a challenge for him, so every year there's a couple of kids that provide their own sets of differences and I'm like ok, how am I going to tackle this.

Similarly, Teacher 7 shared challenges with a student needing sensory supports:

Even with these kinds of supports (furniture), that's like one you can stand and it moves, but even with the chance how I usually do like 5 minutes or so of a lesson and then I move to something else, So even then you can see there are some kids that still need lots of moving.. so that can be challenging.

Teacher 4 described an experience with a student that needed accommodations when she had sensory overload and became anxious:

I had one student who that just had some sort of accomm was necessary, it's kind of hard to explain,...she struggled when there was a loud noise, she was very very sensitive. There were times when I would raise my voice cuz I had a challenging, the challenging group she was in and we developed a signal like if she was getting over stimulated and was just starting to get anxious that she would give me a look you know and would point to the door and she would go and take a break.

Six teachers identified using modified furniture to also help students with sensory needs.

Some classrooms had alternative seating options, such as a yoga ball or chairs that rocked. Some desks were taller than others so a student could also have the option to stand while working as opposed to sitting. Some chairs had cushions for the students to allow for movement within the seat.

For example, Teacher 1 described, “So this year has been different also because this is the first year I haven’t had desks in 13 years.” Teacher 1’s classroom had tables and flexible seating, various adapted sensory chairs or cushions. For example, there were rocking chairs, yoga balls, boards, and textured bases for students to sit or stand instead of sitting on a chair.

Teacher 7 added:

One of the students said, he like just wants to stand the whole time you know and he would just rather stand, which that actually makes sense for him you know. I’ve found that being able to play and this is the second version of the chairs. We had different chairs and different stools at the beginning of the year.

Core Idea: Verbal and Attention Seeking/Impulsivity

Seven of the nine interviewed teachers identified behavior challenges related to verbal behaviors. Five teachers identified behavior challenges related to attention seeking and/or impulsive behaviors.

Teacher 3 shared:

Kids that are really just want, I think it goes back to being noticed and being heard and everyone especially middle schoolers like to talk about themselves...and so I guess I give them an outlet to do that and we do that every Monday.

Teacher 4 described the difficulty of teaching through the curriculum with the attention seeking behaviors. Teacher 4 described building rapport with students, however she also appeared to need more support with classroom management behaviors.

I can think of one in particular that I have this year that wants to, just wants to get the laugh of the class and they have a few other kids that they jockey off of and that makes it, depending upon the day and depending on who is in the room, that makes it just harder for me to get through some of the curriculum.

Some verbal behaviors are more intense than the attention seeking behaviors, for example Teacher 5 shared experiences with extreme unsafe behaviors she identified as outliers.

Spit and throw and say they are going to kill me...I feel responsible for helping these kids and helping the other kids to understand what to do when someone is screaming at the top of their lungs, or, threatening to kill me (chuckles) or throwing things.

Teacher 6 reflected on some impulsivity behaviors, “There’s a lot of impulsivity, but mostly, like there’s a lot of hyperactivity and impulsivity. I wouldn’t say that everybody has ADHD, you know?”

Teacher 7 gave an example where a student was shouting so much that the team decided to collect data:

This kid like shout out constantly and they did like a tally on him and I think like um in a 5 minute period he was shouting out like 20 times or something like that, just like whatever came into his head kind of thing, he shout out constantly and they did like a tally on him and I think like um in a 5 minute period he was shouting out like 20 times or something like that, just like whatever came into his head kind of thing.

Core Idea: Internalizing Behaviors

Five teachers identified behavior challenges related to internal behaviors. Teacher 3 shared:

There’s a little bit of lack of effort, which isn’t a behavior that is like disruptive necessarily, but the kid is there doing anything and sometimes there’s two kids that I can think of that I teach that they just don’t want to be here and they sit there and don’t do anything and any consequence that we put in place or any reward that we put in place doesn’t seem to do the trick and that’s almost the most frustrating as opposed to the (chuckle) disruptive behaviors because I can identify the the ah cause and um and target that.

Teacher 4 similarly explained:

It’s tricky because the students that sort of fly under the radar that just kind of get along and do what they are suppose to, so the kids that will do what they are suppose to, that you know do the do the sort of the not the bare minimum, but a little more than the bare minimum and sort of get lost and aren’t as vocal, that may be more hesitant.

Teacher 6 identified, “I’m there to help guide them, who are you going to play with today?, because so much of it stems from nervousness and anxiety.”

Teacher 7 also reflected on the impact anxiety may have on a student's behavior and academics:

Probably the most challenging thing for me is sometimes interpersonal conflicts that they have...another behavior kind of challenge I find and its not one that's in your face, its more kids that are flying under the radar and its really hard to um get them motivated to do anything, like a lack of motivation where its like or just resistant like this is too hard so I'm not going to do it. That can be challenging too, just because they don't, they are like I'm afraid of this or this is too hard and they then like shut down and then that like shutting down, that can be very challenging actually, sometimes more challenging than this kind of stuff because, sometimes those kids fly under the radar for a while I think overall now there is so much more anxiety in kids across the board.

Core Idea: Emotional Regulation

Seven teachers identified behavior challenges related to regulation behaviors.

Teacher 6 shared:

I feel like I like to look at behaviors similar to academics, in that its a skill deficit not, a, you know a punishment and that's the problem that I feel and so, it's just a skill that they need to be taught and so and like encourage like teach them how to do it and encourage them when they do it positively rather than punish them for doing like, if the kid can't add, I'm not going to get mad at them I'm going to teach them to add. What do these numbers mean, how do we put them together, like oh my gosh, lets use, maybe you need to use unifex cubes to put them together, but like you're not in trouble. I feel the same way with behavior, that you need to learn that oh my gosh, you are arguing every time you want to play a game, we need to play some games together, like we need to practice, let me help you so um and then oh my gosh, you did that so well look how you communicated to him and then do it more.

Teacher 5 shared feeling as if she hit a barrier or a wall after 20 years of teaching, she described not feeling equipped for the new intense behaviors she had recently been experiencing. While the teacher had described valuing inclusion, she also expressed it becoming more difficult to service students with the intense change in student needs.

I have more students who are more in need of more of my time, so I have 40 students and if I have three who have a lot who need a lot of my time, um (sighs) it can it gets overwhelming. I mean, I'm I'm glad this was not a first or second year teacher because that's why teachers burnout because it's, it's really is like, it's exhausting, you know, when you have these kids that are constantly melting down and constantly sort of being

on the verge of being in crisis or in crisis and so I think that you know, some kind of of break... I can call and I can get help with that and that's great, I don't do that a whole lot...but I do when I when I need it or when I know he needs it and I cannot possibly get him out of it and I need help with it, then its great because then someone can pull him out of crisis and then but and get him and bring him back when he is ready and he is regulated.

Teacher 9, a special education teacher reflected on teaching practices of a general education teacher that he works with:

She understands first and foremost, are we regulated? Are we relaxed to learn?...I've had several teachers in my career say, this is not why I got into teaching I would say back to them, this is what teaching is, you know, so, like I would just say, I don't know what to tell you, so I'm like you can either leave the profession or we can work together and figure out a way that you know help these kids learn to regulate, because I've noticed and granted this one boy is extreme, but I've had other kids do this where he just falls asleep after he's had these violent outbursts and everything I mean, the kids exhausted, you know and then you realize, he was exhausted before he went into the red zone, like he's exhausted all day trying to regulate, he's trying to learn tools, even when so some of these kids you can get access to those tools in those structured settings, but then when they get out of that structured setting, that's when access to those tools is so so difficult and then you know, so that's what I also think these kids are working so much harder than the average kid, just to maintain and be in their seat, and be ok that they are in their seat.

Teacher 9 also reflected on the needs of a student with self-regulation difficulties:

Every kid wants to get along with everybody everybody wants, every kids wants to learn, every kid that walks into your classroom everyday was really happy to see you and really wanted to learn from you, now there may have been things getting in the way regulatory wise where they couldn't, they just couldn't access the norms you and your group had created, they couldn't access the material for whatever reason, but not one of them went in there and said, I just don't want to learn. I just don't want to, I don't want to regulate myself and I don't want to you know, be friends with my classmates.

Core Idea: Physical Behaviors/Extreme Intense Outlier Behaviors

Four teachers described experiencing intense and/or physical behavior challenges to the extent of being physically hurt by a student and/or needing to evacuate a classroom. Teachers reflected on their belief that behaviors have appeared to intensified since they started in the field

of education. Teachers also described not knowing how to handle the intense and/or physical behavior challenges in their general education classroom.

Teacher 5 shared:

I've had students recently who hit and kick and spit and throw and say they are going to kill me and now I feel like wait a minute, this isn't safe for the other kids. I have two maybe three students who have eloped sometimes...and someone is you know, starting to run, throw, destroy or you know, become physical, um and what do you do?.. unfortunately you know everyone is in you know in these situations and we are often left as classroom teachers to be like ok, I have to make this up on the fly.

Similarly, Teacher 6 was very empathetic and shared the importance of nurturing and caring for a student and relationship building:

My student this year, who you can see who has desk is like torn apart but, he doesn't get a new name plate, he decided to tear that apart. but, you know, he comes to lunch with me once or twice a week, and that is not a reward, it's not a punishment, he wants to spend time, he wants to be with me and so gathering that relationship so that he trusts me.

Additionally, Teacher 6 shared, "Certain years, depending on like last year, I had very high needs behaviorally in my class and on top of many other things, there were certain kids where I'm like, you knew that they needed extra help."

Teacher 6 also described not knowing what to do with a student exhibiting intense behaviors when human supports did not appear to be an option.

Also, like people power, I have to call for help frequently, for one of my students because, he's being violent, and so um, you know, I we've had we've had two other students who in the school have started, their behavior has started to escalate and I know I didn't call for help a couple of times because they were already dealing helping with them and and that meant the social worker went there and they went there and there's only so much and that is really hard.

A classroom observation was conducted in Teacher 6's classroom. During the observation, Teacher 6 had students begin the class with a soft start where students had the opportunity to play in centers and collaboratively work with peers. At the end of the observation,

the researcher was getting ready to leave, however a student's behavior escalated and Teacher 6 called the office for help. The student walked out of the classroom and Teacher 6 asked the researcher to watch the classroom as Teacher 6 went to follow the student that had eloped from the classroom. After several minutes a social worker entered Teacher 6's classroom to support the classroom, meanwhile Teacher 6 and the principal had walked into the school library with the eloped student and the student was observed pacing around the school library. Teacher 6 expresses embarrassment to the researcher, and the researcher re-assured Teacher 6 that she was not being judged by the student's behavior. Teacher 6 appeared to be on the verge of burning out as she also had described instances when the class had to be evacuated for safety purposes due to an outlier extreme behavior.

Teacher 9, a special education teacher also shared a recent experience with extreme behaviors:

I'm dealing with some pretty extreme behaviors right now. I've got several kids on my caseload that had some significant elopement. They would leave the building, try to leave the premises and they would do that several times a day. Two students with violent outbursts, physical and verbal threats and then one of the two was kind of deep and beyond anyone else, just extremely violent disruptions, property damage, you name it, striking, ultimately the kid stabbed me in the face with a marker and so, I still, its weird I have this kind of scar on my face, so ya, it was last Wednesday.

Teacher 9 continued:

What I can say is that I'm seeing more and more extreme behaviors because this boy that I'm working with now, who did, you know it's been a long year and I had a student just like him the year before. And we all thought that student that I had before we had never seen anything that violent, so extreme and then low and behold literally the following school year, this year we have a boy that presents in almost exactly the same way.

Teacher 9 continued to share:

That (extreme behavior) can be very hard for the teacher, for the students and its just and I've seen it done really well, but it's a lot of work, its from the beginning of the year onward of modifying those expectations, you know, lets say when you are dealing with

younger kids, yes they are first in line everytime, yes, every single time that kid is first, and yup its so unfair you know, but then the kids know the alternative that if they are not then they are tearing things off the wall, right, but if that's the only thing if it's just being first in line if that's you know, just making sure they get to the back of the line, you know, so there are things that can be done with kids with moderate degrees of behavior disorder, obviously.

Five teachers emphasized their inclusion experiences with students they identified as outliers or students that could not be reached through self-regulation strategies or other evidence-based strategies. Teachers also expressed not know what to do or how to support the student they identified as an outlier for the rest of the class.

For example, Teacher 2 shared that she needed more support with students that needed more than Tier 1 strategies to regulate:

I think, most students just like you know general you know behavior management techniques like you know by saying, well “that student is sitting quietly” or “that student is sitting quietly”, most kids will get it. I think the hardest part comes when those are the outliers, so the kids who are really struggling even with all of the like Tier 1 strategies.

Teacher 5 similarly shared needing supports for the small portion of students that needed more support that could not be addressed through the regular Tiered strategies:

I've done PBIS schools before too, they are great you know, those kinds of things help definitely and they help 98% of the population (chuckles) maybe 99! (chuckles) and then there are those outliers that you know...What do I do? I didn't have a walkie talkie yet at the beginning of the year because I didn't know I needed one. I didn't have a protocol for the kids on what to do when this happens, you know so its, I think that is, you know can't know with Kindergarten that someone is going to have those needs, but as soon as you do (snaps fingers), I feel like, we need, it needs to be, it's important for classroom teachers to be able to go to powers that be and say, wow, this is outlier and sort of respect and trust my professional opinion.

Teacher 5 also shared:

Especially with Kindergarten, I think that kind of you know trumps it up a little bit because you know kids do come in and they are often unidentified in terms of you know, of language or um you know any kind of learning differences...we come in and we often start, you know the process of like ok, lets do some interventions in the classroom, lets take some data, lets come back and look at if to see if it was successful, if not, what do

we need to do and we go through the process of taking them down of whatever path that they need to go down, but when you have what I call an outlier like that you know, isn't getting what he or she needs in the school setting and neither has anyone else, there's no, there's no path for that kid because then you still have to go through all of the, all of the different you know um steps in order to make sure you are supporting the child appropriately, but meanwhile its months and months of what do we do...I'm definitely not on my own, I definitely have you know, as a staff member, you know, we support each other you know and it makes, it makes a big difference you know, so that's good.

Teacher 5 also explained frustration:

Just with those outliers...it was just that to me was an egregious amount of time to go in an unsafe situation you know, six months before you know, we do anything, so that's the frustration is when we do have these these situations that are outside and maybe this is where I am developing my own opinion of about you know inclusion, you know (stutters) at what point and to and to what cost and and how do we put in supports in place sooner so that we don't go six out of a nine month school year with this going on.

Teacher 6 described how support services have good intentions to help out, however they do not always necessarily have the time to support.

Another staff member sent an email out and said 'What can we do to like support you guys who are really struggling, who have students, who are having to call for help on a regularly what can we do to help you?' Just to have a staff that is saying we want to help regardless if they can do anything, I, to feel supportive, and cared for, helps us care for the kids, just to know that that people care and really that all of our kids are our kids, all the kids here are our kids and it's not like that's your kid.

When discussing some of the outlier students, Teacher 6 also reflected the importance of building rapport with the student:

They (outlier students) need someone who is just like, they need a million, so much more love and by giving them that time, it's like money in the bank, you know...they're getting told what to do all the time, so the more that I can have those good interactions, I think that's that's been really powerful, I think with most my students...some of those kids that really struggle ...I get worried about these kids, like can you walk in a straight line, I don't want them to necessarily do that, I want them to be human and humans should be talking to each other humans, should be like engaged and when people are engage they want to work.

Similarly, Teacher 9 also shared the importance of building rapport with students, especially the outlier students, giving an example of a student that transferred to the school with behavior needs:

The other school district wouldn't talk to us, when I finally got somebody on the phone, their like, oh, he's terrible, he just destroys rooms, blah blah blah.. I'm like, oh, ok we will see what happens and but I'm like as soon as he and well, I guess the kid likes sports and I'm like ok, that's something we can get, that's something we can jump on from that, so he came in and I met him at the door on his very first day and I told him I was there for him and I was so happy, and I said we were so happy to have you and we were like buddy, we are so happy you are at our school And already that had changed the conversation for him and it was like oh, your into this sport, me too and then it turns out he was into hockey and we had that connection over hockey and we built everything out of that and we had something in place and everything was welcoming him, he's part of us, he's on our team, we love and you know, so we just built and he had an unbelievably successful year um he had you know it was just really and his teacher bought in, you know totally adjusted academic expectation, totally adjusted her routine..its gotta be step by step like with this kid, it was literally the first step was welcoming him to the school the second step was you know, finding out what sport he liked and that's where we kept it and then the next step was the breakfast, the next step was soft start, the next step was learning, you know, it just went step by step by step um, and that gave us um the greatest success.

Teacher 9 described how sometimes staff members have difficulty having empathy for the outlier students because their behaviors are so extreme.

Somebody that has dyslexia, somebody that struggles with cognitive delay, there is a certain sympathy or empathy that is built up through extensive training and literature around the subject, now we've got well over 30 years of like legit special education services that are being provided, there's this whole structure around servicing these kids like that, but this stuff, I don't know that schools, I can tell you right now that our school really struggles We don't have the resources, we are not a therapeutic setting, and its very hard for me, as a the educator. You know you get to know these kids, so its not hard for me to have empathy and sympathy even when they are engaging in such violent you know but for the people around me, even the associates that are supporting me, it is very difficult for them to maintain empathy and clinical distance...but you kind of need both in order, that empathy and clinical distance to really help a kid and support them... and so, but that's what I'm seeing as a real breakdown, and I think it is only natural because I see there is definite, you know people with these behavior disorders, there's just zero sympathy in the broader educational setting for them too unless they are in a therapeutic setting and that to me I think is the greatest challenge as an educator and the people I work with and it's very hard for me to change minds around me if they are witnessing,

you know, if I'm trying to escort this kid to the calming room and my face is literally a bloody mess, its very difficult for my colleagues to have sympathy for that child because they are like, he just attacked you violently and physically simply because you asked him to write his name.

Teacher 9 also continued to share how the increased behavioral challenges warrant additional resources within the general education classroom setting:

But then a student like him...what our general education teacher, that woman in the room, what she's got 23 other kids in that room, and and he can literally up end, the entire, I mean she will have to evacuate the room, she will have to call the crisis team and so when and I just said this to the assistant director of special education for my district. I said if you want these children to stay and I believe that they should be because I want to help them, but you need to staff it up...I mean but what was cool was that we had you know success with all these other kids leading up and that's why when we saw how much of an outlier this kid was, she (general education teacher) was trying all these things she and I had done without even asking, she had tried all these things that had worked for these three other behavior kids and then when nothing was working, this is when she knew it was like an emergency, when she was like I went through my library already, my bag of everything we've done and when I got in there, man I was in there five minutes and I was like ya, this is serious, this is like I fear for his safety, I feel for yours and everybody else's, I fear for his mental state, his mood regulation... your instincts as an educator would just be like oh, we have to help this guy because you know he is just such an outlier.

Theme 4: Experiences/Needs with Supports

Teachers described the human and non-human supports they received with implementing self-regulation strategies. Teachers also discussed the need for more supports, particularly the need for more human supports to especially help with students they considered to be outliers. Teachers also described needing more opportunities for plan time either to create materials, plan for individual students or whole classroom, and opportunities to collaborate with other team members, such as other teachers, or support service providers.

Core Idea: Support of Special Education Teacher

Eight teachers described utilizing a special education teacher as a human resource in attempts to implement self-regulation strategies. Some teachers described that special education

teachers typically went into the general education classrooms to support special education students on their caseload, however sometimes the special education teachers also help provide strategies for other non-special education student as well. Some teachers also described how special education teachers also co-taught with the general education teacher in some instances.

Teacher 1 shared:

I worked really closely with the sped teacher, she is not here anymore, but we worked very closely several years together in a row and she was phenomenal and helped me really figure out how to work with those students in the best way in the classroom and I got a lot of tips and tools from her.

Teacher 6 described how there are less special education students to service more students:

We are on a separate teams and so they will be divided, the special education teacher is mainly assigned to one team, but they also cut our special education teachers, there were three last year, and now there's 1.5 and we had a bunch of move ins at the beginning of the year who most of them, a lot of them that moved in had some needs, so it's been, it's been a little tough.

Teacher 9, a special education teacher shared how even with a larger caseload, his role is sometimes changed to support with more significant behaviors, therefore a teammate may then receive an even larger caseload.

I am a resource SPED teacher, ah, that because of this one outlier student, I had to take him one on one all day, with rotating associates, and another teacher had to take the rest of my caseload.... here's another boy on my caseload and it broke my heart to give him up, but I had to, you know because I didn't have the time because this one boy is taking up so much time as you know, he when he came to us with a 110 page long IEP, and we are like whoa!

Teacher 8 described similar reduced staffing:

I don't have time with the resource teacher because we are split between a mini team, our focus more in these 4 classrooms is to focus more with the ELL teacher, and then the other side is more just so that the resource teacher has more time to service kids and classrooms together, but I know I can always just email them or ask and we have more than one, so that's kind of nice to bounce ideas off from that...so last year I had a student

that had minutes with resource and so the resource teacher was here I want to say 30 minutes in the morning and 30 minutes in the afternoon...it is really nice and that's why I miss having someone this year because I felt like it was also someone to help manage the other behaviors or help give me strategies you know because they sometimes get to recognize, they know those kids too so they can help to brainstorm with me, but I think they are really there for everyone, but I think it is helpful too because then they can monitor a specific chart or checklist or something like that and take a little of that off of me.

Teacher 3 also described some positive supports than come with having access to a special education teacher as they help service identified and unidentified students and provide opportunities for teacher collaboration:

My first resource that I go to every single time is the special education teacher... the idea is that we co-teach, um there are things that get in the way, but we do our best to do that, which is a wonderful opportunity for all students, it's beneficial for all students, not just those kids that are in special education...she provides feedback...she'll speak to her other side of things which is beneficial to me because I will find out whether or not I was blowing something out of proportion, or if it was, you know, I was just having a bad day, if that kid wasn't having the best of days because she moves with a lot of the kids...so she can say, no, it was something that happened in math and they took it out on you in here....she's number one and she's full of ideas so she will give me ideas and then like how our relationship works is she will share ideas and then I will go and then figure out how to make that work in the classroom or try to make it work, I say try to make it work because for me trial and error will be the go to and I will I guess look up activities or ideas on the world wide web...but in previous years, I would say not so much, or they've seen her as only servicing a certain number of kids where she is now in here yes to service her kids, but also everyone.

Teacher 5 expressed how supports from a special education teacher were preferred as they had training and could support students:

It might be preferable, depending upon who comes in, so if it's someone who comes in who is you know, CPI trained, whose a SPED teacher who has been doing this for a long time. More than likely they are going to be better than me if not the same level of you know aptitude you know to be able to assess the situation and help you know in the way that they need to, but when it isn't, so sometimes if an assistant comes in to help you know, then I might say, hey, can you read the kids a book on the carpet.

Teacher participants in this study described the important role of special education teachers, however they also described that the special education teacher gets pulled into multiple

directions. For example, in some cases the teacher's described that the special education teacher provided opportunities to co-teach or collaborate regarding student behaviors, not only regarding students on special education caseloads, but also collaborate about student behaviors for general education students. Teachers also described that having a student receiving special education services in their classroom provided opportunities to have a human resource in the classroom to help manage behaviors. However, the teachers also described that the special education teacher was pulled into multiple directions and did not always have opportunities to help out in a crisis or collaborate with teacher due to special education teacher staffing cuts and large caseloads.

Core Idea: Support Services

Seven teachers described utilizing support services (ex. School psychologist, social worker, speech/language pathologist, occupational therapist) in attempts to implement self-regulation strategies.

For example, Teacher 2 described utilizing the supports of both a school psychologist and occupational therapist to assist with sensory supports.

I have a student that who did go to preschool but started the year really young and he is lacking a lot of fine motor skills and a lot of attention skills and I was kind of just really just giving him time at the beginning of the year to see if he was just going to figure it out and get with it, but it just wasn't working, and I tried a bunch of strategies like I gave him a rocker seat, I chunked his work, I gave him you know rewards after he did his work, not rewards but like stickers after he did his work and all those things really weren't making an impact. So then I basically just we have a form that we fill out and I just emailed the psychologist and the OT was already in my room at that point and we just set up a meeting and I you know talked about everything I had been seeing and so now we are going to meet with the Mom and see just what kind of the next steps.

Teacher 3, a middle school teacher also described how some of the support services could be presented so that students are aware that they exist as a resource.

Not all kids know who the social worker is, but every kid is allowed to see the social worker, x amount of times, I think it's two times right, without parent permission without

having minutes, so knowing what she looks like and that she's accessible and it's not scary and it's not odd, I guess in my opinion every kid should, I don't know go to the social worker but experience that and see if that works for them. So putting her face out there, same thing with the school psychologist, I would like that. I mean the special education teacher, she is in here, so kids are familiar with her, I would like that.

Teacher 5 described how the social worker supports her classroom with behaviors and how some students the social worker supports with end up later being identified as needing special education service, and they are often placed on the social worker's caseload. "Our social worker is great... many of the kids who need the social story are you know, eventually on her caseload anyway...our social worker does a lot of the social stories, which is great."

Teacher 6 described how the school psychologist in her building is accessible to obtain strategies and supports from even before a more formal problem-solving process is started with a student. Teacher 6 also described the importance of relationship building between staff and having opportunities for collaboration and follow up.

Our psychologist has been helpful in just, not necessarily in like through the whole problem solving process, like before I put in someone in for problem solving I can say, 'Can I meet with you?', I just want to talk through what's happening' and like she's giving me some ideas...our psychologist is just really helpful and just problem solving things, we have a team, our team meets once a week and we will bring stuff up at our team meeting or often times in the hallway, like oh my God what am I doing for this...I think, like time with a psychologist to talk through is just huge and then a follow up time with that, you know, like how is this going? How can I continue to help you? that's, super helpful, um and also to have the, I love our psychologist and I know she cares and she's really asking, and that makes a huge difference because sometimes I've been in situations where I'm like you don't really care, you are just going through it and this is hard and so, and I need you to feel invested because I'm digging as deep as I can right now (chuckles).

Teacher 7 similarly described having good rapport with the school psychologist and utilizing the school psychologist for additional supports in the classroom.

Just having conversations and it's kind of like I didn't need it for a while, but then three weeks ago I needed it again, so school psychologist came in and um, we read *The Bad Seed* and talked about where the bad seed was on the mood meter, I did a couple of other read aloud....or if I have like a specific need, I can see maybe someone is having a

specific issue like with anger...I would go to the school psychologist about and we had these like two boys I was talking about, it was a huge issue between them, so I talked to the school psychologist about it and we came up with um something that I had done with some girls that had this problem in fifth grade, we came up with a peace treaty so they were able to say their piece of everything that had happened before each one had a chance.

Additionally, Teacher 7 described how a combination of resources such as professional development trainings along with having time to collaborate with human supports such as school psychologists or social worker help support students. Teacher 7 is a learner and described volunteering and taking up several opportunities for extra professional development and training. It is important to note, Teacher 7 shared that it would be his last year as a classroom teacher as he had applied and been hired as a consultant for the following school year.

I am very fortunate that I got that I did this training and some of it was my own and some of it was working with that other school psychologist or now with school psychologist with some of these things. I think I just have an interest in this.

Teacher 7 described an example of how multiple support services helped to service student.

He had individual reading support, he had a level of oral comprehension he was in the class for part of it, but then so that was actually another good way to get him to move, he would change locations, he got social work, he met with the school psychologist...and people followed through.. there weren't that many big meetings with everyone but I did meet with the social worker and school psychologist, for a while it was like once a week about him and then it was more like once a month, so it was kind of like over time, but we needed to have those meetings because it was a lot to talk about (chuckles)...so those types of things are helpful, but otherwise they are already so supportive, I think, so they are not just sitting in their offices and the thing is its hard to say because next year I might need something totally different that I've never seen before and that's when I mean that what's I like about it because then I have to learn all about you know this type of issue or whatever.

Teacher 8 similarly shared how she works with multiple support services to problem solve or to implement a program. Teacher 8 also described how implementation of a strategy or data collection falls on the teacher and how other support services may want to help, but as

mentioned by other teachers in this study, other support services are already managing larger caseloads, therefore there may be less opportunities to physically support the teachers.

I have had our school psychologist like the zones of regulation and so that was kind of in addition...I would email like the psychologist and she would help facilitate and usually if we are trying to figure out what they (students) need, it would be a broader meeting with the social worker and that and more people involved, but if it's something that I've pinpointed what they need then I maybe just need help figuring out the specific goals on a checklist, I just ask the psychologist to help me with that...I think often times that does fall on the teacher (collecting data), I think that people have the best intentions of wanting to help and wanting you know and it's and it depends on caseload, it depends on what's going on with everyone.

Core Idea: Support of Administrator

Six teachers described utilizing administration in attempts to implement self-regulation strategies. Teachers shared experiences and thoughts of appreciation when administrators supported them, especially when they were having difficulty with a particular student.

Teacher 4 shared:

I think that the district wants to make sure that they are getting the support and what they need...I've had educators, head supervisors come in to be evaluated and I'm like, oh that was an epic fail and their like, well what do you mean and well, I thought this would go this way and it didn't.

Teacher 6 described a situation when a principal came into the classroom and provided her with a physical break. In this example the principal can be seen as an emotional support as well as a physical human support in a classroom.

I think one thing and I will never forget, I think this is why I love about my principal, when one of my students was having a total breakdown and had been with him for about an hour and he came in and said Teacher 6, go to lunch. I got it I'll sit here', and the fact, he sat here, he was like take 20 minutes, don't come back and I was like, 'thank you,', like he, he knew that I needed that and I can't, that cannot be underestimated the amount of because we care so much and it's exhausting, it's just emotionally exhausting and so to, I think it's just so important to think about our mental health too and our emotional states so, we can give to them.

Teacher 6 also described how the need for supports is also needed by administration during unstructured time, such as on the playground.

I think also support from administration to be able to do more social emotional work in the classroom, to help that is key...I mean our principal really, I, we adopted second step, but I think you need beyond that you know, they need to support the time and support time on the playground cuz it matters and it's it's hard, it looks like just play, but really all of this stuff matters.

Teacher 7 described the importance of having supports from the principal.

The principal is also focused on the child...the principal has been nice about this too reminding us to stay present at the end of the year and also to lower my expectations of what we can do right now and bump up the patience and actually, that's keeping me sane and this is feeling better.

Similarly, Teacher 9 described the importance of being supported by the principal to implement accommodations or strategies that may not always appear to be follow norms. For example, allowing a student to eat breakfast when they enter the classroom or allowing students to ease into the day by playing before they get to work.

First thing was just to get him (student) breakfast, get him in the room eating breakfast, and so but its weird you know because you go into the room and you are eating breakfast, right? And everybody else is starting their morning work, well, that's weird, so, the teacher totally adjusted it, she's like, he's going to eat breakfast so we are just having soft start, so while he's eating breakfast, some kids are coloring, some kids are playing, you know with other stuff and he can do that too, he can play Legos with somebody while he's eating breakfast, so that whole 20-25 minutes start to the day, now you can just imagine a principal thinking about test scores and all of that, freaking out, "what are you doing with that time?" You got to start right away, but her (general education teacher) doing that, changed the course of her room, and it changed the course of this kid's trajectory, you know...the thing is you also need a really strong principal that is going to stand up for you and other people in your building that may be doing the same thing when word gets out that like this soft start business, you know, our principal's like yup, do it, so who cares? Who cares?, And luckily, you know, the scores came around because they did that, right? But man, think about it, I'm sure if you've worked in different buildings, I've had different principals, some principals are strong enough to do it and, some are like scared of their own shadow, So its like, I don't want the district coming in here and finding out, no no no, get back to and so that is really important so its really like this huge community discussion and effort you know, to make it happen.

Core Idea: Literature/Technology

Six teachers described utilizing literature or technology in attempts to implement self-regulation strategies.

Teacher 2 shared:

I honestly go online a lot and search. I have like a teacher Instagram that I follow a lot of people and I get help from there, I go on teacher blogs, um because I feel like you know when the school sends out like a general Tier 1 document it may not be Kindergarten specific, and what you are doing for Kindergarten is very different from what you are doing with a second grader. I really just kind of try to research as much as I can on my own and sometimes from professional books too that is kind of where I kind of get all of my information.

Teacher 4 shared similar experiences with technology:

I've also have found outside websites and things, where people are believe it or not, there's like supports, there's groups on Facebook and things like I have found that I have found that there's people and there's a wealth of resources and people are sharing them, which is really nice because I think so often, I think a lot of people are the only one in their district So that if you don't have a lot of people to collaborate, if someone is making it, why re-invent the wheel.

Teacher 5 expressed being surprised that a strategy she read in a book actually helped with an attention seeking student.

Its in the book 2 by 10 and so you give the student two minutes a day for 10 days...and I did it way longer than that because I felt like I needed to but it worked. I was like oh my Lord, this kid wants to talk to me like 45 minutes out of the day, if I added it all up, and like she's not going to be ok with 2 minutes...I would set a timer and I was like, ok, 2 minutes you got it go...and it worked!...I couldn't believe it, and then I slowly, I was like a lot more than 10 days, but that was me, I just kept going with it because it was working.. we did it for a long time and then eventually it kind of just like fizzled out, and she was fine with it, I was like ah ah, this is not going to work, this is adorable, they put this in this book, all right, the experts know, alright, I'll try it, have they been in a classroom you know (laughs), and I was like ok (chuckles), have they been in a classroom you know (laughs), and I was like ok (chuckles), so I tried it and I was like oh darn, it really worked, I couldn't believe it, so that was great, but I think being open minded to it too, and the consistency thing too, you have to stick with it.

Core Idea: On the Job Experience

All nine teachers described using on the job experiences to implement self-regulation strategies. Some teachers referred to professional development, literature, as previously described technology as resources, but the overall consensus was that most was learned through on the job experience.

Teacher 1 explained:

I went to school a long time ago, um, so I don't even remember like what came from school versus not also in our district they don't give you any extra stipened for professional development or like beyond outside the classroom, so I can google and look up best practices, which I do, but I don't, the things that I would have learned in school probably would even be dated by now, so it wouldn't have been...applicable at the time...I think I have been maintaining them for a long time so it's not even a thought process.

Similarly, Teacher 3 shared:

For me experience has been the most significant, has had the most significant impact on how I teach and changing you know how I view the classroom and my expectations of kids as well and so I think me listening in on team meetings, you know my first, probably my first year, two years I didn't contribute necessarily, I listened and observed more so and my team like understood that.

Teacher 4 shared:

Sometimes you don't realize you are doing, its like you are just doing it! And you don't think and you are just banging your head against the wall and your not getting done what you want to do and then someone else comes in and hears and listens and your like oh ya, I guess I do all those things, after time I think it does but it's it's you know when your caught up in what, your day to day things you sometimes don't realize all the things you are already doing. Since I've been in education a long time, like the lingo changes so you know so it's like oh! I've been doing that even though they are calling it something else, but I didn't know I was doing it, but I guess I am doing it!

Teacher 5 shared:

I had seen that modeled by another teacher, you know I always say in education, no new, no ideas are new (chuckles) we all recycle, you know, which is fine. You know, its good we learn from each and get things from each other, but that's what it's been for me, just

picking it up along the way from its when the rubber hits the road and you are in the classroom.

Teacher 8 also shared how observing another teacher is also beneficial.

There's a lot of people doing awesome things, that you don't always see and you can go, it can run from behavior or even if you are there for something different, in the past I've found it really cool and then you can see something else, you know that maybe you didn't intentionally go in there for and your like oh that will work (snaps fingers).

Teacher 8 also shared how reflecting on previous experiences help her navigate how to address students with similar needs:

I think at this point its easier for me, only because I've had more kids, I've had a variety of situations where kids have needed things, so you kind of like I've started to notice like similarities, but had I been newer it might not be as easy ...if I've had that same situation before yes and I can I feel like I can kind of understand the language that you use with those types of things.

Core Idea: Support of Classroom Assistant

Six teachers described utilizing another adult, such as a classroom assistant in attempts to support behaviors, the supports may differ between roles or professionals, however all supports are necessary. As previously discussed, some teachers described that human supports are sometimes accompanied when a student has been identified for needing special education services, for example a school psychologist may provide support with mindfulness, or a social worker may service minutes inside the general education classroom and provide tools such as social stories or the special education teacher might provide services inside the general education classroom and provide tools such as supports with executive functioning or self-regulation. Teachers also described how classroom assistants could be used to support the general education classroom. Teacher 1 described,

I have an associate that is specifically for two students, a two on one for them, but he is more there for them, but he is not there for my other kids, um because they are part of a separate X program.

Teacher 5 described a similar experience, “There was a little bit more support, I think built in with the kids that were included from special education settings, so they came with people who could help.”

Teacher 7 described getting additional staff assigned when a student needed additional behavior supports.

We knew he was the biggest you know challenge in the building so it was an all hands on deck kind of thing and so I shouldn’t say that, but so we were able to get a one to one associate who could take him out for those things um, it was a different one like morning and afternoon so that was a big plus.

Teacher 8 shared:

There was also an associate that I had with that child I want to say for the whole, it switched around at the end of the year, but it was for the whole morning actually when I had someone here to help with and that was mostly behavior based, but they could also help with academics.

Core Idea: Plan

All nine teachers had the consensus that more time was needed to plan.

Teacher 8 shared the need for opportunities for more plan time:

I think its time and people. I think anytime you can get human support with something that is something that what we you know that we value the most because you can do all of those things, but you don’t have the time in the day to do all of that plus all of your lesson planning plus all of your so it all goes together, but you know, really bring it all together, family, communication and all of that kind of stuff.

Teacher 9 shared the need for more plan time for teachers to collaborate with each other regarding student supports:

Like in my ideal world, the principal gets a half day sub, you know, and there is a sub in that room for one full have day while the resource teacher can meet with the gen ed teacher and create that plan and say this is you know how we are going to do it, um and then put enough in place where the gen ed teacher can utilize that plan without having the resource teacher in the room all the time, um but this is where having enough associates you know so you can have schedule flexibility, but that to me is the hugest thing is my greatest successes with behavior kids is working with the resource teacher because I

created a plan along with the gen ed teacher that was specific that was concrete and adjustable.

Teacher 9 continue to share the need to have plan time and increase staffing:

Number one is staffing, number two is when that teacher faces that or has worry about it, what has to happen and again, this is a staff issue, what has to happen is get that teacher, get number one time for the resource teacher or the behavioralist to get in and observe right, so they can get in and observe and really see you know what the dynamic is and what they are facing and then have that resource teacher one on one with the gen ed teacher craft a plan for that child, keeping everything else in mind but that takes time.

Teacher 4 also agreed that more time was needed to collaborate with others. Teacher 4 taught French and is the only French teacher in her building and expressed desire to have opportunities to collaborate with other French teachers from either other middle school buildings or the receiving high school.

The collaboration piece and the person, and my counterpart at the other school is new and and it's you know, it's an adjustment period what from her spin on it and my spin on it, and so, it's a matter of I'm more about, I welcome the opportunity to team and to collaborate...so I think that would be helpful to have the time to observe other educators and other people doing, in action. As well as time to work with other colleagues that are doing the same kind of thing as me...right and there are some people that are uncomfortable with that, because they think oh, someone is going to judge me or I have to be on top of my game.

Teacher 5 also expressed the desire to have more opportunities to plan with other colleagues.

You know, and not only assistance who could help with kids in the classroom, but also with a little bit more planning and teaming together...you know, lets come back and look at it to see if it was successful, if not, what do we need to do and we go through the process of taking them down of whatever path that they need to go down...sometimes you need some type of level of support that way, you know there are times when you know if there are you know when one of my friends is having a you know, an outburst, we call them, um, I can call and I can get help with that and that's great.

Teacher 5 also explained how more plan time was needed in her daily schedule:

I, we all feel like we don't have enough breaks in general, but there are days when I have 45 minutes, of plan time, which is fantastic, and then there are days when I have zero.

Mondays and Thursdays, I have two days a week, I don't, I am not out of the sight of kids, I am with them the entire time and that's too much, and I think that's where I get, that's where my level of being able to handle all of this starts to be impacted, its like, I'm used to that but when I have the extra, sort of stress that it puts.

Teacher 5 also explained how making materials takes a lot of time.

It definitely takes a while and it would it would probably take me about an hour to create the first visual schedule, and so, its, its, you know, tracking down the velcro and taking the pictures and printing them out and I mean, it it all takes time, but then, the other thing too, is you create a visual schedule, and then you know it might be too much and too complicated, so then you kind of have to go back to the drawing board and make it very very simple and then maybe I try board maker pictures but then at first, but then that didn't work so then I took real pictures so then (chuckles), ya, just kind of tweaking it along the way to make it so that it works for the kid at the time, and then as soon as it works for them, it's probably going to change to make it, they are going to need something else, and to be honest with you, for me, I don't mind doing those things and I don't mind you know taking time to create those things for kids, but what I do mind is when it impacts the other kids and I don't know what to do in the moment, I think that's the hardest thing for classroom teachers.

Major Findings

Results from the study indicate the following key findings. When discussing self-regulation strategies, teachers identified using tools related to self-monitoring strategies, planning, goal setting, and self-evaluation. While most teachers did not specifically share that they used breathing strategies or self-talk, they had visuals in the classroom environment that demonstrated the use of self-talk scripts and breathing strategies. Teachers also discussed their experiences having students lack executive functioning skills and their efforts to support those skills. Some of the teachers that participated in the study also specifically named research-based programs that they had received training or professional development on or utilized in their classrooms with some modifications.

Teachers described how technology helped support with the implementation of self-regulation strategies, especially for the older grades. Teachers also shared their need to use trial

and error to determine the best tool to use to support students on an individual and class wide level with their self-regulation behaviors. Teachers also described the benefits of repetition when implementing self-regulation strategies. Modeling of strategies by the teacher or using a peer as a reinforcer were also discussed as ways to help support the implementation of the self-regulation strategies in the general education classrooms.

Not all teachers believed that the self-regulation tools were useful in their classroom, for example two teachers discussed their personal philosophies and dislike with using checklists to monitor student behavior. Teachers also shared that they reflected upon past experiences to help determine which tool or strategy would be helpful with current individual students or whole classes. Teachers also used handouts or worksheets that helped guide the students with self-regulation of behaviors and academics. For example, some tools helped the students keep track of goals, or plan for completion of projects, or check-in on daily behaviors or moods.

Teachers used visual representations to help remind or guide students with self-regulation tools, reminders of emotional and academic expectations or reflections. For example, visuals were used to help students organize writing material or to check on how students were feeling throughout the day.

Teachers discussed how they found it smoother to serve students that were already identified as needing special education services in the general education classroom because they already had needs and supports identified. Younger students were less likely to be identified for special education services, therefore more problem solving was typically needed to identify the students' needs and supports. Teachers also described that identifying students at a younger age was also challenging because they struggled with giving students more time to develop versus pursuing the problem-solving process and evaluating a student for special education services.

Teachers also expressed that when a student receiving special education services was included in their general education classroom, that student typically came with more supports including extra adult support. The additional adult support sometimes was a support service provider, such as a social worker or classroom aide that worked specifically with one or more students receiving special education services or the additional adult support was sometimes a special education teacher. Teachers described how special education teachers added additional supports not only for the student receiving special education services, but also for the general education teacher. General education teachers described that sometimes the special education teacher helped with co-teaching or with collaboration of class-wide strategies or helped collect data or develop interventions for students that were not yet identified as needing special education services, however that needed accommodations in the general education classroom. Teachers again discussed the need to trial and error strategies when working with both students identified and unidentified as needing special education services.

Teachers shared their experiences with various behaviors including physical, sensory, verbal/attention seeking, academic and internal behaviors such as anxiety. A few teachers focused heavily on students they described as outliers. Students for whom the self-regulation strategies explored in this study did not suffice. Teachers reflected on how the traditional self-regulation strategies did not work for these group of students identified as outliers. Teachers expressed needing more supports to assist with the outlier students and the need for more human support in the classroom. The researcher was witness to the need during one classroom observation when a student became upset and eloped from the classroom. The teacher called for help, however had to leave the classroom as the crisis escalated. The researcher stayed with the classroom until a social worker arrived to stay with the class. Had the researcher not been in the

classroom then the classroom would have been left unattended while the teacher left to work with the student in crisis.

Teachers described the behavior challenges and also the need for more resources such as human supports, such as classroom assistants or more opportunities to collaborate with the special education teacher. In addition, teachers expressed wanting opportunities to observe other teachers, as well as more time to plan and collaborate with other team members.

CHAPTER FIVE

DISCUSSION

Summary of the Study

Self-regulation can be defined to include various components. For this study, the following research-based self-regulation strategies were studied: planning (assessing challenging behaviors and creating steps or goals to improve those behaviors), goal setting (target a realistic goal, create plan for completion, monitor progress), self-instruction (language to regulate behaviors, such as self-talk, describe steps to organize or calm down, counting, breathing), self-monitoring (self-observation or self-recording to evaluate performance through graphing, for example), and self-evaluation (student assesses intervention or behaviors) (Menzies & Lane, 2011; Rafferty 2010). Self-regulating strategies have shown to be effective toward increasing academic achievement (Menzies & Lane, 2011; Raver et al., 2011) and positive behaviors (Raver et al., 2011); however, there is a gap in the literature exploring teachers' perspectives on these strategies as well as their use in classrooms.

This study sought to answer the following questions:

Research Question 1: What do self-regulation strategies look like for academics or behaviors within a general education setting? Results from the study indicated that general education teachers were familiar with the above-mentioned self-regulation strategies and either identified them by name or demonstrated implementation of the strategy either by their description of strategies, classroom observation, or by presenting a visual handout tool or visual

poster with components for concepts such as goal setting, self-talk, checklist, or planning with a schedule. Aside from the above-mentioned strategies, teachers also utilized other evidence-based strategies to support self-regulation in their general education classroom. For example, teachers expressed using accommodations for students, such as flexible seating to assist with sensory regulation need. Teachers also discussed providing opportunities for sensory breaks, such walking or offering fidgets or allowing the students to choose the flexible seating they needed for the activity or period. Teachers also described implementing soft starts in which students eased into the day instead of simply entering the classroom and going straight to work. Teachers gave examples of how they allowed students to talk with their peers, or students engaged in play centers, and one student even had the opportunity to eat breakfast upon entering the classroom to help support with self-regulation. Teachers also described using rewards or praise to motivate students to use some of the self-regulation strategies. Teachers discussed using other peers to serve as models and help the students keep each other with checks when implementing some of the strategies. Teachers also shared that repetition of the strategies were important. The nine interviews were conducted after winter break up to the last day of school and teachers reflected how it was important to still repeat the strategies even if it was later in the school year.

Results from previous research indicated an increased percentage of students being prepared and on task with a self-regulation strategy utilizing a checklist with a student receiving special education services (Ness & Middleton, 2007). Teachers in this study were most familiar with concrete strategies or tools such as utilizing checklists to monitor academics and behaviors. Teachers also described how they had modified several versions of one checklist. While teachers did not specifically discuss the increase of positive behaviors, they implemented them class wide, not necessarily only with students receiving special education supports. Two teachers

expressed their dislike in using checklists, however the other seven teachers described successfully implementing the strategy in their daily classroom routines, sometimes with accommodations based on the student's developmental level or need.

Research Question 2: To what extent do teachers explicitly teach self-regulation strategies to their students in to support academic performance or behavior? Although self-regulation strategies are more intensive interventions than would be offered by the school-wide program, they could be designed and implemented by the classroom teacher in the general education context as well as by special education teachers in more restrictive settings (Menziez & Lane, 2011). Previous studies showed students requiring a combination of academic and behavioral intervention (Menziez & Lane, 2011). Little research exists regarding teacher's perceptions, teachings, and overall implementation of specified academic and behavioral self-regulation strategies, especially exploring these components through a qualitative framework.

The gap between evidence-based interventions and their application in actual school settings cannot be narrowed if teachers, those who actually implement the interventions are not informed that such interventions exist or trained in their use (Stormont et al., 2011). A previous study found 82% of teachers interviewed believed they learned classroom management skills after being hired (Merrit & Wheldall, 1993). Teacher training programs could integrate more opportunities to expose future teachers to evidence-based interventions and programs that can be applied when teachers are in the field. Teachers in this study agreed that they had learned skills and received specific training on evidence-based programs once they were hired and working on the job. Teachers did not remember strategies from their teacher training. All teachers were veteran teachers, with over 10 years of teaching experience, with the exception of one teacher that had only been teaching for four years. The teachers commented that what they had learned

in school would no longer be relevant in the present. Only one general education teacher shared that she had to take a special education course as a requirement of her teacher training.

Teachers in this study discussed implementing self-regulation strategies while reflecting on past experiences and also using lots of trial and error. Teachers discussed how the implementation of one tool may need to be tweaked to better fit the need of the individual student or class. Teachers shared materials needed to implement the strategies, for example, some teachers described having manuals or evidence-based programs, or they discussed using technology as a resource to guide them with implementation of strategies. Teachers also described using colleagues as supports and sometimes models to help them implement the self-regulation strategies in their own classrooms. Teachers also shared examples of how they modeled some of the strategies to their students, for example engaging in self-talk to express frustrations, moods or feelings or modeling how to plan backwards or create agendas.

Previous studies found that although teachers found the data collection and paperwork to be time consuming, it demonstrated that implementation of a class-wide self-regulation intervention could be feasible (Hoff & Ervin, 2013). Results from the study indicated that teachers were implementing self-regulation strategies in their general education classroom for academics and behaviors. However, it is important to note that not all teachers were motivated to use all the strategies, such as a collecting data with a chart. Teachers that did implement strategies alluded to the amount of time it takes to implement the strategies, for example they discussed learning from past experiences, researching either online, reading books or manuals, professional development, or being trained on evidence based programs through their district, time to create materials, the desire for more collaboration or plan time with other team members,

and above all patience as the implementation of strategies required lots of trial and error and also modeling and repetition of strategies.

Research Question 3: What experience/perception/knowledge do teachers' have about self-regulation strategies for academics or behaviors? As more schools are pushing for an inclusion model of instruction, more general education teachers are being assigned to serve general education students along with students with special education needs (Smart & Igo, 2010). Teacher-preparation programs often lack the concentration of teaching classroom management or self-regulation strategies for students in general education classrooms. Teachers in this study shared experiences with the problem-solving process as well as inclusionary practices within their general education setting. Teachers described appreciating when students were already identified as needing special education services as they alluded to the problem-solving process to take too long in identifying students for special education services. In this study, teachers shared that they sometimes struggled and were conflicted with the problem-solving process for students in the younger grades, such as Kindergarten. Teachers debated and had a difficult time determining whether a student needed more time to develop and if so, how much time to develop or if the student needed additional special education supports to service their self-regulation and other behavioral or academic needs. Teachers shared frustrations with the problem-solving process, especially when after implementing an intervention, collecting data, and the next step was not followed and then they described the data would be lost for the next grade and having to start all over again with the problem-solving process. School psychologists could support teacher frustrations with the problem-solving process by helping to identify the resources needed to guide the follow through of the process, for example navigating the next steps of the problem-solving process. In addition to collaboration with the general

education and special education teacher as a team could possibly also help alleviate some of the teacher frustrations.

Teachers discussed being frustrated with the length of the problem-solving process when a student exhibited extreme behavior deficits and safety became a concern for the students and staff. Teachers described being in crisis for months and staff members being pulled from their roles to help support students in crisis. Teachers also discussed how students that were already identified as needing special education services came into a general education classroom with additional supports or resources that not only supported the special education student, but also supported the general education teacher and classroom dynamics. Teachers identified inclusive practices helped with planning for students.

Teachers in this study also described rapport building as a component and showing empathy for students that needed support with self-regulation. Teachers appeared to be very passionate about their students and really cared about them. For example, one teacher took time out of her lunch period to build rapport with a student. Another teacher collaborated with a prior school district to make sure systems were put in place for when the student transferred into the new building. Through interviews and observations, teachers demonstrated their value in building rapport with individual students and whole classrooms. In addition, teachers appeared open and willing to learn about evidence-based programs and strategies to help them support their students needing self-regulation supports.

Courses tend to emphasize planning of lessons; however, classroom management is insufficiently addressed (Merritt & Wheldall, 1993) and teachers are often not prepared to manage student behavior due to lack of exposure of content (Freeman et al., 2014). Teachers described their experiences with several behavior challenges, including academic, sensory,

verbal, attention seeking/impulsivity, internalizing behaviors, such as anxiety, emotional regulation, physical behaviors, and extreme escalated behaviors they identified as outliers. Teachers in this study expressed not being prepared to manage student behavior due to lack of content, particularly with the students identified as outliers. Teachers stated that they were aware of self-regulation strategies and had successfully implemented them in the past, however they felt that the needs of the students had increased to extreme levels and they felt as if they needed more training and support to de-escalate the more violent student behaviors as teachers also described needing to evacuate classrooms due to the extreme behaviors presented by the students identified as outliers. Teachers expressed concerns for the classroom dynamics and concerns for the safety of other students when an outlier student became violently dysregulated. The teachers expressed not knowing what to do or who to ask for help as sometimes other staff members, such as the social worker or school psychologist were already de-escalating another crisis. The researcher experienced the lack of resources first-hand during one of the teacher observations. A student went into crisis and the teacher had to leave the classroom to assist the student in crisis. The teacher called for help however the researcher was left alone to monitor the class until a social worker was available to stay with the class. There is a great need for preparation and support with behaviors in the classroom. As discussed above, more plan time between teams including the general education teacher, special education teacher, school psychologist, principal, and other support services such as the social worker or occupational therapist could be beneficial to support problem solving, identifying resources and implementation of self-regulation strategies.

Research Question 4: What supports do teachers need to implement self-regulation strategies within a general education setting? Smart and Igo (2010) indicated that inclusion of

students with special education is increasingly becoming standard and regular education teachers would need to receive training that previously was dedicated toward special education teachers. Teachers in this study relied on the support of the special education teacher to help with supporting the needs of the students receiving special education services. However, the teachers also sought out the special education teacher to co-teach or to collaborate in implementing interventions, specifically for behaviors for general education students that were not identified as needing special education services.

While the above research described teachers not being informed on evidence-based interventions or that self-regulation strategies are more intense than would be offered as a Tier 1 strategy, the teachers in this study reported that they were knowledgeable on self-regulation strategies and through experience, trainings, collaborations with other team members, such as the school psychologist or special education teacher, they had developed a tool kit of strategies. However, five teachers in the study did indicate frustration or needing more physical human resources, planning time resources and training to implement self-regulation strategies with students they identified having extreme violent physical behaviors that were enrolled in general education settings that they sometimes referred to as outliers because it was only a couple of students, however they needed a significant amount of resources to support with self-regulation.

The teachers in this study described the need for opportunities to collaborate and consult with human supports to be physically present in classroom and also for emotional support. Teachers identified special education teachers, school psychologist, social workers, and principals as resources, however also acknowledged that colleagues in those roles were spread thin and not always available to consult with or to assist during a crisis. Teachers also referred to needing more trained staff in the classroom to support the teacher, for example teacher assistants.

Teachers described teacher assistants were sometimes assigned to classrooms to assist with students receiving special education services, however sometimes that teaching assistant also assisted with the whole class, which was helpful for the general education classroom teacher.

Teachers from the study also described needing more opportunities for plan time. Teachers desired more opportunities to plan for their whole class and also for individual students. Teachers also expressed needing more time to plan with the special education teacher or school psychologist. Teachers discussed how more plan time was also needed to create materials needed to implement the academic and behavior strategies. School psychologists could collaborate with the principal in developing systems to support the teachers create opportunities for more plan time.

Limitations of the Study

Limitations for this study include the small sample size as only one district was recruited and only three out of eight buildings from the district participated. Attempts to improve this limitation would be to recruit participants from various schools in the district or collect data from multiple districts. Teachers were recruited from various grade levels; preschool through eighth grade in attempts to get a broader sample size. The study did not recruit a preschool teacher. In addition, this study only had one special education teacher participant. Another potential limitation of the study is time as the researcher gathered information in one point of time, one semester and did not collect longitudinal information. Attempts to improve this limitation would be that the researcher could interact with the participant more than once and have up to three opportunities to interact with each participant. Another limitation of the study was that due to capacity, there was only one coder, the researcher did not have a research team to assist with the

coding, however triangulation of three data sources and across subjects was completed in the analysis.

Implications for Future Research

This qualitative study gained the perspectives of general education teachers experiences with implementation of self-regulation strategies and also provided insight on barriers that teachers encounter when it comes to implementing self-regulation strategies within a general education classroom setting. Teachers reflected on inclusive practices and some teachers emphasized their need for additional training and supports for students that demonstrated more extreme behaviors and were identified as outliers. Similarly, the researcher received courses in teacher education and school psychology. The researcher learned about interventions and self-regulation strategies in her school psychology studies, however that information would have been helpful to have learned during her teacher education training to implement in the general education classroom. Future research can continue to explore the amount of teacher training that has been received and the direction toward professional development opportunities that would be most beneficial to support teachers. Future research could continue to investigate the impact that extreme outlier behaviors have in general education classrooms for the student, teachers, building staff, and classmates and also learn more about the resources needed to support those classroom dynamics.

Future studies could also continue to gain more teacher perspectives regarding the problem-solving process as teachers in this study shared frustrations with the amount of time it was currently taken as well as the following through with components of the process. Teachers particularly expressed concerns and needing more supports with the problem-solving process regarding servicing younger age students and students with extreme violent behaviors that were

unidentified as eligible for special education supports. Future research could also explore the role of the school psychologist has in facilitation the problem-solving process, so teachers feel more supported and better interpret the process. For example, teachers reported frustrations when strategies or the process were not followed through to the following school year or grade level. The school psychologist could collaborate with the administration, general education, and special education teams to help create systems that would follow through for the following school year so that general education teachers do not continue to feel as if their hard work was not valued when the process has to start all over the following year.

The majority of participants in this study were veteran teachers. Future studies could explore if newer teachers had a different training experience. This study only had one specials teacher, a French teacher, future studies could expand on exploring the voice of these teachers that teach specials or elective courses as often times they see every student in the building and may share an additional perspective. This study only had one special education teacher participant. Future research could have a larger sample size and include more representatives of special education teachers to allow for more comparisons between general education teacher and special education teacher experiences, training and perspectives. Future research could also explore how direct interventions are implemented by special education teachers and the resources needed for general education to carry through the supports when the special education is not pushing into the classroom.

Implications for School Psychology and Practice

Another major theme the teachers reflected upon was the need for more plan time and collaboration time to provide teachers opportunities to discuss strategies and tools needed to assist students with the learning of self-regulation behaviors and also have the time to make

materials. Future research could continue to explore with school psychologists, teachers and administration ways to create more opportunities for consulting, collaboration, and planning for students needs during the regular school day.

With this study, school psychologists can gain a better understanding of the teacher's content knowledge and perceptions regarding self-regulation strategies along with supports needed to implement the strategies within general education classrooms. In addition, understanding teacher's perceptions of such self-regulation strategies and their experiences with implementation of them could help school psychologists and administrators understand the behavior supports needed provide teachers the tools to model and implement self-regulation strategies, as well as the feasibility of the practices within a general education classroom.

This study adds to the existing literature by the qualitative insight of teacher experiences and implementation of self-regulating strategies. School psychologists can further teach techniques that may have not been learned by teachers in their training. This study also informs the reader about barriers and challenges as well as explores possible supports needed to support implementation of self-regulation strategies within general education classrooms.

Conclusion

Little research has attempted to gain teacher's perceptions of utilizing self-regulation strategies in general education classrooms. Limited studies exist utilizing a quantitative approach to obtain the teacher perceptions and even less studies attempt to gain the perceptions through a qualitative framework.

Inadequate Preparation for Implementation of Self-Regulation Strategies

In the past, teachers have not received in depth training in their educational programs to support the navigation of classroom management or self-regulation strategies. With inclusion

more general education teachers are working with students eligible for special education services. General education teachers are also teaching students that have not been identified as needing special education services, however many still benefit from the implementation of interventions and tiered strategies. With inclusion, general education teachers are in need of more training. Teachers reported inadequate preparation for behavior management and instruction of self-regulation strategies. Teachers additionally reported coping with students with regulation while having inadequate resources to simultaneously implement self-regulation strategies and teaching academic content. Inclusion without services compromised the ability to support all students.

Teachers shared that most of their knowledge of self-regulation strategies did not come from their teacher training programs or from a University, teachers learned most of their strategies through on the job experience, collaborating with other support staff, such as the special education teacher and school psychologist, and their learned about strategies through professional development of evidenced-based programs or from reading manuals or books or searching for strategies using the internet. Future studies could explore ways to implement changes in teacher training to support more exposure to self-regulation and other behavior strategies.

Inadequate Resources to Successfully Implement Self-Regulation Strategies

Teachers shared their struggles with some behaviors, for example academic or internalizing behaviors, such as anxiety or lack of motivation in some students. Teachers emphasized their struggles navigating physical behaviors or emotional outbursts, sometimes referring to them as outliers as these behaviors were demonstrated by only a couple of students,

yet the intensity of behaviors took up a significant amount of staff resources and required more time to plan in supporting the student's regulation.

The teachers in the study expressed two main barriers for implementation of self-regulation strategies and those were the lack of resources such as time for planning and the need for more allocation of staff.

Inadequate plan time. Teachers expressed the need to have more opportunities to plan, as one teacher shared, there were days on their schedule when the teacher was with the students the whole day without a mental break or break to plan for the students. Some teachers also expressed frustration with the amount of planning and time that is needed through the problem-solving process. The teachers expressed the desire to have more opportunities to plan and collaborate with other staff members. For example, teachers shared that trial-and-error was used to identify the correct support for a student, therefore, planning time is essential to meet with the special education teacher or school psychologist to review strategies and ways to implement strategies in the classroom as well as the fidelity of the strategies and supports with data collection of the self-regulation strategies. Teachers shared they would like opportunities to have the time to observe other teachers and get ideas or other strategies from their colleagues. Teachers also expressed needing more time to make materials needed to implement self-regulation strategies. Future research could focus on finding ways to change current structures to allow additional supports and resources to allow for more opportunities for teachers to collaborate on the problem-solving process and time to plan for their students.

Need for additional staffing. The teachers in this study also expressed the lack of resources in terms of human supports and a need for additional staffing. For example, teachers expressed it was helpful when a classroom assistant or school psychologists could go into the

classroom and assist with data collection. They also expressed the need for more human supports to prevent or support during a crisis. Teachers shared that due to budget cuts, they had less opportunities to consult with the special education teachers or school psychologist that were already spread thin due to higher caseloads. Teachers also shared that they found it helpful with students had already been identified with special education services because when the student was already identified then that increased the likelihood of more human supports available to assist in the classroom in the form of a special education teacher, classroom assistant, or support service such as a social worker that pushed into the general education classroom to provide services. Teachers shared that oftentimes the extra human supports were designated to support students needing special education services, however the extra human supports provided assistance for the teacher and all students.

Overall, teachers in this study reported to being open to using self-regulation strategies. They shared that they had not learned strategies through University trainings, however learned more about self-regulation strategies through on the job experiences. While teachers appeared open to using self-regulation strategies, they also reported needing more resources such as planning time and additional staffing or human supports to successfully implement the self-regulation strategies. Future research could focus on ways to support more instruction in teacher prep programs at the University level. Future research could emphasize ways school psychologists can support teachers in training and successfully implementing self-regulation strategies. Future research could focus on ways to support teachers once they are in the field by providing them with more opportunities to be exposed to evidence-based self-regulation strategies and providing them with resources such as time to collaborate and problem solve with

other team members and also more time to plan for students in order for teachers to successfully implement evidence-based self-regulation strategies in general education classrooms.

APPENDIX A
DISTRICT AND PARTICIPANT RECRUITMENT LETTERS

Dear Administrator,

I am Sofia Flores, a doctoral candidate at Loyola University Chicago and a second-year School Psychologist in District 21. I am looking for participants interested in being a part of my doctoral dissertation study. As a former general education teacher, one of the biggest challenges I had was helping general education students self-regulate behaviors. I often felt lost and unsure how to best support my students who needed extra attention and supports to succeed within a general education classroom. When my career changed, I quickly realized that teachers in general education classrooms needed more supports to identify strategies that could potentially help regulate students' behaviors. I also discovered that special education classrooms received social-emotional supports due to required IEP goals; a service not typically provided to general education students. I recognized that although some tough behaviors exist in general education classrooms, it appeared that it was challenging to identify supports for the teachers and students within the general education classroom setting. I want to seek out more insight regarding teacher's understanding of self-regulation strategies and how they could potentially be utilized within general education classroom settings.

The purpose of my letter is to request consent from your district to interview general and special education teachers in your schools to obtain more insight regarding knowledge and implementation of self-regulation practices within general education classroom settings. I am looking to interview at least 15 teachers for about 1 hour. In addition, I am seeking to observe randomly-selected classrooms twice for a total of one hour. During the observations and interviews, I will also look to collect documents or artifacts that may demonstrate the implementation of self-regulation strategies. After I have transcribed all of the interviews, I will ask to meet with the teachers one more time to review my interpretations of the interview and to get the participants' input to ensure that I have understood their perception accurately. All teacher responses and observations will remain anonymous. Below I have attached an outline of my proposed study. Please contact me if you would be interested in permitting your teachers to participate in the study and if you have any questions. Thank you very much for your time, I look forward to hearing from you soon!

Sincerely,

Sofia Flores, M.Ed.

Dear Participant,

I am Sofia Flores, a doctoral candidate at Loyola University Chicago and a second-year School Psychologist in District 21. I am looking for participants who would be interested in being a part of my doctoral dissertation study. As a former general education teacher, one of the biggest challenges I had was helping general education students self-regulate behaviors. I often felt lost and unsure how to best support my students who needed extra attention and supports to succeed within a general education classroom. When my career changed, I quickly realized that teachers in general education classrooms needed more supports to identify strategies that could potentially help regulate students' behaviors. I also discovered that special education classrooms received social-emotional supports due to required IEP goals; a service not typically provided to general education students. I recognized that although some tough behaviors exist in general education classrooms, it appeared that it was challenging to identify supports for the teachers and students within the general education classroom setting. I want to seek out more insight regarding teacher's understanding of self-regulation strategies and how they could potentially be utilized within general education classroom settings.

The purpose of my letter is to ask if you would be interested in participating in my study. I am interested in obtaining more insight regarding teacher understanding and implementation of self-regulation practices within general education classroom settings. I am looking to interview each teacher for about 30-45 minutes. In addition, I am seeking to observe randomly-selected classrooms twice for a total of one hour. During the observations and interviews, I may also photograph documents or visuals that may pertain to self-regulation strategies. After I have transcribed all of the interviews, I will ask to meet with you one more time to review my interpretations of the interview and to get your input to ensure that I have understood their perception accurately. All responses and observations will remain anonymous. Below I have attached an outline of my proposed study. Please contact me if you would be interested in participating in my study and if you have any questions. Thank you very much for your time, I look forward to hearing from you soon!

Sincerely,

Sofia Flores, M.Ed.

APPENDIX B
CONSENT TO PARTICIPATE IN RESEARCH

Project Title: Teacher Perceptions and Experiences with Self-Regulation Strategies in General Education Classrooms

Researcher: Sofia Flores, M.Ed.

Faculty Sponsor: Gina Coffee, PhD

Introduction:

You are being asked to take part in a research study being conducted by Sofia Flores for a dissertation under the supervision of Dr. Gina Coffee in the Department of School Psychology at Loyola University in Chicago.

You are being asked to participate because you are a general education teacher and have a unique perspective regarding your experience with supporting student's self-regulation for both academic and behavioral needs. Your insights and experiences are of particular importance in this study.

Please read this form carefully, and contact the principal investigator, Sofia Flores at (773) 875-2143 or SFlores2@luc.edu, with any questions you may have before deciding whether or not to participate in the study.

Purpose:

The purpose of this qualitative research study is to explore general education teachers' experiences and perceptions regarding teaching students self-regulation strategies for academics and social-emotional behaviors. Self-regulation strategies can serve as positive intervention strategies to benefit student academics and social-emotional behaviors. Given the effectiveness of self-regulation strategies, yet the paucity of data regarding teachers' use in the classroom, it may be beneficial to explore this further.

To gather this information, we are asking teachers to participate in an interview and potentially partake in two classroom observations. In addition, the researcher may take pictures of documents or visuals that may be displayed in the classroom. Based on the responses, we will have a better understanding of teacher's understanding and practices of implementing self-regulation strategies in general education classrooms. We will also get a better understanding of the obstacles that may hinder the practices in general education settings.

Procedures:

If you agree to participate in this study, you will be asked to complete the following steps:

1. Please read and complete this consent form (see page 3).
2. After we receive your signed consent form, we will call you at the phone number you provide to invite you to a interview session and to potentially schedule two classroom observations.
3. You will potentially be asked to schedule two classroom observations in which the researcher will observe the classroom for 30 minutes each visit to observe classroom strategies.
4. You will be asked to participate in an interview where you will be asked questions regarding your understanding and experiences with implementation of self-regulation strategies in general education classrooms.
5. The interview will be conducted by the researcher and will take approximately 45 minutes.

6. Unless you do not consent to audio-recording, interviews will be audio-recorded and transcribed. Notes will also be taken.
7. Photographs of documents or visuals that pertain to self-regulation strategies may also be taken.
8. Unless you do not consent to photography, documents and visuals may be photographed.
9. You will also be asked to participate in a 5-10 minute check for accuracy in the near future to ensure the researcher reflected your insights accurately.

Risks:

There are few foreseeable risks involved in participating in this research beyond those experienced in everyday life.

Benefits:

Direct benefits of participation cannot be guaranteed. However, if you participate in this study, you will have the opportunity to tell us about your experiences and perceptions of self-regulation strategies and how its implementation may impact general education student's academics and behaviors.

Confidentiality:

All records that identify you will be kept confidential. Also, although interviews will be audio taped, you will be assigned a pseudonym or participant number and will only be identified by this name or number (not your name) on the audiotape. Only the researcher will have access to the personally identifiable data in this study. When data collection is complete, consent forms, demographic information, audiotapes, and transcripts from the interview sessions, and observation protocols will be kept in the researcher's locked office and will be kept for a minimum of 3 years. Consent forms and a list that shows a number assignment for each participant (e.g., Sam = 001) will be kept separate from all other data. Furthermore, names will not be revealed on any forms containing information about participants or in any published reports of the findings.

Voluntary Participation:

Participation in this study is voluntary. If you do not wish to participate in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty.

Contacts and Questions:

If you have questions about this research study, please feel free to contact Sofia Flores at (773) 875-2143 or SFlores2@luc.edu or the faculty sponsor, Dr. Gina Coffee at (312) 915-6854 or gcoffee@luc.edu.

If you have questions about your rights as a research participant, you may contact the Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent, including audio-recording:

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study. You will be given a copy of this form to keep for your records.

Participant's Signature

Date

Researcher's Signature

Date
Sign here only if you consent to participation but not to audio recording.**Statement of Consent, excluding audio-recording:**

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study, but do not consent to being audio-recorded. You will be given a copy of this form to keep for your records.

Participant's Signature

Date

Researcher's Signature

Date
Sign here only if you consent to participation but not to photograph of artifacts.**Statement of Consent, excluding photograph of artifacts:**

Your signature below indicates that you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study, but do not consent to photograph of artifacts. You will be given a copy of this form to keep for your records.

Participant's Signature

Date

Researcher's Signature

Date

APPENDIX C
TEACHER INTERVIEW PROTOCOL

Location, Duration, and Format

Interviews will be conducted in a semi-structured format at participating district/school. The participants will be teachers who have had experience teaching in general education classrooms. The participants will be asked questions relating to their own experiences and training working with general education students who may need extra academic and social-emotional supports, specifically participants will be asked about their perceptions and practices involving student self-regulation strategies. Participants may be asked to provide visual samples of tools if applicable. Their responses will be audio taped and the moderator will also take notes on their responses. The interviews will take approximately 30 minutes.

Roles of Those Conducting the Interview

Interviewer. The interviewer will be in charge of asking interview questions. In addition, the interviewer will summarize responses for participant's reflection and probe for additional information as necessary. The interviewer will also be in charge of audio taping, taking notes, assigning a participant number.

Procedures

1. Welcoming the participant as he or she enters.

Thank you very much for agreeing to participate in this interview, I really appreciate your time in this process. There are two parts to today's meeting. The first part is an interview with questions asking about your perception and experiences with self-regulation strategies in the general education classroom. I may ask you for visuals or documents so I may have a better understanding of supports provided in the class. The interviewer will assign the participant a number.

 - a. The interviewer will also give participants a copy of the consent form.
1. Overview of session and consent
 - a. The interviewer will explain the procedure for the session, noting that participants are free to leave at any time and are free to get up to go use the bathroom or take care of any other needs. The interviewer will note that the combined session will take about thirty to forty-five minutes at a maximum.
 - b. The interviewer will set ground rules for respect and confidentiality, explaining that nothing that is said in the room will be discussed outside of research purposes and that the participant's identity will remain anonymous.
 - c. The interviewer will note that their responses will be audiotaped and transcribed and that only their number will be associated with their responses. The interviewer will also explain that the audio tapes, notes, photographs and transcripts will be stored in secure location to which only the researcher has access. All of this will also be explained in the consent form.
 - d. The interviewer will read the consent form, answer any questions, and participants who consent to participate will sign the consent form.

2. Interview session

- a. Once the consent form is signed and any participant who does not consent to participate has left, the facilitator will start the audio recorder.
- b. The interviewer runs the session by asking questions, summarizing responses for the participant's reflection as needed, and probing for more information if necessary.
- c. Once all questions are answered, the interviewer will thank the participant for his or her participation in the study.
- d. The interviewer will ask the participant if they have any questions.
- e. Once any questions are asked and answered, the interviewer will turn off the audio-recorder.
- f. The interviewer will schedule a time for member-checking.
- g. After dates have been scheduled, the participant will be thanked again for their time and will be dismissed.

Interview Questions

Questions are in bold

Probes that can be used if necessary are in *italics*

1. How many years have you been teaching in general education? Special education?

What grades have you taught?

2. If you think about behaviors in your classroom, what has been the most challenging in the past year? What strategies did you use to address this behavior?

3. Tell me about your thoughts and experiences implementing breathing techniques or counting to 10 in a general education classroom?

How comfortable and/or knowledgeable do you feel in implementing breathing techniques to help regulate behaviors in your classroom? Academics?

How feasible do you think it is to implement a self-regulation strategy such as breathing into your daily class routine?

When could you use this strategy?

Would a strategy like this be most beneficial for a large group, small group, or individual intervention? Explain why.

Do you have a visual of this strategy that I could photograph? (if applicable)

4. Tell me about your thoughts and experiences teaching your students how to plan or set a goal for either an academic or behavior purpose?

How comfortable/knowledgeable do you feel in teaching students how to plan or set a goal to help regulate behaviors in your classroom? What about for academics?

How feasible do you think it is to teach and implement a planning strategy into your daily class routine?

When could you use this strategy?

Would a strategy like this be most beneficial for a large group, small group, or individual intervention? Explain why.

Do you have a visual of this strategy that I could photograph? (if applicable)

5. Tell me about your thoughts and experiences teaching your students how to self-talk through behaviors? For example, talking through their actions or replacing negative thoughts with positive thoughts.

How comfortable/knowledgeable do you feel in teaching students how to self-talk to help regulate behaviors in your classroom? What about for academics?

How feasible do you think it is to teach and implement self-talk strategies into your daily class routine?

When could you use this strategy?

Would a strategy like this be most beneficial for a large group, small group, or individual intervention? Explain why.

Do you have a visual of this strategy that I could photograph? (if applicable)

6. Tell me your thoughts and experiences regarding teaching your students how to self-monitor their behaviors? For example, using a timer, visual schedule or student checklist or graph to keep track of behaviors or academics.

How comfortable/knowledgeable do you feel in teaching self-monitoring techniques to help regulate behaviors in your classroom? What about for academics?

How feasible do you think it is to teach and implement a self-monitoring strategy into your daily class routine?

When could you use this strategy?

Would a strategy like this be most beneficial for a large group, small group, or individual intervention? Explain why.

Do you have a visual of this strategy that I could photograph? (if applicable)

7. Tell me your thoughts on using intrinsic or extrinsic rewards to motivate students?

What would be examples of intrinsic rewards you would use in your classroom?

What would be examples of extrinsic rewards you would use in your classroom?

Is there one you favor over the other and if so what are the reasons?

8. Tell me your thoughts and experiences regarding modeling to students self-regulating strategies? (ex. Breathing techniques, planning or setting a goal, self talk, self monitoring-graphing, checklist)

How comfortable/knowledgeable do you feel in modeling for student's self-regulating behaviors (ex. Breathing techniques, planning or setting a goal, self talk, self monitoring-graphing, checklist) in your classroom? What about for academics?

How feasible do you think it is to model and implement self-regulation strategies into your daily class routine? (ex. Breathing techniques, planning or setting a goal, self talk, self monitoring-graphing, checklist)

9. What are some of the supports that you have experienced in terms of implementing self-regulation strategies in general education classroom for behaviors?

What information or supports would you need to feel more comfortable or more confident in teaching students' self-regulation behaviors? (ex. Breathing techniques, planning or setting a goal, self talk, self monitoring-graphing, checklist)

10. What have been the greatest barriers that you have experienced in terms of trying or implementing self-regulation strategies in a general education classroom for behaviors? Academics?

How would student attention impact implementation?

How feasible is it to implement self-regulation strategies within the daily routine?

How could consistency be improved?

I really appreciate your time and participation in this interview. Is there anything else I did not ask that you would like to share regarding your thoughts or experiences in relation to the implementation of self-regulating strategies in the classroom?

Thank you again very much for your time and participation in this study. Your discussion has helped me gain a better understanding of your experiences in the classroom. I am planning to contact all participants one more time after I analyze what was said in order to ensure that I have accurately represented your views.

APPENDIX D
OBSERVATION PROTOCOL

DATE/TIME	CLASSROOM #	PARTICIPANT #

Purpose: What self-regulation strategies are implemented within a daily routine?

Descriptive Notes	Reflective Notes

APPENDIX E
DOCUMENT ANALYSIS CHECKLIST

Observed Strategy	Yes	No	Observer Comments
Visual Schedule (ex. Daily routine, planning 1, 2, 3)			
Graphs (ex. grades, missing assignments, behaviors)			
Self Talk Visuals (ex. I can...breathing, counting)			
Timers (specify)			
Checklists (ex. Student self-monitoring sheets or boardmaker strips)			
Other (specify)			

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VITA

Dr. Flores-Perez was born and raised in Chicago, Illinois. Before attending Loyola University Chicago, she attended the University of Illinois in Urbana-Champaign, where she earned a Bachelor's of Science in Human Development and Family Studies-Child Development in 2004. She also attended DePaul University, where she earned a Master's in Teaching and Learning Early Childhood Education in 2006. Dr. Flores-Perez has previous experience as an Early Childhood Teacher in the Chicago Public Schools.

While at Loyola, Dr. Flores-Perez earned a Master's in Educational Psychology in 2010. While at Loyola, Dr. Flores-Perez was actively involved in various research teams ranging in interests from home-school collaboration, advocating for students that were homeless, and implementation of multi-tiered systems supports for academics and behaviors in public and private schools.

Dr. Flores-Perez is currently a School Psychologist at Hawthorne Early Childhood in Community Consolidated School District 21 in Wheeling, Illinois.