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THE EFFECTIVENESS OF SELF-REGULATING STRATEGIES ON ON-TASK BEHAVIORS OF A STUDENT WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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Submitted to the faculty of the Office of the Graduate School

in partial fulfillment of the requirements

for the degree

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in the Department of Professional Studies

Indiana University- Purdue University Fort Wayne

May, 2015

Accepted by the Graduate Faculty, Indiana University-Purdue University Fort Wayne, in partial fulfillment of the requirements for the degree of Master of Science in Education with a major in Special Education.

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Abstract

Attention deficit/hyperactivity disorder (ADHD) has been on the rise over the past ten years, increasing to approximately eleven percent of the student population. Children with ADHD often struggle in the classroom both academically and behaviorally. While teachers work to manage the difficult behaviors, many recognize the benefits of teaching students to regulate their own behaviors. Self-regulating is an effective strategy to address academic and behavior challenges in students including those with ADHD. Self-regulating has been found to be successful in bringing about more on-task behaviors for students as well as creating an environment that requires less teacher monitoring of behaviors. Through self-regulating, students become aware of their own behaviors and learn to change those behaviors through various methods. A study was designed for a third grade student with ADHD. The study took place in a parochial school of approximately 200 students in a Midwestern city. Using a single-subject experimental design, four self-regulating strategies were implemented to determine the effectiveness of increasing on-task behaviors during independent work time in Reading and Math classes. Baseline data was collected over three days in both classes. Four different self-regulating strategies, self-monitoring, self-monitoring plus reinforcement, self-reinforcement, and self-management were taught and implemented, each lasting four days in Reading and Math classes. Data was collected and analyzed. The results indicated that the intervention of self-management appeared to be the most effective for the student, however all of the interventions brought about a significant increase in on-task behaviors in Reading and Math class. The study clearly reveals that self-regulating strategies are viable interventions to bring about more on-task behaviors for students with ADHD.

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And to all my students and fellow teachers, it is through my experiences with you that I chose to research ADHD. I pray that as each of us are challenged with future students, we always see the potential in each child and strive to reach and teach them in the ways in which they learn.

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Chapter 1

Introduction

Attention deficit hyperactivity disorder (ADHD) is a common disorder that affects approximately eleven percent of school children ages four to seventeen (Centers for Disease Control and Prevention, 2014). Children with ADHD are often academically challenged, have difficulty with peers, engage in disruptive behaviors, are more likely to drop out of high school and are less likely to continue onto higher education (DuPaul, Eckert & Vilardo, 2012). General education teachers are likely to have students with ADHD in their classrooms and need effective ways to engage this population of students to bring about success in the classroom. Self-regulating strategies have been an effective approach to managing the behaviors of ADHD students in the general education setting (Briesch & Chafouleas, 2009).

Statement of Problem

Students with ADHD generally have a difficult time remaining on-task in the classroom. Due to this difficulty, students with ADHD often have academic and behavioral problems (Hoff & Ervin, 2012). While many children with this disability take medication to control the unwanted behaviors brought about by ADHD, research suggests providing students with the skills to self-regulate their behaviors may help bring about more positive behaviors (Reid, Trout, & Schartz, 2005). Teachers desire to work effectively with all of their students including those with ADHD. However, teachers recognize their lack of knowledge and training in that area (Nowacek & Mamlin, 2007; Weyandt, Fulton, Schepman, Verdi, & Wilson, 2009).

Significance of the Study

Statistically, every teacher will have at least one student with ADHD in their classroom each year, and teachers need to know strategies to effectively work with these students. (Anderson, Watt, & Noble, 2012). While there is a plethora of information in regards to ADHD by way of articles, DVD's, websites, and books, teachers do not always seek out that information for various reasons. Handbooks often have more information than is needed that it may become overwhelming to the teacher. Other handbooks are expensive and may be technical in language. By providing teachers with a concise handbook highlighting ADHD and self-regulating strategies, teachers will have the essential information and resources to work effectively with students with ADHD.

Purpose of the Study

The purpose of the study was to determine the benefits of using self-regulating strategies to improve on-task behaviors among a student with ADHD. In addition, the study revealed which method of self-regulating was most effective for the student. Finally, ease of implementation for the teacher and usefulness as perceived by the student was discussed.

Research Approach

The approach was a single-subject experimental design. Data was collected on observations that occurred prior to intervention implementation to determine a baseline. Each intervention was introduced and implemented. Observations were recorded to identify the effect of each intervention in promoting on-task behaviors of a student with ADHD (Creswell, 2012).

Literature Review

Attention Deficit Hyperactivity Disorder. There has been an increase in children identified with attention deficit hyperactivity disorder (ADHD) over the past 20 years. In 2000, four to five million children or about five percent were diagnosed with ADHD (DuPaul et al., 2012). In a 2013 survey by the Centers for Disease Control and Prevention (CDC), approximately eleven percent of the school age students ages four to seventeen have been diagnosed with ADHD, doubling the number of students over the past 13 years. Students with ADHD are at greater risk for academic failure and have an above-average rate of dropping out of school. Students with this disorder are often categorized as inattentive, impulsive, and hyperactive (Ganz, 2008).

Teacher Knowledge of ADHD. Current research has indicated that most teachers have limited understanding of ADHD. Additionally, teachers with a higher knowledge of the disability are more likely to implement strategies in their classroom but have a lower confidence in working with these difficult students (Anderson et al., 2012). However, studies have shown the majority of teachers have inaccurate information or beliefs about ADHD. In order for teachers to work effectively with students with ADHD, teachers need to know factual information about them. Additionally, research indicates teachers have limited knowledge about research based strategies to best serve these challenging students and have received little to no professional development in any areas in regards to ADHD. Research also indicates teachers desire more knowledge about ADHD and effective interventions (Weyandt et al., 2009).

Self-Regulating. Self-regulating strategies, an intervention in which students learn to monitor their own behaviors, offers students methods to manage and take control

of their own behaviors (Briesch & Chafouleaus, 2009; DuPaul et al., 2012). Selfregulating offers many benefits for students in that it 1) provides students with a more accurate picture of the behaviors or progress; 2) provides students with immediate feedback, and 3) facilitates better communication between parent and student due to students recognizing their progress. Additionally, self-regulating is beneficial for teachers due to its ease of implementation as well as bringing about more independence for students (Wehmeyer & Field, 2007). There are different types of self-regulating strategies, 1) self-monitoring; 2) self-monitoring with reinforcement; 3) selfreinforcement; and 4) self-management. While each strategy has some uniqueness from the others, the goal for all the strategies remains the same; to empower students to control behaviors. All of the strategies begin with choosing a target behavior. Discussion then occurs about the benefits of self-regulating. A measurement system is determined as well as the method of self-regulating strategies. The student learns how to self-regulate and learns examples and non-examples of the target behavior. The student then self-regulates their behaviors at the expected situations and time.

Self-monitoring is one type of self-regulating strategy used to change a target behavior. During a designated time in the classroom, such as independent work time, the student hears a tone or cue and records whether or not they are on-task (Harris, Friedlander, Saddler, Frizzelle, & Graham, 2005). The goal is that the student will engage in more on-task behaviors than off-task behaviors. Another self-regulating strategy is self-monitoring with reinforcement. This strategy is similar to self-monitoring but this strategy provides a reinforcer to the student to promote the behavior change. The reinforcer may be a sticker or chip for the student to collect and use towards some type of prize that motivates the student.

The self-regulating strategy of self-reinforcement requires a student to make a personal goal for a change in the target behavior. The goal should be attainable but one that challenges the student. The student self-monitors his or her behavior like other self-regulating strategies in previous studies. If the student reaches the goal, he or she obtains a reinforcer (Briesch & Chafouleas, 2009).

In the final self-regulating strategy, self-management, the student self-monitors during a determined period and evaluates his or her behavior. An observer, typically the classroom teacher, also monitors and documents the student's behavior and the data between the two will be compared. If the observations are consistent, the student is provided a reinforcer (Reid et al., 2005). Self-management assists students in documenting behaviors correctly. Self-regulating has been shown to increase on-task behaviors and decrease off-task behaviors in students with ADHD as well as improve performance (Ganz, 2008; Zirpoli, 2012).

Methodology

Subject. The subject of the study was a third grade boy who has been diagnosed with ADHD and is currently on medication. The student received small group instruction for 30 minutes in the areas of Math and Reading daily by the special education teacher (primary investigator). The student had an Individual Service Plan (ISP) and qualified for special education services under Other Health Impairment (OHI).

Setting. The setting of the study was a parochial school of approximately 200 students in Midwestern United States. The school was in the surrounding area of a city of approximately 250,000 residents. At the time of the study, the school has six students

who had Individual Service Plans (ISP). There were eleven teachers, four teacher aides, and one special education teacher.

Design. The project was a single-subject experimental design. Baseline data of the subject was collected through six observations and recorded (see Appendix A for Student Observation Form). Each of four self-regulating strategies were individually taught and there were teacher observations of on-task behavior as well as student selfmonitoring data collected and recorded over eight class periods. The detailed implementation information can be found in the IRB application (see Appendix B for IRB application).

Recruitment and Data Collection Procedures

An application was sent to the Institutional Review Board and the study has received the approval of the IRB as well as the building administrator (see Appendix B for Administrator's letter). The student subject was enrolled in the classroom of the coinvestigator. Observations for baseline data occurred over six class periods. The procedure for each self-regulating strategy consisted of teaching the strategy during a class period and recording observation data over eight class periods.

Data Analysis Procedures/Methods

Data was collected for the baseline and each intervention. Data was visually analyzed and graphs constructed to display data. A student observation form was utilized using a frequency count to determine the percentage of on-task behavior. Comparing the percentages of on-task behavior for each intervention provided information on the effectiveness of each intervention on the target behavior. Comparison of frequency counts between the observer and student data determined the accuracy of the student's recording (Zirpoli, 2012).

Timeline

Observations of the target student began as soon as IRB approval was received. The baseline observations were taken during six instructional periods. Each strategy was taught for ten minutes during two instructional periods. The observations for each strategy occurred each day for 15 minutes during Math and Reading independent work time. Each self-regulating strategy was observed over eight instructional periods.

Outline for Development of the Special Project

The format of the project is a handbook that provides teachers information about ADHD as well as address some common misperceptions. The handbook will thoroughly explain the role of self-regulating strategies in the general education classroom and provide steps for implementation for individuals and whole classrooms. Teacher and student resources were included. Work on the Special Project continued through the remainder of the fall and spring semesters

Summary

Students with ADHD will continue to be a part of the general education classroom. These students may bring about unique challenges for the classroom teacher. In order to best serve students with ADHD, teachers need to become more knowledgeable about ADHD. Additionally, knowledge about proven strategies such as self-regulating strategies will provide teachers with additional interventions to manage their students with ADHD. The handbook will provide teachers with accurate information about ADHD and how it affects students in the classroom. The handbook will also provide teachers the steps to empower their students through the use of selfregulating strategies.

Definition of Terms

Various terminology is used in special education as well as in the research of selfregulating. The following terms should be noted.

Attention Deficit Hyperactivity Disorder - attention deficit disorder and attention deficit hyperactivity disorder are medical conditions characterized by a child's inability to focus, while possessing impulsivity, fidgeting and inattention

Baseline Data - data taken over a period of time in a typical setting before implementing an intervention

Comorbidity - disabilities existing simultaneously with and usually independently of another condition

Goals - observable, measurable and attainable targets based on the baseline data

Intervention - a planned set of procedures that are aimed at teaching a specific set of academic or social skills to a student

On-task behaviors - behaviors related to various academic or instructional tasks **Other Health Impairment (OHI)** - term used to describe limited strength, vitality and

alertness that results in limited ability in the educational environment

Reinforcer - a stimulus as a reward that increases the probability of a desired response in operant conditioning by being applied or effected following the desired response **Self-Regulating** - a number of methods used by students to manage, monitor, record, and/or assess their behavior or achievement

Chapter 2

Literature Review

Introduction

It is estimated that eleven percent of school-age children ages four through seventeen, have been diagnosed with attention deficit hyperactivity disorder (ADHD). Based on the statistics, every teacher will likely have at least one student with ADHD in their classroom (CDC, 2014). Students with ADHD may qualify for special education under the Individuals with Disabilities Act (IDEA) of 1990. The disability in itself is not listed as one of the 13 categories under IDEA, but is part of the category of Other Health Impairment (OHI). Children with ADHD may have challenging behaviors due to difficulties in the areas of hyperactivity, impulsivity or inattentiveness. Additionally, as students with ADHD engage in more challenging behaviors, the risk of academic and social concerns increase (Reid et al., 2005).

The challenges and concerns that accompany those with ADHD are found not only with the students but also with those who teach. Teachers have identified dealing with disruptive behaviors as one of the greatest sources of frustration in their vocation and for many, one of the main causes of leaving their profession (Hoff & Ervin, 2013). However, research reveals that teachers have a lack of knowledge and understanding of ADHD as well as how to effectively meet the needs of these students. Giving teachers effective strategies to manage the behaviors of those with ADHD may bring about less disruptions and increase effective instructional time during the school day (Briesch & Chafouleas, 2009). Many behavior strategies have been promoted as a means to bring about positive behaviors for students with ADHD. In the midst of them, self-regulating strategies have been identified as a way to empower the student to manage their own behaviors, bringing about less management of behaviors by the teacher (DuPaul et al., 2012; Ganz, 2008).

Purpose Statement

The purpose of the study is to investigate the effectiveness of self-regulating strategies on a student with ADHD. The study is aimed at the changes in a student's ontask behaviors as well as determining if one particular strategy is more effective. In order to achieve this purpose, the following topics will be addressed in the existing literature: History of Attention Deficit Hyperactivity Disorders, Legal Rights for Students with Attention Deficit Hyperactivity Disorder, Characteristics of Attention Deficit Hyperactivity Disorders, Concerns for Students with Attention Deficit Hyperactivity Disorders, Comorbidity and ADHD, Teacher Knowledge of Attention Deficit Hyperactivity Disorders, Interventions including Self-Regulating Interventions, and Goals and Reinforcers.

History of ADHD

While ADHD may be considered a newer disability, its history dates back to as early as 1798. Dr. Alexander Crichton wrote a paper entitled, "Mental Restlessness." The paper discussed behaviors of children that were inattentive and easily distracted. Researchers see the similarity between Crichton's characteristics of children with those of today with the ADHD characteristic of inattentiveness. Interestingly, Crichton's feelings were that these children, who had the "fidgets," were in need of special education.

In 1809, the book, Observations on Madness and Melancholy, by John Haslam

provided characteristics of a child who under today's criteria, would be diagnosed with ADHD and Oppositional Defiance Disorder (ODD). Haslam characterized the child as "mischievous and uncontrollable....he had limited attention span...". (Fitzgerald et al., 2007). Then in 1845, Dr. Heinrich Hoffman created a book based on characteristics seen in children. One of his stories was entitle, "Fidgety Phil".

> "Let me see if Philip can Be a little gentleman; Let me see if he is able To sit still for once at the table." Thus Papa bade Phil behave; And Mama looked very grave. But Fidgety Phil, He won't sit still; He wriggles, And giggles, And then, I declare, Swings backwards and forwards, And tilts up his chair, Just like any rocking horse--"Philip! I am getting cross!" See the naughty, restless child Growing still more rude and wild, Till his chair falls over quite.

Philip screams with all his might,
Catches at the cloth, but then
That makes matters worse again.
Down upon the ground they fall,
Glasses, plates, knives, forks and all.
How Mama did fret and frown,
When she saw them tumbling down!
And Papa made such a face!
Philip is in sad disgrace . . .

Similarities can be seen between Hoffman's description of a child in 1845 and the often seen characteristics of today's student diagnosed with ADHD (Hoffman, 1844).

During the early 1900's, several physicians documented behaviors of children with descriptions such as fidgety, mischievous, over-active and distractible. At this time, these symptoms were attributed to some type of brain damage or disorder. In 1937, the first benefits of medication were documented by Charles Bradley. Bradley gave Benzedrine to children for treatment of headaches and found the medication also improved behavior (Fitzgerald et al., 2007).

The 1960's brought about a change in the opinions of physicians. While the inappropriate behaviors had been previously deemed brain damage, physicians began to consider more closely the behaviors and attribute them to 'minimal brain dysfunction'. It was during this time, a clinician, M. W. Laufer, began using the term 'hyperkinetic behavior syndrome'. The symptoms of this disorder included hyperactivity and impulsivity. It was also during this time that the Diagnostic and Statistical Manual of

Mental Disorders (DSM-II) was created as well as rating scales for teachers and parents to document the behaviors of children. The focus of behaviors remained on those associated with hyperactivity, distractibility and attention problems. It was also an assumption during this time that as children grew into adolescence, the behaviors would cease (Fitzgerald et al., 2007; Weyandt, 2007).

In the 1970's and 80's, interest continued in the area of attention difficulties. Virginia Douglas, from McGill University, considered attention problems being caused by an underlying condition of hyperactivity and impulse control. It was through Douglas' working that the DSM-III was published and added the categories of attention deficits with and without hyperactivity (Dowdy, Patton, Smith & Polloway, 1998; Fitzgerald et al., 2007; Weyandt, 2007). In 1987 the DSM-III-R was again revised. While the disorder was still called Attention Deficit Disorders (ADD), three categories existed including inattention, impulsivity and hyperactivity. In addition to the previous categories, another category entitled, Undifferentiated Attention Deficit Disorder was named.

In 1994, the DSM went under further revisions and the DSM-IV was published. The DSM-IV renamed ADD to the current identification of ADHD (Fitzgerald, Bellgrove & Gill, 2007; Weyandt, 2007). Finally, in 2013, the DSM-5 was published and became the criteria used today (DuPaul, Gormley, Laracy, 2013). The DSM-5 brought about a few changes such as renaming the different categories of ADHD to Predominantly Hyperactive/Impulsive Presentation, Predominantly Inattentive Presentation, and Combined Presentation. The new criterion also gave examples of how each of the presentations might appear in students with ADHD. Additionally, the new DSM-5 was considered to be more lenient in regards to the onset of symptoms for children being diagnosed with ADHD. In the DSM-IV, the onset of symptoms had to occur before age seven. For the DSM-5, the symptoms must have occurred before age 12. One other area that was considered to be more lenient was the multiple settings requirement. The DSM-IV criterion stated that the symptoms had to cause impairment in at least two different settings that were determined to undermine the child's functioning. While symptoms need to be seen in two or more settings for the DSM-5, the symptoms do not need to impair functioning (DSM-5, 2013).

Legal Rights

In order to ensure legal rights for those with ADHD and all disabilities, two federal laws guarantee a free and appropriate public education (FAPE). The laws were Section 504 of the Rehabilitation Act (1973) and the Individuals with Disabilities Education Act (IDEA). While these laws both protect the rights of those in special education to have public education at no expense, there are differences between them.

Section 504 plan. Section 504 Plans guarantee that children are not being discriminated against due to their disabilities. Schools that receive funds from the federal government must serve students with disabilities. To qualify for a 504 plan, a person must have a disability which is a "physical or mental impairment" that limits at least one major life activity. Due to the seriousness of a disability, some students may not qualify under Individuals with Disabilities Act (IDEA, 1990) but will qualify for a 504 Plan. Students who qualify for a 504 plan are given accommodations based on their disability. Under Section 504, a student does not have a named category of disability. Section 504 plans are protected in both public and private schools (National Resource Center on ADHD).

Individual with Disabilities Education Act. In 1991 specific services were declared for students with ADHD in regards to their education under IDEA. Under IDEA, a student may receive services in a public school setting (Special Education) if it is determined that their disability affects their academic progress. If a student qualifies for Special Education, the student is to be educated in the Least Restrictive Environment (LRE) which is typically the general education classroom. There are 13 disability categories under IDEA. For a student with ADHD, the student is qualified in the category of Other Health Impairment (OHI) and receives services and accommodations necessary to meet the needs of their disability (IDEA, 1990).

Representative Characteristics of ADHD

ADHD is one of the earliest disorders identified in young children (Anderson et al., 2012; DuPaul & Stoner, 2003). To determine whether or not a child has ADHD, it is often parents as well as teachers that are involved in the observations that may lead to a diagnosis (West, Taylor, Houghton, & Hudyma, 2005). In *The American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders*, the DSM-5 provides the criteria to diagnose a person with ADHD. In order for a child to be diagnosed with ADHD, particular symptoms must exist before the age of twelve and the behaviors must have occurred for at least six months. Additionally, the symptoms must been present in two or more settings such as at school, home, or play, and "reduce the quality of social, academic, or occupational functioning". Based on the dominance and frequency of characteristics seen through observations, a medical doctor may diagnose ADHD as one of three subtypes: Predominantly Inattentive Presentation, Predominantly Hyperactive/Impulsive Presentation, and Combined Presentation. Each of the presentations has defining characteristics that bring about academic, social, and behavioral challenges in the classroom (Weyandt, 2007).

Predominantly inattentive presentation. It is estimated that for those diagnosed with ADHD, 20 to 30% fall into the predominantly inattentive subtype with a larger percentage being girls. Children with inattentiveness are often characterized as daydreamers and have difficulty maintaining attention or staying with difficult tasks (DuPaul & Stoner, 2003). Children in this subtype often lose things, have difficulty following directs, and fail to give attention to details (DSM-5, 2013). Research suggests students in this category have a slower processing speed and have more difficulty with memory retrieval (DuPaul & Stoner, 2003; Flick, 2010). While children with the predominantly inattentive presentation generally have fewer overt behavioral problems than the other presentations, these students have a greater likelihood of having anxiety problems (Fitzgerald et al., 2007).

Predominantly hyperactivity/impulsive presentation. Approximately 15% of children with ADHD are characterized as the predominantly hyperactive/impulsive presentation (DuPaul & Stoner, 2003). Children with this presentation often blurt out in the classroom and fail to think before they act. Additionally these children seem to always be moving and have a tendency to fidget or squirm (Weyandt, 2007). Children that are predominantly hyperactive or impulsive tend to talk excessively and blurt out or interrupt others. They have difficulty waiting their turn and may intrude on others (DSM-5). While characteristics of this presentation are seen at various ages, research indicates theses characteristics tend to show themselves in younger children. This presentation is seen more frequently in boys but may be one that lessens as children mature (Fitzgerald

et al., 2007; Weyandt, 2007).

Combined presentation. The final category of ADHD is the combined presentation which is the largest. Approximately 50 to 70% of those diagnosed with ADHD are in this category with the majority being males. Children with the combined presentation are affected by both hyperactivity/impulsiveness as well as inattentiveness (Flick, 2010). While children with predominantly inattentive or predominantly hyperactive/impulsive presentations have a tendency toward certain behaviors that can be targeted, children with the combined type display behaviors from both categories which may prove to create a greater challenge for educators to address (Fitzgerald et al., 2007). Children with ADHD are characterized by inattentiveness, impulsivity, and hyperactivity. These traits are often seen in the classroom setting and may prove to bring about areas of concern for the student as well as challenges for the teacher. Challenges for these students occur in social and academic deficits as well as behavior difficulties (Briesch & Chafouleas, 2009; Weyandt et al., 2009).

Concerns for students with ADHD

The challenging behaviors of children with ADHD bring about struggles in the classroom. In a 2004 study by DuPaul et al., 175 students with ADHD were compared to 63 of their peers without ADHD. The study revealed those students with ADHD had more difficulty in the area of social skills, academics, and behaviors than their non-ADHD peers. The research further suggested the need to provide strategies in all three areas for students with ADHD.

Social deficits. Students with ADHD are recognized to have deficits in social skills (Anderson et al., 2012; McConaughy, Volpe, Antshel, Gordon, & Eiraldi, 2010).

Approximately 50% of children with ADHD have greater difficulty in social settings and struggle to work in groups (Rutherford, DuPaul, & Jitendra, 2008). Understanding social situations as well as recognizing the impact words and actions have with peers is an additional area of concern. Many ADHD children fail to understand how to appropriately engage in conversation with their peers (DuPaul &Weyandt, 2006; Fitzgerald et al., 2007). Children with ADHD have a difficult time making and maintaining friendships. These children often have difficulty playing with their peers and struggle with group work. Many of these children engage in disruptive behaviors and have a difficult time being redirected by the teacher which may cause social tensions with classmates (Rutherford et al., 2008).

Behaviors that are not the norm within classrooms and playgrounds cause these students to stand out negatively (DuPaul & Stoner, 2011). Students with ADHD often barge into games uninvited, fail to give attention to the opinions of others and lack selfcontrol. Due to these social impairments, ADHD students have a greater probability of being rejected by their peers as well as being victim to bullying (McConaughy et.al, 2011). Interestingly, students with ADHD often do not recognize their out-of-the-norm behaviors as abnormal which may lead to even greater struggles with peers (Weyandt, 2007).

Academic concerns. In a 2005 study by Harris, Friedlander, Saddler, Frizzelle and Graham statistics indicated that up to 80% of students diagnosed with ADHD have shown academic difficulties. Due to behaviors of inattentiveness and hyperactivity, it is understandable why students with ADHD have a greatly possibility of academic concerns (DuPaul & Stoner, 2011; Rutherford et al., 2008). Students with ADHD are more likely to be retained and are more likely to receive failing grades (Frazier, Youngstrom, Glutting, & Watkins, 2007). Due to inattentiveness, students with ADHD lack attention to details. This reveals itself in more computation errors in Math as well as lack of attention to processing signs. In writing, students with ADHD have difficulty punctuating correctly, often spell incorrectly and have few editing skills. Students with ADHD often struggle writing in complete sentences and often have poor handwriting. These children have a difficult time reading silently due to the inability to remain focused (CHADD Educator's Manual, 2006).

In a 2011 study by McConaughy et al., of six to eleven year old students, 25% of the students with ADHD had deficits in the academic areas of Math, Reading and Spelling and a range of 35% to 54% of students scored significantly lower on cognitive tests compared to their non-ADHD peers. The study also revealed that teachers rated over half of their students with ADHD to be performing poorly academically. Similarly, a 2007 study by Frazier et al., suggested students with ADHD had more difficulty in reading evidenced by lower standardized achievement test scores. Due to memory issues, children with ADHD struggle to turn in assignments and seem to continually lose class items. Many students with ADHD have difficulty understanding what they read which affects reading comprehension. Memory issues also reveal themselves in learning math facts. Students with ADHD may grasp a concept one day only to struggle with the same concept the following day. This may bring about frustration for both student and teacher (Martinussen et al., 2011).

Behavioral concerns. Challenging behaviors of students are identified as an area of great stress for teachers and have led to many teachers leaving the field (Hoff & Ervin,

2013). Students with ADHD bring about challenges though the challenges may be vastly different based on the dominant characteristics of the disability. Students who are predominantly inattentive typically have difficulty paying attention during school. These students often lose focus during instructional times. During independent work time, students with ADHD or more likely to sit and do nothing. Students with ADHD often lose the supplies needed for class. Teachers are challenged with these students as much of the school days is spent encouraging students to remain on-task (CHADD Educator's Manual, 2006; DSM-5, 2013; Flick, 2010).

The student that is predominantly hyperactive/impulsive brings about their own challenges in the classroom with their overt behaviors. These children are more likely to blurt out in class or leave their seat without permission. They may continually tap their pencils or rock back and forth in their chair. Additionally, these students often climb on objects or run in places that are not acceptable. Predominantly hyperactive/impulsive students may talk constantly and barge into conversations where they are unwanted which brings about tensions with their peers. They tend to have difficulty with transitions and may struggle even to stand in a line without incidence (CHADD Educator's Manual, 2006; DSM-5, 2013; Kos, Richdale, & Hay, 2006).

On-task behaviors. On-task behaviors are essential for students to promote greater success in the classroom (Richards, Heathfield, & Jenson, 2010). On-task behavior is identified as (a) focused her or his eyes on the academic task; (b) executed any step in the academic task, procedure, or instructions; or (c) asked for help (Harris et al., 2005). Due to the inattentiveness that is a profound characteristic of all presentations of ADHD whether seen as lack of attention, or hyperactive, it is understandable that on-

task behavior is an immense challenge for children with ADHD (Flick, 2010).

Research suggests off-task behaviors are directly correlated to academic performance (Richards et al., 2010). Furthermore, the behaviors displayed by students with ADHD may negatively impact various areas for students such as social, academic and behavioral as previously described (Stahr, Cushing, & Lane, 2006). Teachers describe the ability to listen and work independently as some of the most desired behaviors for students to be successful. As students attend to their work and remain ontask, they are less likely to engage in disruptive behaviors. The benefits of more on-task behaviors may bring about greater academic performance by not only the student, but by the entire classroom due to less teacher time spent redirecting students (Richard et al., 2010). In a meta-analysis of behavior interventions, 25 of the 31 studies targeted on-task behaviors validating their importance (Briesch & Chafouleas, 2009). While various interventions have proven effective in managing students with ADHD, the preponderance are teacher driven. These interventions are less likely to bring about a long-term change in student behavior. Teaching students to monitor or regulate their own behaviors may bring about positive life skills and independence (Briesch & Chafouleas, 2009).

Relationship between academic, social, and behavioral concerns. Research indicates the challenges for children with ADHD are often intertwined between academic, social and behavioral deficits. It is sometimes difficult to distinguish which area is the greatest risk as they all seem to intermix. Some evidence suggests a student who has difficulty performing a challenging academic task may act out in the classroom which brings about behavioral concerns as well as struggles with peers (DuPaul & Weyandt, 2006). Others research proposes that difficulty in controlling one's behavior because of poor self-control may bring about academic impairments due to an increase in office referrals. These overt behaviors may also produce social challenges among peers and ultimately lead to rejection (McConaughy, 2011). Due to deficit in the areas of academics, social and behavior of students with ADHD, all three areas should be addressed (DuPaul & Weyandt, 2006; Rutherford et al., 2008).

It was often thought that children would outgrow ADHD. Statistics reveal 70% to 85% of high school students still exhibit behaviors associated with ADHD. While ADHD students may exhibit less attention problems as they mature, so have their non-ADHD peers. Therefore, the marked differences seen in social behaviors continue. It is alarming that 60% of teenagers with ADHD are more likely to exhibit defiance and noncompliance towards rules and authorities. These same students are more likely to engage in stealing, fighting and vandalizing and have a greater possibility of dropping out of school and engaging in substance abuse (DuPaul & Stoner, 2011). Due to impulsive behaviors, teens with ADHD are more likely than non-ADHD adolescents of being caught speeding and are four times more likely to be involved in a serious car accident (Flick, 2010).

Comorbid Disorders

Approximately 60% of children with ADHD have a comorbid, or coexisting disability (CHADD Educator's Manual, 2006). While ADHD may be diagnosed before the age of seven, other disorders are not diagnosed until later in a child's life. As students with ADHD struggle in the classroom, there is question as to whether an additional disorder exists. Several disorders have been identified as comorbid with ADHD including Tourette's syndrome, Bipolar Disorder, Obsessive Compulsive Disorder, and Anxiety Disorder. Additional comorbid disorders that will be discussed include Behavior Disorders, Learning Disabilities, and Depression (Fitzgerald et al., 2007).

The most common comorbid disabilities with ADHD are the behavior disorders of Conduct Disorder (CD) and Oppositional Defiance Disorder (ODD). It is estimated 40% to 60% of children and adolescents with ADHD also have a behavior disorder (CDC, 2014; Fitzgerald et al., 2007). Children with ADHD have challenging behaviors. Coupled with an additional behavior disorder creates greater challenges for students and those who work with these students. These children are more likely to blame others for their own actions as well as purposely annoy other children (CDC, 2014). Children with ADHD and comorbid behavior disorders are more likely to experiment earlier with drugs and alcohol than those without an additional disorder as well as abuse those substances as they become older (Flick, 2010; Rickel & Brown, 2007). Children with externalizing and impulsive behaviors are more likely to engage in deviant actions such as fighting and setting fires (Fitzgerald et al., 2007). While externalizing behaviors from ADHD and the various behavior disorders are challenging, internalizing behaviors bring about their own challenges.

Children with ADHD have a high existence of comorbidity with depression. For many children, behaviors that set them apart from their peers continue to plague students with ADHD. Disrupting games, blurting out in the classroom as well as other externalizing behaviors may cause rejection by their peers (Ostrander, Crystal, & August, 2006). As children mature, peer relationships become more critical in determining their own self-worth. Those students who continue to display disruptive and antisocial behaviors may withdraw from others as a way of saving themselves. The withdrawing of peers may manifest itself through drug and alcohol abuse as well as suicide which is considerably higher for those children with ADHD (Flick, 2010; Ostrander et al., 2006).

The number of students with ADHD and a Specific Learning Disability (SLD) varies from 16%-56% (Wei, Yu, & Shaver, 2014). A meta-analysis of previous studies was analyzed to determine the frequency of comorbidity for ADHD a SLD. The statistics revealed a much higher rate of comorbidity with a mean of approximately 45% (DuPaul et al., 2013). Students with an SLD coupled with ADHD experience increased challenges compared to those with only one of the disorders. Research suggests attention problems are multiplied for those with both disorders as well as significantly increased memory issues. Additionally, students with both disorders have poorer academic gains, make slower than typical progress in the areas of Math and Reading, and have greater difficulty transitioning or completing tasks such as homework than those without comorbid disabilities (Rickel & Brown, 2007). Interventions in both academic areas as well as ones targeting the characteristics that accompany the disability of ADHD are essential in order for the student to make the greatest gains in the classroom (DuPaul et al., 2013).

Teacher Knowledge: ADHD, Misconceptions and Interventions

With the number of children educated in the general education classroom that are diagnosed with ADHD, one would assume teachers would have a vast knowledge about children with ADHD especially when teachers are often involved in the process of identification for a student. In addition to identifying students who may have ADHD, teachers are often solely responsible for managing the difficult behaviors as well as providing supports for those that struggle academically. Various studies indicate teachers have a lack of knowledge of ADHD as well as the useful interventions to help manage students with ADHD (Anderson et al., 2012; Martinussen et al., 2011; Weyandt et al., 2009). While studies reveal varying degrees of knowledge about ADHD and interventions, all suggest the need for improvements (Kos et al., 2006; Vereb & DiPerna, 2004).

Knowledge of ADHD. In a 2012 study by Anderson and colleagues, pre-service and in-service teachers were given a questionnaire rating their knowledge and attitudes about students with ADHD. The pre-service teachers scored an average of 52.2% and the in-service teachers averaged 60.2%. The research suggested that as teachers gained more experience, their knowledge base of ADHD increased. The study also investigated the attitudes of teachers. While the attitudes of both groups were predominantly positive in working with students with ADHD, those teachers with more experience felt less confident in effectively reaching students with ADHD. Reasons behind those feelings were not researched, but it was suggested that the confidence fell due to the realization of the immense challenges teachers faced in working effectively with children with ADHD.

A study by Ohan and colleagues (2008) revealed that most teachers had a good understanding of ADHD knowledge in regards to symptoms and diagnosis, but had a lower knowledge in the area of treatments. However teachers with a higher knowledge also predicted that children with ADHD would be disruptive students. The teachers had less confidence in their ability to work effectively with those students. The study indicated the need to provide teachers with strategies to work effectively with their students with ADHD. Similarly, Martinussen, Tannock, and Chaban (2011) reported that 76% of the teachers surveyed reported having very little training in dealing with students with ADHD. Those who had more training were much more likely to implement various interventions with their students with ADHD.

Misconceptions. Various misconceptions about the causes of ADHD have surfaced over the years and many are believed by teachers (Weyandt, 2009). One of the most widely accepted beliefs is that a diet free from food additives, such as dyes, will control ADHD. This was the belief brought about by the research of allergist Dr. Benjamin Feingold in 1975. Feingold performed a study which brought about the findings of this fallacy. Though the results of his study were later nullified, many still accept his research to be valid and are still widely believed today. Additionally, many parents believe that taking sugar out of a child's diet would lessen hyperactivity. No clinical research verifies this theory, however many parents still believe this myth (Rojas & Chan, 2005). Another misconception is in regards to the parenting of students with ADHD. In a 2009 study by Weyandt et al., approximately 53% of teachers believed ADHD was due to parent spoiling. In that same survey, almost 40% of teachers felt that students with ADHD would do poorer than students without the disability. Other misconceptions included the belief that vitamin therapy or diet is an appropriate treatment for ADHD, and that children will outgrow ADHD. None of these misconceptions have been validated to date (Rojas & Chan, 2005).

Knowledge of interventions. Research indicates teachers have varying degrees of knowledge in regards to ADHD and interventions (Anderson et al., 2012; Rojas & Chan, 2005). In a 2011 study by Martinussen et al., 76% of teachers reported having little training in regards to students with ADHD. The study indicated that while the majority of teachers frequently used positive behavior management for all of their students (e.g., praise, proximity control) few teachers acknowledged using any kind of individualized

approach for students with ADHD. Individualized interventions such as daily report cards, setting goals or self-regulating strategies were not used by the majority of teachers, even though research has validated the benefits for students with ADHD. The research also indicated the need for additional training to equip teachers with knowledge about ADHD and training them to be competent implementing interventions to benefit their students with ADHD.

Trends in Interventions

Various interventions have been determined to help students with ADHD in the school setting. These interventions are designed to help students in their areas of deficit whether academic, social or behavioral. One of the most commonly suggested intervention to control the behaviors of ADHD is the use of psychostimulants. Research has indicated that almost 90% of people with ADHD respond favorably to stimulants (DuPaul, 2007; Fitzgerald et al., 2007; Rickel & Brown, 2007).

Stimulants. A 2008 meta-analysis by Sherman, Rasmussen, and Baydala revealed teachers attitude towards the use of medications for students with ADHD. The majority of teachers believed medications were the easiest and most effective means to control the behaviors of students with ADHD. Psychostimulants have brought about more on-task behaviors and decrease disruptive behaviors. Additionally, greater academic improvement has been associated with a medication approach due to students completing more assignments with greater accuracy (DuPaul, 2007). Students have also had the added benefit of improved memory as well as improvement in staying with difficult tasks. Conversely, many children struggle with being adversely affected by medications including weight loss and insomnia, or the medication does not produce the wanted

behaviors. Many parents are also against the use of medication to control their children (DuPaul, 2007; Rickel & Brown, 2007).

Research indicates perhaps the best interventions are those combined with medication and academic/behavioral interventions (DuPaul & Weyandt, 2006). Many parents do not want their children on medication. The use of academic and behavioral interventions have proven to be effective for students with ADHD. In a 2012 meta-analysis by DuPaul, Eckert, and Vilardo, school based interventions have shown moderate to large benefits for students with ADHD in both academic and behavioral functioning (Nowacek & Mamlin, 2007).

Academic interventions. Students with ADHD tend to struggle academically in the classroom and benefit from academic interventions. Peer tutoring has been shown to benefit students with ADHD. Peer tutoring provides students with immediate feedback as well as more assistance than they would receive by only the teacher (Nowacek & Mamlin, 2007). During peer tutoring, two students are paired together to work on some type of academic project. This provides an opportunity to monitor the productivity of the student with ADHD as well as the ability to reinstruct if necessary (DuPaul & Weyandt, 2006). Computer-assisted instruction is another intervention that has been shown to be successful for students with ADHD. Computer-assisted instruction has been found to improve the attention of students with ADHD while working in an academic area. Multiple sensory programs have been shown to keep ADHD more on-task (DuPaul & Weyandt, 2006; Nowacek & Mamlin, 2007). Other academic interventions provide students the necessary assistance for remediation in areas of deficit. Homework help through tutoring a well as a home-school support system for academics have also proven beneficial for students with ADHD. In addition to improvement in academic areas, these interventions have brought about additional improvements in behaviors (DuPaul, 2007).

Behavioral interventions. Behavioral interventions have also brought about greater benefits for children with ADHD. Praise and prompt feedback have resulted in increased positive behaviors for students with ADHD, though research indicates teachers do not typically provide interventions at the rate necessary to see improvement for their students (Fabiano & Pelham, 2003). Modifying tasks or assignments into smaller chunks have proven beneficial to keeping children with ADHD on-task. Providing brief breaks throughout the day may also help manage behaviors as students with ADHD often lose their focus. Research has revealed that good classroom management and clear and concise rules benefit students with ADHD as well as the entire classroom (DuPaul & Weyandt, 2006). Preferred seating assists students to increase on-task behavior during instruction. Daily report cards, response cost and behavioral contracts provide regular feedback for students which have resulted in greater on-task behaviors (Martinussen et al., 2011). While many of the strategies are proven beneficial, most are teacher directed. Providing students the skills to management their own behaviors may bring significant gains in social, academic and behavioral settings (Reid, Trout & Schartz, 2005).

Self-Regulating Strategies

Self-regulating is a strategy that has been researched since the early 1970's. Other terminology that reflects the understanding of self-regulating is self-discipline and self-control (Post, Boyer, & Brett, 2006). "Self-regulation describes a number of methods used by students to manage, monitor, record, and/or assess their behavior or achievement" (Reid et al., 2005, p. 362). Due to more on-task behaviors brought about

through self-regulating, the process has been widely used for those students with ADHD as well as other disruptive disorders (Martinussen et al., 2011).

Self-regulating is based on a continual cycle of immediate feedback for the student which has been shown to benefit students with ADHD (DuPaul, Eckert, & Vilardo, 2012). When students take control of their own behaviors and engage in more on-task behaviors, it enables teachers to spend less time managing behaviors and more time teaching. Various studies support the ease of implementing self-regulating strategies as well as favorable responses of the interventions by students (Briesch & Chafouleas, 2009; Ness & Middleton, 2012; Thompson, 2014). The typical cycle for self-regulating begins with the teacher determining a target behavior or academic goal. The teacher then instructs the student about the benefits of self-regulating. A measurement system such as a check-off sheet or graph is determined as well as the method of self-regulating. The student is taught to self-regulate and learns about the desired behavior based on examples and non-examples. The student then self-regulates at the appointed time. The four types of self-regulating strategies that will be discussed are self-monitoring, self-monitoring plus reinforcement, self-reinforcement, and self-management (Reid, Trout & Schartz, 2005).

Intervention 1: Self-monitoring. Self-monitoring is a self-regulating strategy in which students manage their behaviors through a two-step process of evaluating the desired behavior or task and recording their assessment. Self-monitoring is used to bring about better attention to a task or may be for an academic task. In self-monitoring of attention, a student is instructed about the need to remain on-task during a particular time. At random times, a tone such as a bell sounds and the student will determine whether or

not they are engaged in the appropriate behavior. The student then self-records their behavior. In self-monitoring of performance, a goal is set such as completing a determined number of problems or accuracy in work over in a set period of time. The student will determine whether they achieved the goal and record their progress (Reid et al., 2005).

Self-monitoring is useful in assisting students to remain on-task during instruction or work time as well as beneficial in helping them show more accurate work or complete a task. In a 2005 study by Harris et al., students were taught the strategy of selfmonitoring for attention which was defined as being on-task, and self-monitoring for performance in the area spelling. In the self-monitoring for attention, a tone was sounded at random times and the students recorded whether they were on-task at that time. During the self-monitoring of academics, the students had to graph whether they practiced their spelling words the determined amount of times. The students were interviewed following the interventions and reported positively about graphing their progress but negatively about hearing the tones. However, both types of self-monitoring brought about significant gains. The 2005 meta-analysis by Reid and colleagues revealed an increase in on-task behaviors for students that engaged in self-monitoring. Additional benefits included higher academic productivity as well as a decrease in inappropriate behaviors.

Intervention 2: Self-monitoring plus reinforcement. Self-monitoring plus reinforcement is similar to self-monitoring in that a target behavior is determined. This type of self-regulating also engages the student to self-assess their behavior in relationship to the established goal. While many students change behaviors simply by self-monitoring, there are those that need the addition of a reinforcement to bring about

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the desired change. A reinforcer is a type of reward given for the completion of a task or for engaging in an appropriate behavior such as being on-task. For self-monitoring plus reinforcement, the student is again informed of the desired behavior and the benefits for engaging in that behavior. The student hears a tone and records whether or not they are engaged in the desired behavior. If the student reaches the predetermined goal, the student receives a type of reward. The reinforcement is often a sticker or chip that the student accumulates and exchanges for a larger prize. The 2005 meta-analysis by Reid et al., the intervention of self-monitoring plus reinforcement reported to be an effective intervention to increase on-task behaviors.

Intervention 3: Self-reinforcement. The self-regulating strategy of selfreinforcement puts a greater amount of responsibility of the intervention on the student. During this strategy, the student monitors his or her own behavior and then continues by recording and reinforcing themselves for meeting the goal. In self-reinforcement, the teacher is no longer involved in determining whether or not the goal is met therefore it is only once a teacher is confident that a student understands and can accurately record behaviors that a self-reinforcement intervention should be used. One concern in using this strategy is that children with ADHD often lack the ability to recognize their behaviors and may not have the ability to record their effort accurately (DuPaul & Stoner, 2003).

A 1985 study by Chase and Clement revealed the benefits of self-regulating as well as self-regulating with a stimulant. The study included six male students ages 9-12 who were having academic difficulties due to off-task behaviors. Baseline data was collected prior to any interventions. The skill of self-reinforcement was taught to each of the students. During the first intervention, students were given a placebo in place of the stimulant and prompted to use the strategy of self-reinforcement during Reading class. The second intervention included taking Ritalin as well as self-reinforcing during Reading class. 83% of the children improved during the first intervention of only self-reinforcement. All of the students improved during the second intervention of Ritalin and self-reinforcement. While greater gains came from the combination of self-regulating and medication, the effect size was still positive using only the self-reinforcement strategy.

Intervention 4: Self-management. The final type of self-regulating strategy is self-management. During self-management, the student again has a predetermined goal for a changed behavior. The student self-monitors the behaviors at random times and the teacher also records the on-task or off-task behavior. At the end of the observation period, the teacher and student compare their records to determine if the student is accurately record the desired behavior. If the student's recording is close to the teacher's, the student receives a reward of some type. This reward could be used toward a larger goal or prize. Self-management has been shown to produce positive effects from students in grade school through high school and across various disabilities. (Briesch & Chafouleas, 2009). While self-management has been shown to bring about improvements for students with ADHD, some concern exists due to the role the teacher plays in the intervention of self-management. The goal for all of the self-regulating strategies is for the student to become self-reliant; to control behaviors without the aid of others. Self-management requires more effort by the teacher than the other interventions (Reid, Trout, Schartz, 2005).

A 2006 case study by Crawley, Lynch, & Vannest researched the effects of selfmonitoring on a child with mild mental retardation to improve off-task behaviors. Self-

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monitoring may be referred to as self-regulating, self-management, self-control or goal setting. For the purpose of this study, this example fits the definition of self-management. The teacher began the intervention by identifying what was deemed off-task behaviors. Data was collected to determine the amount of time the student exhibited off-task behaviors. The student was taught on-task and off-task behaviors through examples and non-examples and given instruction of how to self-monitor. A tape player was put by the student and every two minutes a beep occurred. At that time, the student recorded whether he was on-task or off-task using a self-monitoring sheet. At the end of the period, the student compared his observations with that of the teacher. If the observations recorded were similar, the student received a reinforcer. The results revealed off-task behavior decreased from 12.7 minutes to 8.9 minutes indicating a positive effect of using the strategy of self-monitoring. While this was a study of a student with mild mental retardation, the target behavior of on-task behaviors is one shared by students with ADHD.

Goals and Reinforcers

The different types of self-regulating strategies involve goals and often employ the use of some form of reinforcement. In order for interventions to be effective, teachers need to understand the role each plays during the implementation of an intervention. Special care needs to be taken in the use of both to ensure favorable outcomes.

Goals. Goals must be defined and measureable. To determine an appropriate goal for a student, baseline data must be taken to measure the student's progress before the onset of an intervention. The baseline identifies the typical behaviors of a student in a regular setting such as the classroom. The data for the baseline should be collected over a

period of at least five days to ensure the data is stable. Once the baseline has been determined, a goal is set for a change in behavior or completion of a task. The goal should be one that is attainable by the student but should bring about improved behaviors. Goals should be redefined as necessary. If the goal is not being achieved, it should be lessened to bring about success. If the goal is not high enough, the behavior will not change (Zirpoli, 2012).

Reinforcers. Reinforcers are another vital part of the intervention of selfregulating. "Reinforcement is any stimulus that maintains or increases the behavior exhibited immediately prior to the presentation of the stimulus. However, a stimulus takes on the value of a reinforcer only if it has been demonstrated that the behavior it followed was maintained (at the current rate, duration, or intensity) or increased (from the current rate, duration, or intensity.) If the rate, duration, or intensity of the behavior is not maintained or increased after a stimulus, then that stimulus cannot be considered a reinforcer" (Zirpoli, 2012, p. 258).

Students with ADHD tend to prefer smaller rewards that are given more frequently (DuPaul & Stoner, 2003). Reinforcers may take the form of verbal praise, a token, a piece of candy, time on the computer, more social time, or anything that promotes a change in behavior. Care must be taken to choose appropriate reinforcers for students. The reinforcer needs to elicit a change therefore it needs to be of value to the student. A reinforcement menu may be used to provide a list of reinforcers available to the student. Surveys for students may provide valuable information about the type of reinforcement that is meaningful. However care needs to be taken that a student is not satiated through the use of reinforcers, or the reinforcer will lose its effect. The purpose of reinforcers is to bring about a change in behavior. However, the intent is that the reinforcer is faded over time. Fading is necessary to determine whether a true implicit change has taken place with the student (Zirpoli, 2012).

Conclusion

Research indicates the need for students to remain on-task throughout the school day in order for the best outcomes in regards to academic growth. Teachers have identified on-task behaviors as perhaps the most important skills for students to succeed in the classroom. Lack of on-task behaviors may affect academic areas as well as relationships with peers. Additionally, there is a direct correlation between academic, social and behavioral deficits for students with ADHD. Therefore the need for developing the skills to remain on-task is essential to bring about improvements in behavior. Acquiring these skills may in turn bring about positive outcomes in social and academic areas. Research has also revealed teachers have a lack of knowledge about ADHD as well as proven strategies to work with these students effectively. A thorough research of peer reviewed articles supports self-regulating strategies as an effective intervention to bring about greater on-task behaviors for students with ADHD.

Chapter 3

Methodology and Special Project

Introduction and Purpose Statement

The previous chapter provided information about ADHD and addressed the lack of knowledge of teachers. Additionally, various interventions were discussed to provide teachers with opportunities to assist this population of students in their classrooms. Finally, the intervention using self-regulating strategies was thoroughly discussed and evidence-based research studies were introduced to validate the effectiveness of four different self-regulating strategies on on-task behaviors for students with ADHD. The following sections will present methodology, analysis of results of previously published materials, and descriptions of the special project. The methodology section includes the setting, participant, design and procedure of the study. The purpose of the study is to determine the effects of four self-regulating strategies for a student with ADHD.

Methodology

Participant. The sole participant in the study is a third grade male student. The student was retained when he was in kindergarten due to academic difficulties. The student was diagnosed as having ADHD and was determined to have specific learning disability when he was in second grade. The current and past teachers as well as parents all agreed that the participant had difficulty in academic areas as well as remaining ontask in various activities such as reading, following instructions, and completing assignments. The student currently receives services in the areas of Math and Reading support directly from the Special Education teacher.

Through direct and indirect observations, several characteristics about "Joe" were

revealed. Joe was a pleasant student. He had positive relationships with his teacher and peers. Joe was well-behaved in and out of the classroom. However, Joe regularly lost focus during instructional periods. He misplaced items such as pencils and papers frequently and had difficulty completing assignments. Writing was a difficult process for Joe as well as the ability to form letters. Joe also processed information very slowly which added to the struggle of completing assignments. There were times too when Joe could not sit still. He played with pencils and pulled apart erasers. His desk was very messy and unorganized. Due to the observations, it appears likely that the student was of the combined presentation of ADHD. As a student with the combined presentation of ADHD, on-task behaviors were a continual challenge.

Setting. The study was conducted in a small Lutheran school in Northeast Indiana. Located on the outer limits of a city of approximately 250,000 people, the Kindergarten through eighth grade school has about 221 students from various areas within the community. The median salary was just under \$40,000. Unemployment rate in the community was at 10.5%. The population of the student body included approximately 93% Caucasian, 3% mixed ethnicity, 3% African American, and 1% Hispanic. 15% of the student body received free and reduced lunches. The school had eleven teachers, one special education teacher, three teacher aides and one paraprofessional. There were 6 students identified as having exceptionalities.

The needs of students with disabilities were met in various manners. Some of the students received direct instruction from the special education teacher, some received additional classroom attention by the paraprofessional, and some students received indirect services through consultation between the special education teacher and general

education teacher.

Research Method and Design. A multiple treatment design was used to determine the effectiveness of four different self-regulating strategies. The study was also a single-subject design used to determine the behavior of a single student rather than a group. Because there is only one subject, the subject is also the control of the experiment. This design began with determining the baseline of the subject based on observations over time. After the baseline had been determined, an intervention was applied to the subject. Observations were recorded to determine the effects of the four interventions (Creswell, 2012).

Recruitment and Data Collection Procedures. In order to determine the effectiveness of self-regulating strategies on the participant, a single-subject design was used with the student. The student was chosen due to his difficulty remaining on-task during the school day as well as his diagnosis of ADHD. Baseline data was collected to determine the percentage of on-task behavior of the student. Four self-regulating strategies were taught and observational data was collected. Baseline data observations occurred for fifteen minutes during Math and Reading independent work time for three days. Observations for each of the four interventions occurred for 15 minutes during Math and Reading instruction. Each intervention occurred over a four day period.

Baseline. Prior to interventions, data recording on-task behavior during independent work time of the subject were observed. Harris and colleagues (2005) determined on-task behaviors as (a) focused her or his eyes on the academic task; (b) executed any step in the academic task, procedure, or instructions; or (c) asked for help. Using a frequency chart, the investigator observed the student for 15 minutes during

Reading independent work time and Math independent work time. The investigator observed the student every 30 seconds and marked whether the subject was on-task based on the determined criteria. The observations to determine the baseline occurred for three days during three class periods for a total of six observation periods. Due to the time constraints, stability in the baseline was not able to be established.

Intervention 1: Self-Monitoring. The student was given instruction on the first self-regulating strategy, self-monitoring. The teacher explained the benefits for being ontask and provided examples and non-examples of wanted behaviors. The student was shown how to fill out the self-monitoring chart and practiced using the form. During independent work time in Math and Reading periods, the teacher randomly sounded a tone. When the student heard the tone, he recorded whether he was on-task or off-task. The teacher also recorded her observations on the Student Observation Form. The observations occurred over four days in both subjects providing data for eight instructional periods.

Intervention 2: Self-Monitoring plus Reinforcement. In the following week, the student was given instruction on the second self-regulating strategy, self-monitoring plus reinforcement and reviewed examples and non-examples of what constituted on-task behaviors. The student was asked to make a goal for the number of times he would be on-task during independent work time. The student was instructed that if he met the predetermined goal, he would receive a sticker. The student also understood that once he filled his sticker chart, he would be able to pick a prize out of the teacher's prize box. During the 15 minutes of independent work time in both Math and Reading, the teacher again sounded a tone and the student documented whether he was on-task using the self-

monitoring chart. The teacher also documented her observations. At the end of the work time, the student received a sticker if he achieved his goal. The second intervention occurred during Math and Reading independent work time over four days.

Intervention 3: Self-Reinforcement. The student was instructed on the third self-regulating strategy, self-reinforcement. The student was reminded how to fill in the self-monitoring chart and instructed that during this time, he would give himself a sticker if he felt he was accurate in his self-observations. The student was also reminded that once the sticker chart was filled, he could pick a prize out of the teacher's prize box. The teacher again randomly made a tone and the student recorded whether he was on-task. The teacher also recorded her observations. If the student felt he was accurate in his documentation, he gave himself a sticker for his chart. The observations occurred for 15 minutes during Math and Reading independent work time over four days.

Intervention 4: Self-Management. The student was instructed on the fourth selfregulating strategy, self-management. The student was reminded how to fill in the selfmonitoring chart and reviewed examples and non-examples of on-task behaviors. During this intervention, the student was instructed to fill out his self-observation chart and told that the teacher too would document her observations. The student was instructed that after the observation time, the student and teacher would meet together to compare their charts. The student understood he would receive a sticker if his own observations were similar to those of the teacher. The student also understood that the sticker would be put on his sticker chart and that once the chart was filled, a prize could be taken from the teacher's prize box. During independent work time, the teacher sounded a tone at random times and the student recorded whether he was on-task. The teacher also recorded her observations. At the end of the work times, the teacher and student met together to compare their observations. The intervention occurred over four days.

Data Analysis Procedures

Pre and Post-intervention measures. Pre-intervention data was collected using a frequency count of on-task behaviors. The data was analyzed prior to the interventions to determine the baseline and charted on a graph. Observational data from each of the four interventions was collected using a frequency count and graphed. The graphs were visually compared to determine the effectiveness of improving on-task behaviors for each of the four interventions. The four interventions were then compared to each other to determine which intervention had the greatest positive impact on the student. A post-intervention interview with the student was conducted by the investigator. Anecdotal information collected from the student in regards to his attitude towards the study and the various interventions as well as ease of using the strategies was recorded.

Analysis and Descriptions of Published Handbooks

Various books about ADHD have been published. Some of these books are intended to be used by educators. Three handbooks about ADHD were reviewed. To remain with the focus of the study, the four areas reviewed included 1) an overview of ADHD; 2) teacher knowledge of ADHD; 3) strategies of self-regulating; 4) examples of charts for data collection.

Handbook #1: Meeting the ADD Challenge: A Practical Guide for Teachers. The book by Gordon and Asher is a guide for teachers to work effectively with ADHD students. The book offers scenarios about students with ADHD and what they might look like in the classroom. It also gives a brief overview on ADHD in regards to possible medications that are used and might prove beneficial to children. The book provides answers to various myths about ADHD that are too often acknowledged by educators as truths. The guide provides information on the DSM-IV and the basic characteristics seen in children at different school ages. Three theories about ADHD are described in the book as well as a fairly in-depth description of a five-stage model of behavior assessment. A small section explaining data collection is described as well examples of data collection forms. Several interventions are described for both antecedent a consequence interventions as well as a small section explaining why many interventions are not effective. The book also provides appendices with various teacher forms.

Positive aspects and limitations. There are some positive aspects about this book. First, it offers answers to misconceptions about ADHD. Various studies address the inaccurate information teachers have about students with ADHD and this book offers some answers. The book also offers some sample forms that can be used by teachers for data collection as well as observation forms.

While this guide offers some practical means for addressing the needs of students with ADHD it also has some limitations. While the book does offer forms, such as data collection or behavior charts, the forms are not reproducible. Each form would need to be created in order to use it in the classroom. Another limitation in this book is the lack of information about the types of self-regulating strategies. While self-monitoring and selfreinforcement are mentioned in the book, only a brief summary is provided and the steps to use the strategies are not detailed. Due to the year of publishing, the DSM-5 is not used in the explanations of the different presentations.

Handbook #2: Successfully Managing ADHD: A handbook for SENCOS and

teachers. The handbook by Fintan O'Regan offers practical strategies for teachers to use in the general education classroom to effectively manage students with ADHD. The handbook first provides the basics of ADHD including its prevalence, general characteristics and explanation of other comorbid disabilities. Various strategies were given to help teachers manage the disruptive behaviors of students with ADHD as well as suggestions of ways to help them in areas of academic difficulties. The handbook offered whole school approaches to the management of students as well as supports for parents of children with ADHD. A few reproducible forms were also included in the handbook.

Positive aspects and limitations. The handbook offers information about students with ADHD as well as basic facts. The handbook also offered suggested ways to set up a professional development program for teachers. While it offered many other areas of information, none were the focus of this study. The book contained a few reproducible pages but they were not pertinent to the topics researched.

The handbook did not offer any information in regards to teacher knowledge or misconceptions of the disorder. Another negative aspect was the lack of reproducible reference pages for teachers. The biggest negative part of this handbook was that all of the interventions were teacher driven. There were no interventions discussed in the area of self-regulating strategies.

Handbook #3: An ADHD Primer. The book by Lisa Weyandt is intended for various people who come in contact with children with ADHD including teacher and parents and also targeted students in teacher education programs. Provided in the resource are federal laws applicable to those with ADHD. The book begins with a general overview of ADHD similar to other handbooks as well as basic characteristics of the three subtypes. The book addresses myths associated with ADHD, possible causes and how it is diagnosed. Finally, various methods of treatments are discussed including behavioral and medical treatments. Discussion is also included for home to school supports.

Positive aspects and limitations. The book is visually appealing and easy to read and understand. Teacher understanding and myths about ADHD are explained. This resource also gave some information about the self-regulating skills of self-monitoring and self-reinforcement. It offers some prepared resources for teachers such as behavior charts and offers an outline for a teacher in-service on ADHD training.

The book does not go into much detail in the strategies of self-regulating for students to bring about more on-task behaviors. While basic information was given about ADHD, one might determine that too much emphasis was on the history of ADHD. Again, this book is a reference for various people that work with ADHD children. In order to provide a practical reference for teachers, more information targeting specific areas would be beneficial.

Overview of published handbooks. All of the handbooks had strengths and weaknesses. Each had a variety of information on ADHD and some provided misconceptions of the disability. However the information provided about ADHD was very detailed and often technical in language. For the purpose of this project, selfregulating strategies were a main focus due to the benefits seen through a variety of studies. While some of the handbooks provided basic information about self-regulating, none of the handbooks offered a detailed guide to implement the strategies. Additionally, the necessary forms needed for data collection were not present in all of the handbooks.

Outline for Special Project

For the purpose of this project, self-regulating strategies were the main focus. The purpose in targeting these particular strategies was to provide students a way to take control of their behaviors that will promote greater time on-task. While there are various interventions that a teacher can provide in the classroom, those interventions may come and go based on the teacher. The skill of self-regulating may prove beneficial as students change teachers from year to year. It may also prove beneficial in various settings such as home, school, and even athletics. Students with ADHD have difficulty with hyperactivity, impulsivity, and inattentiveness. Due to those challenges, with ADHD often have academic, social and behavior challenges in the classroom. The literature review indicated classroom teachers had a lack of knowledge about students with ADHD that has led to frustration.

There are many books on the topic of ADHD, some specifically created for teachers. While the information is beneficial, the books give so many varieties of interventions that it may lead to an overload of information. Conversely, there are books written primarily about self-regulating strategies, but the books are written in a technical manner which makes them difficult to understand. A handbook targeting this life skill as well as providing the necessary forms needed for teachers to implement the strategy is not seen in any of the handbooks. Therefore, this is the focus of the project. The table of contents for the handbook created for teachers is the following:

Handbook Table of Contents

Section 1 – Introduction

Personal Narrative

Case Study

Section 2 - Teacher Knowledge

Teacher Knowledge Quiz

Myths and Truths

Comorbidity with ADHD

ADHD Presentations

Predominantly Inattentive Presentation

Predominantly Hyperactive/Impulsive Presentation

Combined Presentation

Section 3 – Self-Regulating Strategies

Self-Monitoring

Self-Monitoring Plus Reinforcement

Self-Reinforcement

Self-Management

Section 4 – Goals and Rewards

Goals

Reinforcers

Section 5 – Teacher Tips

General Tips for Teachers

Behavioral Interventions

Academic Interventions

Environmental Interventions

Accommodations and Modifications

Don'ts for Teachers

Section 6 – Parent Supports

Needs at Home

Behavioral Strategies

Preventing Behavior Problems at Home

Preventing Behavior Problems Outside of the Home

Organization Tips

Homework Tips

Giving Directions

Advocating for Your Child

Section 7 – Daily Report Cards

Section 8 – Online Resources

Description of Handbook

The purpose of the handbook is to provide teachers a useable resource to effectively work with students with ADHD. The first section of the book begins with a personal narrative by the author. The narrative describes the challenges that have occurred while working with ADHD students during her teaching career. The section continues with pertinent terminology for teachers as well as an overview of the case study that was implemented.

Section Two discusses the knowledge of teachers in regards to ADHD. A small quiz provides teachers a way to test basic knowledge. This section also speaks to some of the well-known myths of ADHD. Additionally, facts about ADHD and other comorbid disorders are discussed. Finally, the three different presentations and their characteristics are shared.

Self-regulating strategies have been shown to bring greater on-task behaviors for students with ADHD. Section Three focuses on four self-regulating strategies for teachers to use with their students with ADHD. Each strategy is explained in detail providing teachers the steps for implementation. All forms for recording each of the interventions are provided for teacher use.

Goals and rewards are an essential aspect of changing behaviors. If goals are unrealistic, students may give up before achieving the goal. If goals are too easy, it may not change the behavior. Additionally, the rewards students earn need to have value for the student or the reward will not change the unwanted behavior. Section Four focuses on how to choose appropriate goals for students and how to include the student in the process. Reproducible forms are provided for teachers to assist in determining which rewards motivate students.

Section Five of the handbook provides teacher tips. These tips include behavioral, academic, and environment interventions. Also included is a section discussing accommodations vs. modifications and the role they have in the general education classroom for students with ADHD.

The focus of Section Six is on parent supports. Due to the challenges parents face at home with their child with ADHD, teachers are often a valuable resource by providing information to parents. The supports for parents includes suggestions for managing behaviors, organizational tips, homework tips, giving directions, and tips for advocating for the child. In addition to providing suggestions for parents, the connection between home and school is vital. Section Seven provides information about Daily Report Cards (DRC). These notes between home and school provide opportunities for collaboration between teachers and parents, and also keeps both informed. The steps to set up DRC's are provided as well as various forms to use.

The final chapter of the handbook includes various online resources. These websites can be used by teachers to provide helps for themselves and their students. The resources may also be shared with parents in an effort to assist them with their child.

Summary

The challenges for students with ADHD as well as their teachers are clearly established through researching various peer reviewed articles and books. Teachers lack knowledge about ADHD and are unfamiliar with the benefits of self-regulating strategies to improve the behaviors of those students with ADHD. A new handbook provides teachers with basic knowledge about ADHD as well as identifies some of the common myths about ADHD. The handbook also provides the steps to implement self-regulating strategies for their students as well as the necessary forms for implementation. Additionally, information pertaining to Daily Report Cards is included as well as helps for parents. Teachers of all grade levels will find the handbook useful, offering practical strategies to work with those students with ADHD.

Chapter 4

Results

A single subject case study was used to determine the benefits of implementing self-regulating strategies for a student with ADHD. The goal was to increase on-task behavior during independent work time in the subjects of Reading and Math. Four different interventions were implemented over a period of three weeks. Figure 1 presents the results of the baseline as well as the four interventions during Reading class. Figure 2 presents the results of the baseline and the four interventions during Math class.

Baseline. Baseline data was collected over as three day period in the subjects of Reading and Math. The student, Joe, was observed and on-task and off-task behaviors were recorded by the investigator. No prompting of the student took place during the 15 minute periods. During independent work time in Reading class, on-task behavior ranged from17 to 33% with a mean of 24%. During all the observations, Joe began on-task at the beginning of the work period but failed to remain on-task for greater than three minutes. Additionally, Joe consistently failed to remain on-task for the last 8 minutes of each of the observation periods.

Baseline observations during independent work time in Math class of on-task behavior ranged from 23 to 37% with a mean of 28%. Joe began on-task at the beginning of each of the baseline periods as he did in Reading class. Similarly, Joe failed to remain on-task for longer than three minutes at a time. Joe was never on-task during the last six minutes of the Math period. Overall, Joe struggled to remain on-task during all of the baseline observations in both subjects, but performed slightly better in Math than in Reading. Additionally, Joe failed to be on-task at the end of all of the observation periods.

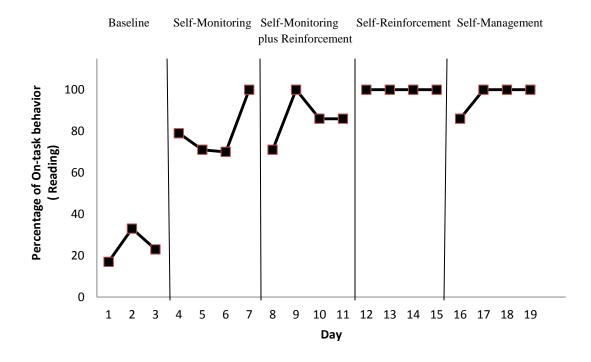


Figure 1. Percentage of on-task behavior for baseline and interventions during Reading independent work time.

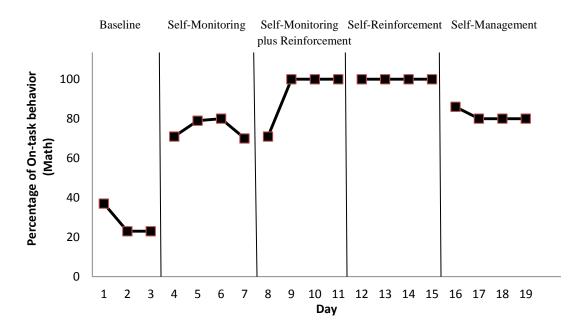


Figure 2. Percentage of on-task behavior for baseline and interventions during Math independent work time.

Intervention 1: Self-Monitoring. The first intervention, self-monitoring, was implemented over a four day period immediately following the baseline observations. During independent work time in Reading, Joe's on-task behavior rose drastically from the baseline observations. Joe's on-task behavior ranged from 70 to 100% with a mean of 80% which was an increase of on-task behavior from the baseline of 56%.

During independent Math work time, Joe had a drastic increase in on-task behavior from the baseline data. Over the four day period using the self-monitoring strategy, Joe's on-task performance ranged from 70 to 80% with a mean of 75%. This was an increase of 47% from the baseline data of on-task behavior.

Inter observer agreement (IOA) checks occurred throughout the interventions to determine the reliability of Joe's self-recording of on-task behavior. During Reading class, the IOA ranged from 76 to 90% with a mean of 83%. During Math, the IOA ranged from 80 to 92% with a mean of 86%.

The intervention was extremely successful in promoting more on-task behaviors in both Reading and Math class. Joe was excited about using the strategy. It was promising to see Joe needed no type of reinforcement and had a significant increase in on-task behavior compared to the baseline data.

Intervention 2: Self-monitoring plus reinforcement. The second intervention, self-monitoring plus reinforcement occurred over the following four days. Reading class on-task behavior ranged from 71 to 100% with a mean of 85.75%. This was an increase of 61.75% from the baseline data and an increase of 5.75% from the initial intervention. With the exception of the first day, the data remained relatively stable.

Math class saw a drastic rise after the first day of the new intervention and

remained stable. The range of on-task behavior was 71% on the first day and then remained at 100% for the following three days. The mean time on-task was 92.75% which was an increase of 64.75% from the baseline and an increase of 17.75% from the first intervention.

The IOA during Reading class ranged from 70 to 90% with a mean of 80%. During Math class, the IOA ranged from 85 to 95% with a mean of 90%. While Joe's on-task behaviors again increased from both the baseline and the previous intervention, one implication could be due to his familiarity with the process. Additionally, based on previous interactions, Joe has typically responded favorably to a rewards system.

Intervention 3: Self-reinforcement. The third intervention, self-reinforcement occurred over the following four days. There was again an increase in recorded on-task behavior. In both Math and Reading classes, on-task behavior was recorded 100% for the first day and remained stable throughout the intervention.

An IOA was not determined during this intervention; however observations were made during each of the class periods. One observation made was that Joe consistently documented that he was on-task at all times even though this had never occurred in the prior interventions. It was also observed that at times, Joe filled in his entire chart before he was prompted to self-regulate. Additionally, during the intervention, Joe marked himself on-task when he was observed to be off-task.

Intervention 4: Self-Management. The final intervention, self-management, was implemented the following four days. During the first day of the new intervention during Reading, a slight decrease occurred with an 86% on-task behavior. However for the remainder of the intervention, the on-task rose to 100%. This was a mean of 96.5% and

an increase of 72.5% from the baseline observations.

During Math class, a slight decrease in on-task behavior occurred from the previous intervention, but it remained relatively stable. The range for on-task behavior was 80 to 86% with a mean of 81.5%. While this was a decrease from the previous two interventions, it was still a relatively high increase from the baseline data of 28% on-task.

The IOA during Reading class ranged from 85 to 100% with a mean of 92.5%. During Math class, the IOA ranged from 96 to 100% with a mean of 98%. Part of the intervention is to compare self-regulating charts between the student and observer. This may account for the greater on-task behavior as well as the high IOA in both subjects.

A short interview with the student was conducted after the study. Joe spoke positively about the strategy of self-regulating. He felt that the strategies helped him remain on-task more often. He also commented that he was able to get more of his work done during the period. One of the negatives of the interventions seen by Joe was the continual beep. While he recognized the need for the sound to keep him on-task and to prompt him to mark his forms, he said the beeps "were annoying".

Joe stated that the intervention of self-management was his favorite intervention. He liked the idea of having to compare his recording sheet with the teacher and felt that in doing so, he was honest in his recordings. He admitted that during the selfreinforcement, he just marked that he was on-task all of the time.

Conclusion

It is evident that the self-regulating interventions were highly effective in bringing about more on-task behaviors for the student. While the intervention of selfreinforcement recorded the highest gains at 100% for both Math and Reading, this set of data is misleading due to inaccurate recording by Joe. The self-reinforcement intervention requires the student to document their own on-task behavior without any monitoring from the teacher. During this intervention, Joe recorded that he was on-task at all times. In fact, there were times when Joe filled in the chart before he was cued to do so. Additionally, there were times the observer saw Joe off-task during the work times. Therefore, the validity of that data set is in question.

Following the self-reinforcement intervention, the intervention of selfmanagement produced the greatest percentage of on-task behavior in Reading class followed by self-monitoring plus reinforcement and then self-monitoring. During Math class, the highest change came about during self-monitoring plus reinforcement followed by self-management and finally the first intervention of self-monitoring.

While the first intervention, self-monitoring, saw the lowest percent of change from the baseline in both Reading and Math, it should be noted that it was the first intervention implemented. It is unclear whether the smaller change was due to the intervention or due to it being the first intervention. Research indicates that prior knowledge brings about a learning effect for students. Therefore, with each subsequent intervention, the student had prior knowledge which could have brought about higher totals.

The data clearly shows that self-regulating strategies are an effective intervention for Joe. While each strategy varied in its effectiveness for increasing on-task behavior, they all brought about a significant increase. Self-regulating strategies would be considered a viable intervention for this student.

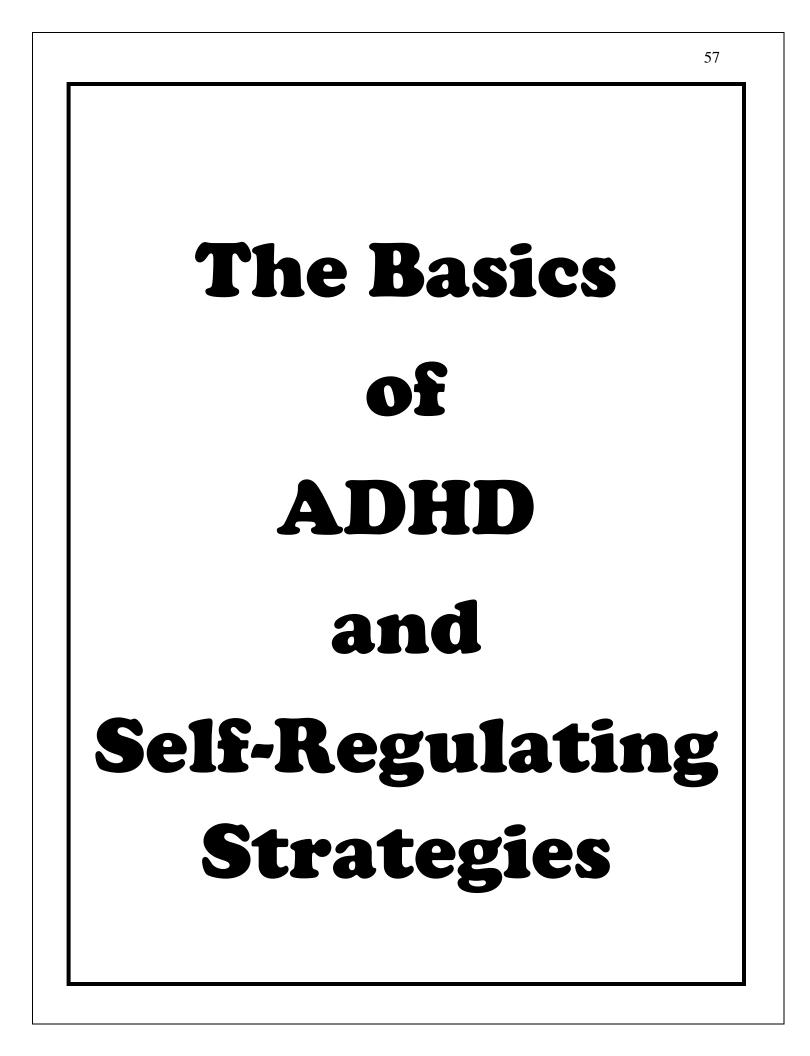
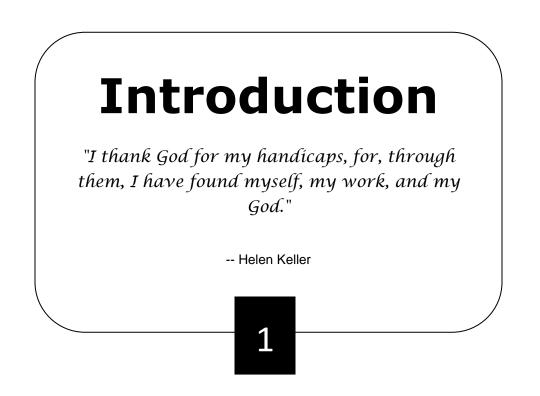


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My Story

Teaching has always been my passion. My love for children as well as the challenges they bring whether academically or behaviorally have always driven me to improve myself as a teacher.

Over the almost 30 years of teaching, I have seen great changes in education due to the demands brought about by the government as well as the every changing family make-up. When I began teaching, it was rare to have children from one parent homes. The majority of mom's stayed at home with their children. Parents were involved in schools and the education of their children. Teachers were highly regarded and supported by parents and their decisions as well as those of administrators were rarely challenged. Children with exceptionalities were not a typical part of the classroom as they were separated from other students and put into their own classrooms. Attention-Deficit/Hyperactivity Disorder was just beginning to surface in schools, but again, it was a rarity.

Schools of today are immensely different. It is common to have students from a one parent household. Most homes have both parents working which often leads to less parent involvement. Parents are more likely to question the authority of teachers and administrators. The idea that "teachers are always right" is long gone. Classrooms now have students with exceptionalities within their walls and ADHD or at least the lack of attention by students seems to flood our classrooms.

My conversations with so many teachers over the years seem to have one common theme.....children don't pay attention. The challenge to keep the focus of students during the day seems to be overwhelming. Teachers often feel as if their entire classroom is full of ADHD students! And there is little doubt that if children do not pay attention, they are not going to fully achieve their academic potential. Additionally, teachers find themselves more and more frustrated with managing difficult behaviors which often lead to teacher burnout.

We all know we are not going to change the family make-up and the ever changing demands in education. So how do we effectively work with students with ADHD and attention difficulties? And so began my master's project. My hope is that by providing information about ADHD as well as various interventions to be used with students with ADHD, teachers will feel more equipped to help their students succeed.

Definitions

Attention Deficit Hyperactivity Disorder - attention deficit disorder and attention deficit hyperactivity disorder are medical conditions characterized by a child's inability to focus, while possessing impulsivity, fidgeting and inattention

Baseline Data - data taken over a period of time in a typical setting before implementing an intervention

Comorbidity - disabilities existing simultaneously with and usually independently of another medical condition

DSM-5 – Diagnostic and Statistical Manual of Mental Disorders, 5th Edition. The manual is used to diagnose various disorders including ADHD.

Goals - observable, measurable and attainable targets based on the baseline data

Interventions - a planned set of procedures that are aimed at teaching a specific set of academic or social skills to a student

On-task behaviors – behaviors related to various academic or instructional tasks

Other Health Impairment (OHI) - term used to describe limited strength, vitality and alertness that results in limited ability in the educational environment and could be a result of chronic health problems such as asthma, attention deficit hyperactivity disorder, epilepsy, heart condition, hemophilia, leukemia, nephritis, rheumatic fever and sickle cell anemia

Reinforcer - a stimulus as a reward that increases the probability of a desired response in operant conditioning by being applied or effected following the desired response

Self-Regulating - a number of methods used by students to manage, monitor, record, and/or assess their behavior or achievement

Case Study with a Student with ADHD

Joe is a third grade student at a parochial school of approximately 200 students. I asked teachers about Joe and here are some of their comments. "He's such as sweet boy." "I just love him." "He just can't pay attention." "He just sits there and does nothing." "It takes one person to work with him or he won't accomplish a thing." "I don't know what's going to happen to him".

Joe has ADHD, Combined Presentation in addition to a Specific Learning Disability. Joe's challenges in paying attention have always been a part of his school day and a source of frustration for his teachers and himself. To compound Joe's challenges, Joe also has an extremely slow processing speed and the school days seem to simply pass him by.

Joe became the subject of my study in hopes to provide him with the resources to be more successful in school by addressing one great challenge – working during independent work time. My goal was to teach Joe 4 different self-regulating strategies to aid him in this challenging behavior.

The first step was to look at the target behavior and determine how on-task Joe was during Reading in Math independent work time. Regular observations showed that Joe was off-task, but the question was, how much? I did 3 observations on Joe in Math class and Reading class to determine the average amount of time he was on-task. This determined the baseline. The data revealed that Joe averaged only 24% on-task behavior during Reading and an average of 28% during Math.

Once the baseline was determined, the steps for each of the four self-regulating strategies were taught. Joe was taught about self-regulating and its benefits. It was determined that Joe would use a self-recording form to record whether he was on-task when prompted during various times of independent work time. Time was spent practicing self-regulating through role playing and examples and non-examples were discussed.

The first strategy taught was self-monitoring and occurred over 4 days. It was amazing to see how well the intervention worked for Joe. His attention increased greatly and even his attitude about self-regulating and his accomplishment brought him such pride. Joe remained on-task for an average of 80% of the work time in Reading and an average of 75% during Math classes.

The next intervention, self-monitoring plus reinforcement brought a greater amount of on-task behaviors. Over the 4 days of the intervention, Joe averaged just over 85% on-task during Reading and almost 93% on-task during Math. It was evident that Joe enjoyed being rewarded for his on-task behavior.

The intervention of self-reinforcement brought about some interesting observations. While Joe recorded that he was on-task 100% of the time during both Reading and Math, it was clear by observations that his self-assessments were at times inaccurate. Joe was observed marking his entire recording sheet before he was prompted to do so. This occurred during both Reading and Math class. It was evident that Joe did not yet have the ability to accurately self-record his behaviors.

The final intervention, self-management, was Joe's favorite intervention. He enjoyed meeting after each class period to compare our recording sheets. During the 4 days of the intervention, Joe averaged just over 96% on-task behaviors during Reading class. He also averaged just over 81% on-task behavior during Math.

All of the interventions brought about a significant increase in on-task behaviors. Though the intervention of self-reinforcement would not be the best strategy for Joe to use at this time, it still brought about an increase in on-task behavior from the baseline. Self-regulating strategies were proven to be an effective strategy for Joe.

The graphs on the following page show the average percentage of on-task behaviors for Joe during the baseline and each of the interventions. Figure 1 shows on-task behaviors during independent work time in Reading. Figure 2 shows on-task behaviors during independent work time in Math. A comparison of the graphs shows the intervention of self-reinforcement having the highest on-task behavior. However observations of Joe during the self-reinforcement revealed he was not accurate in filling out his chart and often completed his self-monitoring chart before he was cued to do so. Due to the inaccurate self-recording, this particular intervention would not be an intervention to use until Joe improves in his ability to accurately self-record.

A short interview with Joe occurred at the completion of the study. Joe enjoyed the various self-regulating strategies. His commented that he liked how he was able to remain on-task and complete more of his work. He also stated that he enjoyed self-management the most because it allowed time to meet with the teacher and compare the self-monitoring charts. Joe's desire was to continue with self-management after the study because it allowed him to have better control of himself.



Figure 3. Percentage of on-task behavior for baseline and interventions during Reading independent work time.

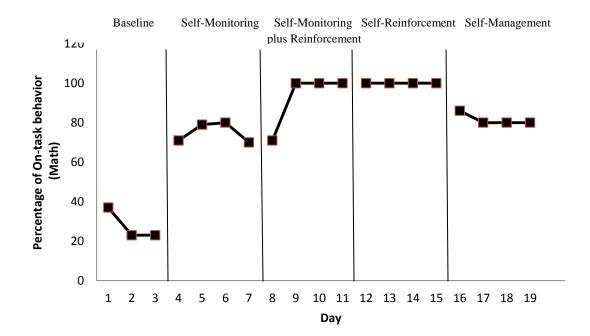
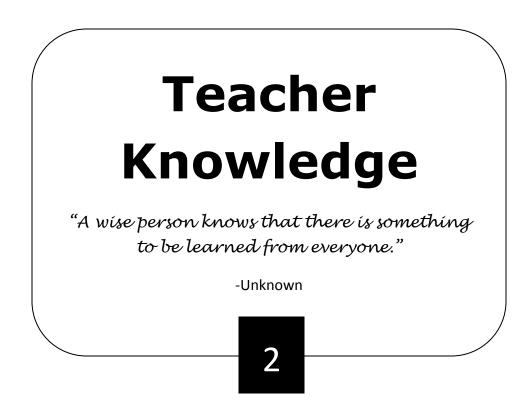


Figure 4. Percentage of on-task behavior for baseline and interventions during Math independent work time.

65



Most teachers would consider themselves knowledgeable about ADHD. After all, it is being seen more and more in classrooms and most teachers could probably identify a friend or family member that has ADHD.

Several studies about teacher knowledge have occurred over the years and the results may be a bit surprising. In a 2012 study, teachers were surveyed about their knowledge and attitude of ADHD. The survey revealed that the teachers who were currently teaching only correctly answered 60% of the questions about ADHD. Additionally, the majority of the teachers with more experience felt less confident in reaching students with ADHD than those teachers with less experience. The majority of the teachers surveyed recognized a lack of knowledge of effective interventions to work with students with ADHD and also reported very little training about ADHD.

So how do teachers work effectively with students with ADHD? The first step comes in understanding the disorder and characteristics of the different presentations. Take a quick quiz about ADHD. How much do you know?

Knowledge of ADHD

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What is your knowledge of ADHD? Answer true or false to each of the following statements. The answers can be seen below.

1.	т	F	ADHD isn't a real medical disorder.
2.	Т	F	ADHD is caused by bad parenting.
3.	Т	F	In order for a child to be diagnosed with ADHD, symptoms must
			occur in 2 different settings.
4.	Т	F	Giving special accommodations for ADHD students is unfair.
5.	Т	F	Children will eventually outgrow ADHD.
6.	Т	F	Symptoms of depression are more common in those with ADHD.
7.	Т	F	Sugar and certain food additives are causes of ADHD.
8.	Т	F	Current statistics reveal approximately 10% of children in the
			United States have been diagnosed with ADHD.
9.	Т	F	Students with ADHD are always hyperactive.
10.	Т	F	Children with ADHD are often more compliant with their fathers
			than with their mothers.
11.	Т	F	Boys are more likely to have ADHD than girls.
12.	Т	F	The majority of children with ADHD evidence some degree of
			poor school performance in elementary school.
13.	Т	F	Approximately 25% of children with ADHD have an additional
			disability.
14.	Т	F	Watching too much TV causes ADHD.
15.	Т	F	Children who can focus at times (eg. reading, games, TV) do not
			have ADHD.
16.	Т	F	ADHD can be inherited.

J-E J-E 3-L 4-E 2-E 8-L J-E 8-L 3-E J0-L JJ-E JJ-E J3-E J4-E J2-E J9-L

Myths and Truths

Myth #1: ADHD is not a real disorder.

Truth: ADHD is a medical disorder which is the result of an imbalance in neurotransmitters in the brain.

Myth #2: ADHD is caused by bad parenting.

Truth: ADHD is a medical disorder. Children who often blurt out in the classroom or seem impolite do so as a result of a chemical imbalance in which they struggle to control their behaviors.

Myth #3: Children with eventually outgrow ADHD.

Truth: ADHD is a lifelong condition. As children mature, many of them learn how to manage the disability. Most children with ADHD will continue to have symptoms into adolescence and adulthood.

Myth #4: Reducing sugar and additives is an effective way to manage ADHD.

Truth: There is no scientific evidence that sugar or food additives cause ADHD and there is little scientific evidence to show that changing diet will help with ADHD symptoms.

Myth #5: Boys are more likely to have ADHD than girls.

Truth: Boys are more likely to have the hyperactive or impulsive behaviors of ADHD which are more often seen in the classroom. Girls are more likely to display the ADHD behavior of inattentiveness which is often characterized as daydreaming and dismissed as ADHD.

Myth #6: A child who can focus at certain times and during certain activities doesn't really have ADHD.

Truth: Studies reveal that the brain reacts differently to the context in which a student is functioning. Due to these differences, a child might be able to have great focus on something that interests them, but has little focus on something not of interest. This is not a matter of willpower nor is it a lack of effort. It's a matter of a chemical imbalance in the brain.

Source: Retrieved from ADDitude: Strategies and Supports for ADHD and LD (www.additudemag.com)

Comorbidity with ADHD

It is estimated that approximately 60% of students with ADHD have a comorbid, or coexisting disability. While ADHD may be diagnosed by the time a child is seven years old, many other disabilities are not diagnosed until later. Comorbid disabilities include Tourette 's syndrome, Bipolar Disorder, Obsessive Compulsive Disorder, Anxiety Disorder, Behavior Disorders, Learning Disabilities and Depression.

Behavior Disorders

Behavior Disorders such as Conduct Disorder (CD) and Oppositional Defiance Disorder (ODD) are the most common comorbid disability. 40-60% of children with ADHD also have a behavior disorder. Children with ADHD and a behavior disorder are more likely to

- purposely annoy others
- o blame others for their own actions
- o experiment earlier with drugs and alcohol
- o engage in deviant behavior such as setting fires and fighting

Depression

Due to the social challenges for children with ADHD, a high existence of depression exists. Children with ADHD often struggle to act appropriately with their peers which often lead to rejection by peers. Children with ADHD and depression are more likely to

- withdraw from peers
- o engage in antisocial behaviors
- o engage in drug and alcohol abuse
- commit suicide compared to non-disabled peers

Learning Disabilities

Approximately 45% of students with ADHD have a comorbid learning disability. These students have the additional challenge in academic areas such as reading and math. Children with ADHD and a learning disability are more likely to

- increased attention problems
- increased memory issue
- increased deficit in processing speed
- poor academic gains
- greater difficulty with transitions
- greater difficulty completing tasks

Attention Deficit/Hyperactivity Disorder

It is estimated that eleven percent of school-age children have been diagnosed with ADHD. So in a classroom of 20 students, statistically, 2 of them will be diagnosed with ADHD. ADHD is considered a disability if it interferes with the academic growth of a child. A student who qualifies for Special Education due to ADHD is qualified under the category of Other Health Impairment (OHI).

ADHD is one of the earliest disorders identified in young children. *The American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) provides the following criteria used to diagnose a person with ADHD.

- Particular symptoms must exist before the age of 12.
- Behaviors must occur for at least 6 months.
- The symptoms must occur in at least 2 settings such as home, school or play.
- The behaviors must reduce the quality of social, academic or occupational functioning.

Based on the dominance and frequency of particular characteristics those with ADHD will be identified with one of the three different subtypes: Predominantly Inattentive Presentation, Predominantly Hyperactive/Impulsive Presentation, and Combined Presentation.

ADHD Presentations

- 1. Predominantly Inattentive
- 2. Predominantly Hyperactive/Impulsive
- 3. Combined

Predominantly Inattentive Presentation

It is estimated that 20-30% of those identified with ADHD fall into the predominantly inattentive presentation with a larger percentage of girls. Children in this category are often characterized at daydreamers or spacey. The following are characteristics seen in those with the predominantly inattentive presentation:

- Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or during other activities (e.g. overlooks or misses details, work is inaccurate).
- Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).
- Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
- Often does not follow through on instructions and fails to finish school work, chores, or duties in the work place (e.g., starts tasks but quickly loses focus and is easily sidetracked).
- Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
- Often avoids or is reluctant to engage in tasks that require sustained mental effort (e.g. schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).
- Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses and mobile telephones).
- Is often easily distracted by extraneous stimuli (e.g., for older adolescents and adults may include unrelated thoughts).
- Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).

In addition to these characteristics, students in the predominantly inattentive presentation are more likely to have a slower processing speed as well as more difficulty with memory retrieval. These students generally have fewer overt behavioral problems which makes it easier for them to seem invisible in the classroom. However, these students also have a greatly likelihood of struggling with anxiety.

Predominantly Hyperactive/Impulsive Presentation

Approximately 15% of children with ADHD are characterized as predominantly hyperactive/impulsive presentation. Characteristics of this presentation are more likely to be seen in younger children and are seen more frequently in boys. Characteristics of this presentation may lesson as a child matures. The characteristics for the predominantly hyperactive/impulsive presentation are as follows:

- Often fidgets with or taps hands or squirms in seat.
- Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
- Often runs about or climbs in situations where it is inappropriate (e.g., in adolescents or adults, may be limited to feeling restless).
- Often unable to play or engage in leisure activities quietly;
- Is often "on the go" acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).
- Often talks excessively.
- Often blurts out answers before questions have been completed (e.g., completes people's sentences; cannot wait for turn in conversation).
- Often has difficulty waiting turn (e.g., while waiting in line).
- Often interrupts or intrudes on others (e.g. butts into conversations, games, or activities. may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

Due to the overt behaviors in this presentation, students with the predominantly hyperactive/impulsive presentation are more likely to receive office referrals as well as being removed from the classroom.

Combined Presentation

Approximately 50-70% of children of those diagnosed with ADHD are in the combined presentation with a greater percentage of boys. Children with this presentation display behaviors from both categories. The following are behaviors of children with the combined presentation:

- Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or during other activities (e.g. overlooks or misses details, work is inaccurate).
- Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).
- Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).
- Often does not follow through on instructions and fails to finish school work, chores, or duties in the work place (e.g., starts tasks but quickly loses focus and is easily sidetracked).
- Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).
- Often avoids or is reluctant to engage in tasks that require sustained mental effort (e.g. schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).
- Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses and mobile telephones).
- Is often easily distracted by extraneous stimuli (e.g., for older adolescents and adults may include unrelated thoughts).
- Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).
- Often fidgets with or taps hands or squirms in seat.
- Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).
- Often runs about or climbs in situations where it is inappropriate (e.g., in adolescents or adults, may be limited to feeling restless).
- Often unable to play or engage in leisure activities quietly;
- Is often "on the go" acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).
- Often talks excessively.
- Often blurts out answers before questions have been completed (e.g., completes people's sentences; cannot wait for turn in conversation).
- Often has difficulty waiting turn (e.g., while waiting in line).

 Often interrupts or intrudes on others (e.g. butts into conversations, games, or activities. may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

Students characterized with the combined presentation often bring additional challenges to the classroom. Because these students may display very different behaviors at various times, teachers may not recognize these students with ADHD. Due to this being the largest category of students with ADHD, teachers need to recognize the symptoms of students with the combined presentation.

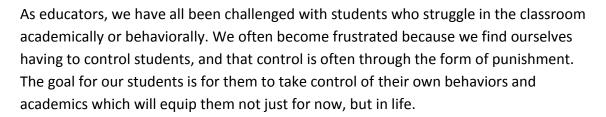
Source: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (2013)

Self-Regulating Strategies

"There is no greater disability in society than the inability to see a person as more."

-Robert M. Hensel

3



Self-regulating is a strategy that has been researched since the early 1970's. Other terminology that reflects the understanding of self-regulating is self-discipline and self-control. Self-regulation describes a number of methods used by students to manage, monitor, record, and/or assess their behavior or achievement. Due to more on-task behaviors brought about through self-regulating, the process has been widely used for those students with ADHD as well as other disruptive disorders.

Self-regulating is based on a continual cycle of immediate feedback for the student which has been shown to benefit students with ADHD. When students take control of their own behaviors and engage in more on-task behaviors, it enables teachers to spend less time managing behaviors and more time teaching. Various studies support the ease of implementing self-regulating strategies as well as favorable responses of the interventions by students. The typical cycle for self-regulating begins with the teacher determining a target behavior or academic goal. The teacher then instructs the student about the benefits of self-regulating. A measurement system such as a check-off sheet or graph is determined. The student is taught to self-regulate and learns about the desired behavior based on examples and non-examples. Finally, the student self-regulates and records behaviors. Goals are adjusted based on the student's success.

Self-Regulating Strategies

- 1. Self-Monitoring
- 2. Self-Monitoring plus Reinforcement
- 3. Self-Reinforcement
- 4. Self-Management

Self-Regulating Checklist

Before any self-regulating strategy is used, it must be determined whether a student is able to self-monitor. The following checklist may be used to determine whether self-regulating is an appropriate intervention.

Questions to Determine if Self-Regulating is an Appropriate Intervention		
	Yes	No
Does the student possess the skills to engage in the target behavior (eg., a performance or behavior deficit)?		
Would the student be expected to engage in the target behavior at least a few times each week?		
Is the target behavior developmentally and cognitively appropriate for the student?		
Is the behavior voluntary?		
Is the behavior one that does not evoke harm on the student, the people around him or her, or the environment?		
It is clear that the student does not engage in the behavior for cultural reasons?		
If all the questions are answered "yes", then self-monitoring may be a intervention to use.	n appropri	ate
If any of the questions are answered "no", then self-monitoring is probably appropriate intervention to use.	bably not a	in

Source: Rafferty, L.A. (2010). Step-by-step: Teaching students to self-monitor. *Teaching Exceptional Children*, 43(2), 50-58.

Forms for Self-Regulating

Teacher Forms

- Teacher Planning Form used to plan out all aspects for each of the four selfregulating strategies
 - Teacher Planning Form for Self-Monitoring Pg. 22
 - Teacher Planning Form for Self-Monitoring plus Reinforcement Pg. 26
 - Teacher Planning Form for Self-Reinforcement Pg. 30
 - Teacher Planning Form for Self-Management Pg. 34
- Teacher Recording Forms used to collect data on the student
 - Student Observation Pg. 36
 - Completion of Problems Pg. 38
 - Accuracy of Problems Pg. 40

Student Recording Forms

- Self-Recording Charts used by the student to self-record on-task behavior when prompted
 - Self-Recording Chart for Primary Students Pg. 42
 - Self-Recording Chart for Intermediate Students Pg. 44
 - On-Task Recording Chart Pg. 46
 - Completion of Problems for Primary Students Pg. 48
 - o Completion of Problems for Intermediate Students Pg. 50
 - Accuracy of Problems for Primary Students Pg. 52
 - Accuracy of Problems for Intermediate Students Pg. 54
- Sample Behavior Checklists Customizable forms using to focus on various areas during the school day such as instructional time, independent work time etc. using Intervention Central (www.interventioncentral.com).
 - Morning Routine Pg. 56
 - During Instruction Pg. 56
 - Independent Work time Pg. 57
 - Group Work Pg. 57

Self-Monitoring

Self-monitoring is a self-regulating strategy in which students manage their own behaviors through a two-step process. Step one is to determine the desired behavior. Step two is the student's self-recording of their own observations.

Self-monitoring is used to bring about better attention to a task and is also used for completing an academic task. In self-monitoring of attention, a student is instructed about the benefits of remaining on- task during work time or while listening as the teacher is providing classroom instruction through self-regulating. A goal will be determined as well as the type of self-recording. The student will be given examples and non-examples of self-regulating as well as opportunities to practice. At random times, a tone such as a bell will sound and the student will determine whether or not they are engaged in the appropriate behavior. The student will then self-record their behavior.

In self-monitoring of performance, an academic goal is set. The goal might be completing a determined number of problems or the accuracy of work in a set period of time. The student follows the same steps as self-monitoring of attention, but during this intervention, they record their progress and determine if the goal was met. Selfmonitoring of performance often includes a graphing aspect in which the student will graph the data. For example, if the goal for the student is to complete ten Math problems during the work time, the student would graph how many problems they completed. The graph allows the student a visual to see their progress over time.

The benefit of self-monitoring is that very little time is required of the teacher. Once the teacher has taught the strategy and has monitored the student to determine their accuracy in self-recording, the teacher's work is complete. The remainder of the strategy is student directed which allows the teacher to use their time in areas other than managing behaviors. However, the teacher needs to regularly revisit the goal to determine whether it needs to be altered.

Steps for Self-Monitoring

Step 1 – Choose a target behavior.

- Academic or behavioral
- Written down
- Measurable

Step 2 – Talk to the student about the benefits of self-regulating.

- Improved behavior
- Better grades
- More work accomplished

Step 3 – Determine how to measure the behavior eg. time on-task, problems complete (see pages 36-40).

- Begin taking baseline data on target behavior
- Graph data
- Baseline data should show a pattern and last for at least 3 sessions.

Step 4 – Determine method of self-recording (see pages 42-54).

- Tally marks
- Coloring boxes
- Tokens

Step 5 – Teach the student to self-regulate.

- Role play
- Give examples and non-examples
- Practice together until the student can perform on their own

Step 6 – Student begins self-regulating.

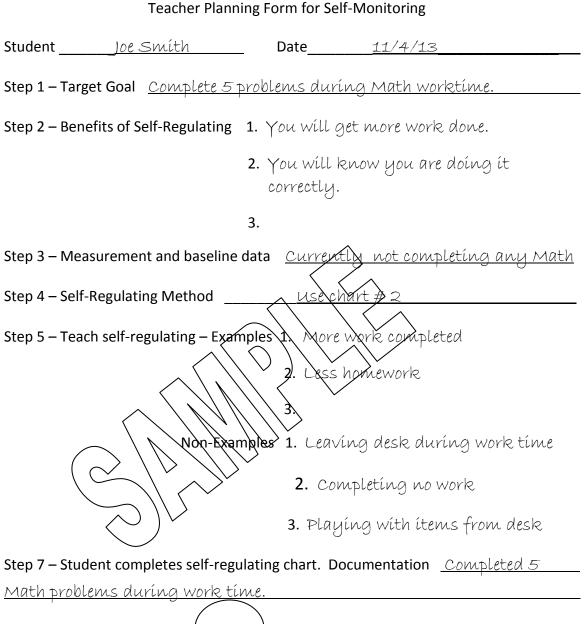
- Teacher should also monitor initially to ensure students is regulating correctly.
- If errors are made, reteach the skill.

Step 7 – Once goals are being met and student is proficient in self-regulating, begin fading.

- Lessen the amount of times checking.
- Increase goals.
- As the goals are met consistently, make a new goal and begin again.

Teacher Planning Form for Self-Monitoring Student ______ Date _____ Step 1 – Target Goal Step 2 – Benefits of Self-Regulating 1. 2. 3. Step 3 – Measurement and baseline (see pages 36-40) Step 4 – Self-Regulating Method (see pages 42-54) _____ Step 5 – Teach self-regulating – Examples 1. 2. 3. Non-Examples 1. 2. 3. Step 7 – Student completes self-regulating chart. Documentation Step 8 – Was goal met? Yes No Notes and next steps _____ Created by Dana Muehl (2015)

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Step 8 – Was goal met?

No

Notes and next steps <u>Continue goal for the remainder of the week. If he</u>

meets the goal, increase the goal to 7 problems next week.

Yes

<u>Start graphing problems completed.</u>

Self-Monitoring plus Reinforcement

Many students lack the skills to take control of their own behaviors. And for others, they are unable or unwilling to change behaviors without some type of reinforcement. For those students, using the self-regulating strategy of self-monitoring plus reinforcement might bring about the desired changes.

Self-monitoring plus reinforcement is very similar to self-monitoring. First, a desired target behavior is identified. This change may be one's behavior (eg., time on-task) or an academic behavior (eg., completing an assignment). The target behavior should be clearly defined and measureable to allow the teacher and student to understand what behavior is desired.

The teacher talks to the student about the benefits of self-regulating such as improved grades or getting more work accomplished. It is also determined what type of 83einforce motivates the student. This can be accomplished through a variety of surveys.

The teacher then determines how to measure the behavior (eg., minutes on-task during instruction, number of problems completed in Math), and records the student's performance over a minimum of three sessions to determine a pattern of behavior. This will be the baseline data.

A self-recording method is chosen for the child. Older students may use paper-based systems such as charts whereas younger children may benefit from tangible items such as tokens or blocks. The teacher also determines the goal for the student to receive the reward based on the baseline data. It is important that the goal is set at or just above the baseline data to guarantee success.

The teacher then teaches the student how to self-monitor using role playing. Sharing examples and non-examples assists the student in understanding the desired behavior. Practice should continue until the teacher is confident in the student's ability to self-record their behavior accurately.

The student and teacher begin self-monitoring. It is necessary for the teacher to selfmonitor initially to determine if the student requires more instruction or practice. If the student reaches the preset goal a 83einforce is given.

When the teacher determines the student is proficient in monitoring behavior, the teacher begins gradually to fade monitoring until checks are only periodic. Once the behavior is changed, a new behavior may be introduced and the process begins again.

Steps for Self-Monitoring plus Reinforcement

Step 1 – Choose a target behavior.

- Academic or behavioral
- Written down
- Measurable

Step 2 – Talk to the student about the benefits of self-regulating

- Better grades
- More work accomplished
- Determine the type of reinforcement. Involve the student!
 - Forced Choice survey (see pages 71-83).
 - Reinforcer Menu

Step 3 – Determine how to measure the behavior eg. time on-task, problems complete (see pages 36-40).

- Begin taking baseline data on target behavior
- Graph data
- Baseline data should show a pattern and last for at least 3 sessions.

Step 4 – Determine method of self-recording (see pages 42-57).

- Tally marks
- Coloring boxes
- Tokens

Step 5 – Determine appropriate criterion to receive a 84einforce.

- Should be based on baseline data.
- Start with expectations just above baseline so a reward will be achieved.

Step 6 – Teach the student to self-regulate.

- Give examples and non-examples
- Practice together until the student can perform on their own

Step 7 – Student begins self-regulating

- Teacher should also monitor initially to ensure students is regulating correctly.
- If errors are made, reteach the skill.

Step 8 – Once goals are being met and student is proficient in self-regulating, begin fading.

- Lessen the amount of times checking.
- As the goals are met consistently, make a new goal and begin again.

Teacher Planning Form for Self-Monitoring plus Reinforcement
Student
Date
Step 1 – Target Goal
Step 2 – Benefits of Self-Regulating 1.
2.
3.
Reinforcement working towards
Step 3 – Measurement and baseline data (see pages 36-40)
Step 4 – Self-Regulating Method (see pages 42-54)
Step 5 – Criterion for 85einforce
Step 6 – Teach self-regulating – Examples 1.
2.
3.
Non-Examples 1.
2.
3.
Step 7 – Student completes self-regulating chart. Documentation
Step 8 – Was goal met? Yes No
Notes and next steps
Created by Dana Muehl (2015)

Teacher Planning Form for Self-Monitoring plus Reinforcement
Student <u>Joe Smith</u> Date <u>11/4/13</u>
Step 1 – Target Goal On-task behavior during instruction
Step 2 – Benefits of Self-Regulating 1. You will understand new concepts
2. You will know the directions.
3. You will not get into trouble.
Reinforcement working towards <u>15 mknutes of computer time</u>
Step 3 - Measurement and baseline data Time on task - Baseline - 40%
Step 4 – Self-Regulating Method
Step 5 - Criterion for reinforcer Increase to 50% on-task = 1sticker
Step 6 – Teach self-regulating – Examples 1. Cook at the teacher
2. Follow along in the book
3. Be able to answer questions
Non-Examples 1. Leaving desk during instruction
2. Talking to friends
3. Playing with items from desk
Step 7 – Student completes self-regulating chart. Documentation <u>50% on-task</u> behavior
Step 8 – Was goal met? (Yes No
Notes and next steps Continue with 50% of goal for the week.
If goal is met, increase to 60% next week.
Move away from Jason!

Self-Reinforcement

Self-reinforcement in another method of self-regulating. While self-reinforcement does not require as much monitoring self-monitoring plus reinforcement, it does require students to be able to accurately self-record their behaviors. Consequently, students who are not proficient in self-recording should not use the self-reinforcement strategy.

Self-reinforcement follows the same steps and guidelines as the previously explained interventions. The goal is determined and the teacher explains the advantages of self-regulating. The teacher determines how to measure the behaviors, takes baseline data, and determines how the student will self-record their behaviors. Finally, the teacher will practice with the student and then the student self-monitors and records their behavior. If the student reaches the goal, they provide themselves a reinforcer.

The main difference with this intervention is that the student determines whether or not they have reached the goal. In the previous interventions, the teacher also monitored the student to see if they were accurately self-recording. Because the teacher is not recording behaviors, it may be a challenge for some students to accurately record their behaviors.

One positive aspect in self-reinforcement is that is requires very little time from the teacher. Once the strategy has been taught, the strategy is all student directed. However, the negative in this strategy is that students may not record accurately which may cause no change in the unwanted behavior.

Steps for Self-Reinforcement

Step 1 – Choose a target behavior.

- Academic or behavioral
- Written down
- Measurable

Step 2 – Talk to the student about the benefits of self-regulating

- Improved behavior
- Better grades
- Determine the type of reinforcement. Involve the student!
 - Forced Choice survey
 - Reinforcer Menu

Step 3 – Determine how to measure the behavior eg. time on-task (see pages 36-40).

- Begin taking baseline data on target behavior
- Graph data
- Baseline data should show a pattern and last for at least 3 sessions.

Step 4 – Determine method of self-recording (see pages 42-54).

- Tally marks
- Coloring boxes
- Tokens

Step 5 – Determine appropriate criterion to receive a reinforcer.

- Should be based on baseline data.
- Start with expectations just above baseline so a reward will be achieved.
- Increase criteria as goals are met more readily

Step 6 – Teach the student to self-regulate

- Give examples and non-examples
- Practice together until the student can perform on their own

Step 7 – Student begins self-regulating

- Teacher should also monitor initially to ensure students is regulating correctly.
- If errors are made, reteach the skill.

Step 8 – If student determines they have reached their goal, a reinforcer is given.

- Increase goals.
- As the goals are met consistently, make a new goal and begin again.

Teacher Planning Form	for Self-Reinforcement
-----------------------	------------------------

Student	Date
Step 1 – Target Goal	
Step 2 – Benefits of Self-Regulating	1.
:	2.
	3.
Reinforcement working towa	rds
Step 3 – Measurement and baseline d	ata (see pages 36-40)
Step 4 – Self-Recording Method (see p	bages 42-54)
Step 5 – Criterion for reinforcer	
Step 6 – Teach self-regulating – Exam	ples 1.
	2.
	3.
Non-Exam	ples 1.
	2.
	3.
Step 7 – Student completes self-recor	ding chart. Documentation
Step 8 – Was goal met? Yes N	Νο
Notes and next steps	
Created by Dana Muehl (2015)	
	30

Teacher Planning Form for Self-Reinforcement

Student	Joe Smí	th	_Date _		11/4/1	3	
Step 1 –	Target Goal 🧕	on-task beh	<u>iavíor</u>	durínç	g ínstru	.ctíon	
Step 2 –	Benefits of Sel	f-Regulating	1. Yo	n will	underst	and new	concepts
			2 . Yo	ou will	know th	ne dírectí	ons.
			3. You	u wíll ı	not get í	into troul	ble.
ſ	Reinforcemen	t working tow	ards <u>-</u>	15 mír	nutes of	computer	rtíme
Step 3 –	Measurement	and baseline	data	<u>Tíme o</u>	n-task	– Baselív	re - 40%
Step 4 – S	Self-Regulatin	g Method		<u>Alse c</u>	hart # 1	>	
Step 5 –	Criterion for r	einforcer	Increi	<u>asato e</u>	<u>50% n-t</u>	task = 1	sticker
Step 6 –	Teach self-reg	ulating – Exan	nples 1) L. Look	s at the t	teacher	
	\langle			2 Follo	ow along	g ín the b	ook
	\bigcirc	1//////////////////////////////////////	\sum	3 . Ве а	ble to av	nswer qu	estíons
		Non-Exan	nples	1. Leav	/ing des	k during	g instruction
	\langle			2. Ta	ilking to	o fríends	
				3. Plaį	ying wit	th ítems	from desk

Step 7 – Student completes self-regulating chart. Documentation <u>50% on-task</u> behavior

Step 8 – Was goal met? Yes No

Notes and next steps <u>Continue with 50% of goal for the week.</u>

If goal is met, increase to 60% next week.

Move away from Jason!

Self-Management

Self-management is another form of self-regulating. Self-management follows the same steps as the other types of self-regulating with one significant difference. Self-management includes a comparison of the student's self-recording and the teacher's observations. This type of self-regulating strategy is beneficial for students who may not self-record proficiently and need more teacher direction.

During self-management, a goal is determined based on the desired behavior as well as the baseline data for that behavior. The teacher explains the benefits of selfmanagement to the student and shares what the student must achieve in order to receive the agreed upon reward. This intervention requires a similarity in data between the student and teacher. For example, the teacher may determine that the charts must be 80% similar in order to receive a reward.

The teacher then instructs the student how to self-regulate using examples and nonexamples of appropriate behaviors are shared, and the teacher provide practice filling out the self-recording form. When prompted, the student begins to self-regulate and records their behavior. The teacher also observes the student and records the behavior. At the end of the period, the student compares their recording form with the teacher. Based on the predetermined goal of similarity, the student receives a reward.

One of the benefits the self-management strategy is it allows more regulating by the teacher to determine if the student is accurately self-recording. It also provides time for the teacher to give immediate feedback to the student. The negative aspect of self-management is that it requires more time on the part of the teacher.

Steps for Self-Management

Step 1 – Choose a target behavior.

- Academic or behavioral
- Written down
- Measurable

Step 2 – Talk to the student about the benefits of self-regulating

- Improved behavior
- Better grades
- More work accomplished
- Determine the type of reinforcement. Involve the student!
 - Forced Choice survey (see pages 71-83)
 - Reinforcer Menu
- Step 3 Determine how to measure the behavior eg. time on-task, problems complete (see pages 36-40).
 - Begin taking baseline data on target behavior
 - Graph data
 - Baseline data should show a pattern and last for at least 3 sessions.

Step 4 – Determine method of self-recording (see pages 42-54).

- Tally marks
- Coloring boxes
- Tokens

Step 5 – Determine appropriate criterion to receive a reinforcer.

- Determine the percentage of matching information with the teacher.
- Start with expectations just above baseline so a reward will be achieved.
- Increase criteria as goals are met more readily
- Step 6 Teach the student to self-regulate
 - Give examples and non-examples
 - Practice together until the student can perform on their own
- Step 7 Student begins self-regulating and teacher also records behavior
 - If errors are made, reteach the skill.

Step 8 – Compare teacher recording sheet with student.

- If the recording sheets match, a reward is given.
- As the goals are met consistently, make a new goal and begin again.

Teacher Planning Form	n for Self-Management
------------------------------	-----------------------

Student	Date
Step 1 – Target Goal	
Step 2 – Benefits of Self-Regulating	1.
	2.
	3.
Reinforcement working tow	vards
Step 3 – Measurement and baseline	data (see pages 36-40)
Step 4 – Self-Recording Method (see	e pages 34-47)
Step 5 – Criterion for reinforcer	
Step 6 – Teach self-regulating – Exar	nples 1.
	2.
	3.
Non-Exar	mples 1.
	2.
	3.
Step 7 – Student completes self-reco	ording chart. Documentation
Step 8 – How did we compare?	
Was goal met? Yes No	
Notes and next steps	
Created by Dana Muehl (2015)	

Student loe Smith Date 11/4/13 Step 1 – Target Goal On-task behavior during instruction Step 2 - Benefits of Self-Regulating 1. You will understand new concepts 2. You will know the directions. 3. You will not get into trouble. Reinforcement working towards <u>15 minutes of computer time</u> Step 3 - Measurement and baseline data Time du-task Baseline - 40% Step 4 – Self-Regulating Method char <u>acquirate concentison = 1</u>sticker Step 5 – Criterion for reinforcer Step 6 - Teach self-regulating - Examples 1 Gook at the teacher $\mathbf{2}$. Follow along in the book 3. Be able to answer questions Non-Examples 1. Leaving desk during instruction 2. Talking to friends 3. Playing with items from desk Step 7 – Student completes self-regulating chart. Documentation <u>50% on-task</u> behavior Step 8 - How did we compare? 90% accuracy in comparing with Mrs. Smith. Was goal met ? Yes No

Teacher Planning Form for Self-Management

Notes and next steps <u>Continue with 80% of goal for the week</u>.

<u>If goal is met, increase to 90% next week.</u>

Move away from Jason!

Student Observation Form

Student	Date	Session

Setting _____

On-task = working during independent work time

- Writing down answers
- Looking up or computing answers
- Filling in self-recording sheet

Off-task= any behavior other than those listed above

Interval	1	2	3	4	5	6	7	8	9	10
	:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00
On-task										
Off-task										

Interval	11	12	13	14	15	16	17	18	19	20
	5:30	6:00	6:30	3:30	7:00	7:30	8:00	8:30	9:00	9:30
On-task										
Off-task										

Interval	21	22	23	24	25	26	27	28	29	30
	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30
On-task										
Off-task										

Observations

Behaviors	Totals		
On-task	/	=	%
Off-task	/	=	%

Source: Adapted from Behavior Management – Zirpoli (2012)

Observation Notes

Student Observation Form

Student	leff Smíth	Date	3/14/13	Session	3

Setting Math work time. Lesson taught. Students working on assignment

On-task = working during independent work time

- Writing down answers
- Looking up or computing answers
- Filling in self-recording sheet

Off-task= any behavior other than those listed above

Interval	1	2	3	4	5	6	7	8	9	10
	:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00
On-task	Х	Х	Х	Х	×	X	X	X	Х	Х
Off-task								\geq		

			<		$ \land \land \land$	\sim	-			
Interval	11	12	∕13∖	14 1	15	16	17	18	19	20
	5:30	6:00	6:30	3:30	7:00	7:30	8:00	8:30	9:00	9:30
On-task	× ($\left[\right]$	$\langle \rangle$		\sim					
Off-task		X	X	×	Х	Х	Х	Х	Х	Х
		\langle	\mathcal{F}							

Interval	21	22	23	24	25	26	27	28	29	30
	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30
On-task										
Off-task	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

Observations

Behaviors	Totals
On-task	11/30 = 37%
Off-task	19/30 = 63%

Observation Notes

Jeff is off-task after about 5 minutes. This is similar to the first 2 sessions. While he begins promptly, he cannot stay with the assignment. Jeff needs to be moved away from the door. It is too distracting for him.

Teacher Recording Form for Completion of Problems

Name	Date		
Subject	Торіс		

Average percentage of completed problems	/=	%
<pre># of problems completed/ # of total p</pre>	roblems = average	
New Goal		

Daily Notes and Observations:

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday _____

Source: Retrieved and adapted from Intervention Central (www.interventioncentral.org)

Teacher Recording Form for Completion of Problems

Name	Jack Smíth	Date	5/9/14	
Subject	Math	Topic	Adding Fractions	

	Monday	Tuesday	Wednesday	Thursday	Friday
# of problems assigned	15	15	15	15	15
# of problems completed	4	3	5	4	3
% of problems completed	27%	20%	33%	27%	20%

Average percentage of completed problems 19 / 75 = 25%(# of problems completed # of total problems = Average) Goal for next assignment $-\frac{25-27\%}{25-27\%}$ problems completed

Daily notes and observations

Monday Jack is very distracted by the people that sit around him. He was redirected several times with no changed behavior.

Tuesday Jack has a cold. Constantly up for tissues.

Wednesday _____

Thursday Jack is struggling with the concept of fractions.

Friday <u>Worked with small group over fractions. Still off-task</u> <u>during the work time</u>.

Teacher Recording Form for Accuracy of Problems

Name	Date		
Subject	Торіс		

Average percentage of completed problems/ =	_%
<pre># of problems completed/ # of total problems = average</pre>	
New Goal	

Daily Notes and Observations:

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday _____

Source: Retrieved and adapted from Intervention Central (interventioncentral.org)

Teacher Recording Form for Accuracy of Problems

Name	Jack Smíth	Date	5/9/14	
Subject	Math	Topic	Adding Fractions	

	Monday	Tuesday	Wednesday	Thursday	Friday
# of problems assigned	15	15	15	15	15
# of problems correct	4	3	5	4	3
% of problems completed	27%	20%	33%	27%	20%

Average percentage of correct problems 19 / 75 = 25% (# of problems correct \# of total problems = Average) Goal for next assignment -25-27% correct problems

Daily notes and observations?

Monday Jack is very distracted by the people that sit around him. He was redirected several times with no changed behavior.

Tuesday Jack has a cold. Constantly up for tissues.

Wednesday _____

Thursday Jack is struggling with the concept of fractions.

Friday <u>Worked with small group over fractions. Still off-task</u> <u>during the work time</u>.

Self-Recording Chart

101

Name	Date
Class	
Start Time	Stop Time
Goal for the number of on-task marks	

Directions: Put a $\textcircled{\odot}$ in the box each time you hear the beep and were on-task and a

 $\ensuremath{\mathfrak{S}}$ each time you hear the beep and were off-task.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

Number of 😇

Number of	$\overline{\mathfrak{S}}$	

Did you meet your goal? Yes No

If you did not meet your goal, what changes need to occur for you to meet it next time?

				102		
		Self-Recording Cha	rt			
NameJac	kson	Date	11/15/13			
Class Math wo	rk tíme					
Start Time	9:00		Stop Time	9:20		
Goal for the num	ber of on-task ma	arks <u>10</u>				
~		each time you hea ep and were off-tag		vere on-task and a		
1	2	3	4	5		
\odot				$\overline{\mathbf{i}}$		
6	7	8	9	10		
(\mathbf{i})						
11	12	13	14	15		
\odot		$\overline{\mathbf{i}}$	$\overline{\mathbf{i}}$	$\overline{\mathbf{S}}$		
16	YV	18	19	20		
Number of 🕲 Number of 🙁						
Did you meet yo	ur goal? Yes	No				
If you did not meet your goal, what changes need to occur for you to meet it next time?						
There was too I	much talking	duríng work tír	ne. I need ít qu	uíeter to work.		

Self-Recording Chart

103

 Name _____
 Date _____

 Class _____
 Class ______

 Start Time ______
 Stop Time ______

Goal for the number of on-task marks

Directions: Put a + in the box for each time you were on-task when prompted and a -

for each time you were off-task when prompted.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

 Number of
 +

Did you meet your goal?
 Yes

If you did not meet your goal, what changes need to occur for you to meet it next time?

104 Self-Recording Chart Name Jackson Date 11/15/13 Class Math work time Start Time ______9:00 Stop Time 9:20 Goal for the number of on-task marks ______ Directions: Put a + in the box for each time you were on-task when prompted and a for each time you were off-task when prompted. 1 2 3 5 6 7 10 8 11 12 14 15 16 17 18 19 20 Number of – <u>9</u> Number of + <u>9</u> Did you meet your goal? Yes No If you did not meet your goal, what changes need to occur for you to meet it next time?

There was too much talking during work time. I need it quieter to work.

On-Task Self-Recording Sheet

Student Name Date Class	
-------------------------	--

Directions: Set your timer for _____ minutes. When the timer rings, circle 'Y' for Yes if you were paying attention and doing your work at that moment. Circle 'N' if you were not paying attention and doing your work. Start the timer again and continue to the end of the class period.

1I am paying attention to the academic task.YN2I am paying attention to the academic task.YN3I am paying attention to the academic task.YN4I am paying attention to the academic task.YN5I am paying attention to the academic task.YN6I am paying attention to the academic task.YN7I am paying attention to the academic task.YN8I am paying attention to the academic task.YN9I am paying attention to the academic task.YN10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task behavior for this session. Add up the total number of Y response and divide that by the total% On-task behavior %							
3I am paying attention to the academic task.YN4I am paying attention to the academic task.YN5I am paying attention to the academic task.YN6I am paying attention to the academic task.YN7I am paying attention to the academic task.YN8I am paying attention to the academic task.YN9I am paying attention to the academic task.YN9I am paying attention to the academic task.YN10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task behavior for this session. Add up the total number of Y response and divide that by the total% On-task behavior	1	I am paying attention to the academic task.	Y	N			
4I am paying attention to the academic task.YN5I am paying attention to the academic task.YN6I am paying attention to the academic task.YN7I am paying attention to the academic task.YN8I am paying attention to the academic task.YN9I am paying attention to the academic task.YN9I am paying attention to the academic task.YN10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I	2	I am paying attention to the academic task.	Y	N			
5I am paying attention to the academic task.YN6I am paying attention to the academic task.YN7I am paying attention to the academic task.YN8I am paying attention to the academic task.YN9I am paying attention to the academic task.YN9I am paying attention to the academic task.YN10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I	3	I am paying attention to the academic task.	Y	N			
6I am paying attention to the academic task.YN7I am paying attention to the academic task.YN8I am paying attention to the academic task.YN9I am paying attention to the academic task.YN10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN15I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN15 <td< td=""><td>4</td><td>I am paying attention to the academic task.</td><td>Y</td><td>Ν</td></td<>	4	I am paying attention to the academic task.	Y	Ν			
7I am paying attention to the academic task.YN8I am paying attention to the academic task.YN9I am paying attention to the academic task.YN10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN15I am paying attention to the academic task.YN15I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN <td>5</td> <td>I am paying attention to the academic task.</td> <td>Y</td> <td>Ν</td>	5	I am paying attention to the academic task.	Y	Ν			
8I am paying attention to the academic task.YN9I am paying attention to the academic task.YN10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN16I am paying attention to the academic task.YN17<	6	I am paying attention to the academic task.	Y	N			
9I am paying attention to the academic task.YN10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN16I am paying attention to the academic task.YN15I am paying attention to the academic task.YN15I am paying attention to the academic task.YN15Calculate the Percentage of on-task behavior for this session. Add up the total number of Y response and divide that by the total% On-task behavior	7	I am paying attention to the academic task.	Y	Ν			
10I am paying attention to the academic task.YN11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN16I am paying attention to the academic task.YN17I am paying attention to the academic task.YN18I am paying attention to the academic task.YN19 <td>8</td> <td>I am paying attention to the academic task.</td> <td>Y</td> <td>Ν</td>	8	I am paying attention to the academic task.	Y	Ν			
11I am paying attention to the academic task.YN12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN16I am paying attention to the academic task.YN17I am paying attention to the academic task.YN18I am paying attention to the academic task.YN19I am paying attention to the academic task.YN15I am paying attention to the academic task.YN16I am paying attention to the academic task.YN17I am paying attention to the academic task.YN18I am paying attention to the academic task.YN19I am paying attention to the academic task.YN19 <td>9</td> <td>I am paying attention to the academic task.</td> <td>Y</td> <td>Ν</td>	9	I am paying attention to the academic task.	Y	Ν			
12I am paying attention to the academic task.YN13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YN15I am paying attention to the academic task.YNCalculate the Percentage of on-task behavior for this session. Add up the total number of Y response and divide that by the total% On-task behavior	10	I am paying attention to the academic task.	Y	Ν			
13I am paying attention to the academic task.YN14I am paying attention to the academic task.YN15I am paying attention to the academic task.YNCalculate the Percentage of on-task behavior for this session. Add up the total number of Y response and divide that by the total% On-task behavior	11	I am paying attention to the academic task.	Y	Ν			
14 I am paying attention to the academic task. Y N 15 I am paying attention to the academic task. Y N Calculate the Percentage of on-task behavior for this session. Add up the total number of Y response and divide that by the total % On-task behavior	12	I am paying attention to the academic task.	Y	Ν			
15I am paying attention to the academic task.YNCalculate the Percentage of on-task behavior for this session. Add up the total number of Y response and divide that by the total% On-task behavior	13	I am paying attention to the academic task.	Y	Ν			
Calculate the Percentage of on-task behavior for this session. Add % On-task behavior up the total number of Y response and divide that by the total	14	I am paying attention to the academic task.	Y	Ν			
up the total number of Y response and divide that by the total	15	I am paying attention to the academic task.	Y	Ν			
	Calculat	% On-task	behavior				
number of intervals rated. Divide the quotient by 100%	up the total number of Y response and divide that by the total						
	numbei	number of intervals rated. Divide the quotient by 100%					

Source: Retrieved and adapted from Intervention Central (<u>www.interventioncentral.org</u>)

On-Task Self-Recording Sheet

Student Name	Date	Class
--------------	------	-------

Directions: Set your timer for <u>2</u> minutes. When the timer rings, circle 'Y' for Yes if you were paying attention and doing your work at that moment. Circle 'N' if you were not paying attention and doing your work. Start the timer again and continue to the end of the class period.

1	I am paying attention to the academic task.	Y	N			
2	I am paying attention to the academic task.	Y	Ν			
3	I am paying attention to the academic task.	Y	Ν			
4	I am paying attention to the academic task.	Y	N			
5	I am paying attention to the academic task	Y	N			
6	I am paying attention to the academic task.	Y	Ν			
7	I am paying attention to the academic task.	Y	Ν			
8	I am paying attention to the academic task.	Y	Ν			
9	I am paying attention to the academic task.	Y	Ν			
10	I am paying attention to the academic task.	Y	Ν			
11	I am paying attention to the academic task.	Y	Ν			
12	I am paying attention to the academic task.	Y	Ν			
13	I am paying attention to the academic task.	Y	Ν			
14	I am paying attention to the academic task.	Y	Ν			
15	I am paying attention to the academic task.	Y	Ν			
Calculat	Calculate the Percentage of on-task behavior for this session. Add % On-task behavior					
up the t	total number of Y response and divide that by the total	<u>70</u> %				
number	r of intervals rated. Divide the quotient by 100.					

Student Recording Form for Completion of Problems

Name ______ Date ______

Color in the stars to show how many problems you completed.

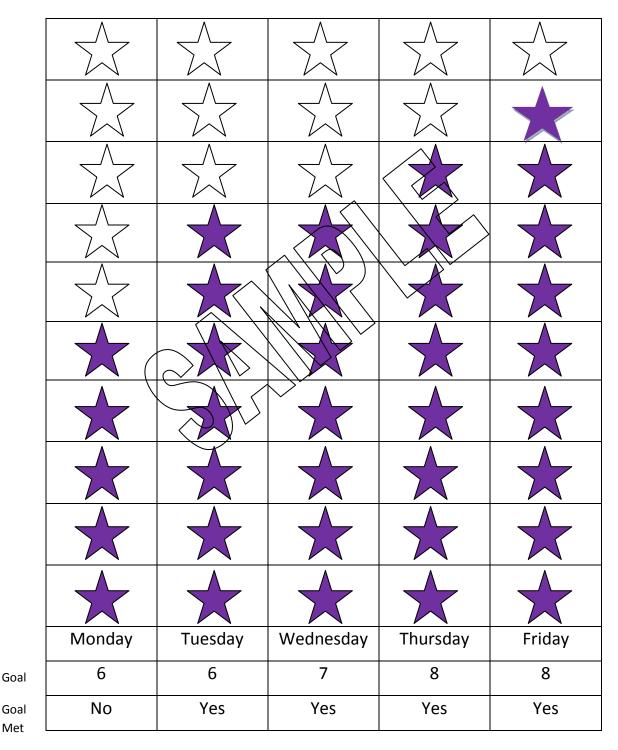
	\sum	$\sum_{i=1}^{n}$	\sum	$\sum_{i=1}^{n}$	\sum
	\sum	$\sum_{i=1}^{n}$	\sum	\sum	\sim
	\sum				
pleted	\sim	\mathbf{X}	\sum	\sum	\sim
Number of Problems Completed	Λ		\sum	\sim	$\sum_{i=1}^{n}$
: Proble		\mathbf{X}	\sum	\sim	\sim
mber of	\sum			\sum	$\sum_{i=1}^{n}$
NU	$\sum_{i=1}^{n}$	\sum		$\sum_{i=1}^{n}$	\sim
	\sum	\sum		\sum	$\sum_{i=1}^{n}$
	\sum	\sum	\sum	\sim	\sum
	Monday	Tuesday	Wednesday	Thursday	Friday
Goal					
Goal Met					

Source: Step-by-Step: Teaching Students to Self-Monitor – Rafferty (2010)

Student Recording Form for Completion of Problems

Name John Smith Date 5/14/13

Color in the stars to show how many problems you completed.



109

Student Recording Sheet for Completion of Problems

Name _____ Date ____ Subject _____

On the graph below, record the number of problems completed each day.

15					
14					
13					
12					
11					
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
	Monday	Tuesday	Wednesday	Thursday	Friday
# of					
Problems					
Goal					
Goal Met					

Complete the questions and return to your teacher on Friday.

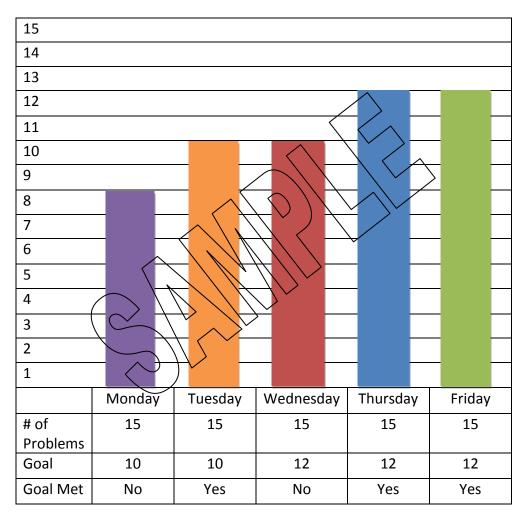
How well did you do meeting your goal? If you were not successful, what changes need to take place in order for your daily goal to be met?

Source: Adapted from Step-by-Step: Teaching Students to Self-Monitor – Rafferty (2010)

Student Recording Sheet for Completion of Problems

Name loe Smíth Date <u>12/3/13</u> Subject Math

On the graph below, record the number of problems completed each day.



Complete the questions and return to your teacher on Friday.

How well did you do meeting your goal? If you were not successful, what changes need to take place in order for your daily goal to be met?

<u>I díd pretty well thís week. I made my goal for 3 days. I thínk I</u> will be able to make my goal all 5 days next week.

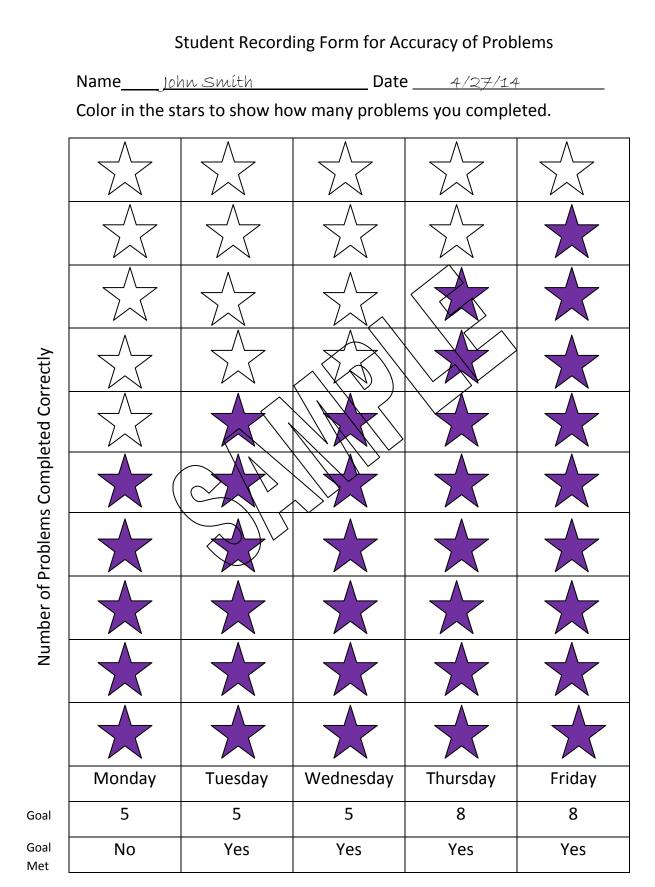
Student Recording Form for Accuracy of Problems

Name_____ Date _____

Color in the stars to show how many problems you completed correctly.

	\sum	\sim	\sum	\sum	\sum
	\sum	\sum	\mathbf{X}	$\sum_{i=1}^{n}$	\sum
Number of Problems Completed Correctly	$\sum_{i=1}^{n}$	\sum	\sum	$\sum_{i=1}^{n}$	$\sum_{i=1}^{n}$
npleted ($\sum_{i=1}^{n}$	\sum	\sum	$\sum_{i=1}^{n}$	$\sum_{i=1}^{n}$
ems Cor	$\sum_{i=1}^{n}$	\sum	\sum	$\sum_{i=1}^{n}$	$\sum_{i=1}^{n}$
of Probl	\sum	\sum	\sum	\sum	\sim
Number	\sim	\sum	\sum	$\sum_{i=1}^{n}$	\sum
	\sum	\sum	\sum	$\sum_{i=1}^{n}$	\sum
	\sum	\sim	\sum	\sum	\sum
	Monday	Tuesday	Wednesday	Thursday	Friday
Goal					
Goal Met					

Source: Step-by-Step: Teaching Students to Self-Monitor – Rafferty (2010)



Student Recording Sheet for Accuracy of Problems

113

Name _____ Date ____ Subject _____

On the graph below, record the number of problems completed correctly each day.

15					
14					
13					
12					
11					
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
	Monday	Tuesday	Wednesday	Thursday	Friday
# of					
problems					
Goal					
Goal Met					

Complete the questions and return to your teacher on Friday.

How well did you do meeting your goal? If you were not successful, what changes need to take place in order for your daily goal to be met?

Source: Adapted from Step-by-Step: Teaching Students to Self-Monitor – Rafferty (2010)

Student Recording Sheet for Accuracy of Problems

Name Joe Smith Date 12/3/13 Subject Spelling

On the graph below, record the number of problems completed correctly each day.

Complete the questions and return to your teacher on Friday.

How well did you do meeting your goal? If you were not successful, what changes need to take place in order for your daily goal to be met?

<u>I díd not do very well thís week. Joe kept talking to me while I</u> was trying to work. I think I need to be moved away from him.

Sample Behavior Checklists

Checklist Item – Morning Routine

- □ I have a sharpened pencil.
- □ I have my homework ready to turn in.
- □ I have cleared my desk of unneeded materials.
- □ I am sitting quietly.
- □ I am working on the assigned start-of-class activity.

Checklist Item – During instruction.

□ I am looking at the teacher.

- □ I am not talking to other students.
- □ I am sitting up straight.
- □ I raise my hand and wait to be called on to comment or ask a question.
- □ I ask questions if I don't understand what is being taught.
- □ To avoid distracting myself or others, I do not play with objects at my desk.

Checklist Item – Independent Worktime

- □ I am sitting up straight.
- □ I have cleared my desk of unneeded materials.
- □ I am working on the assignment.
- □ I am not talking to other students.
- □ To avoid distracting myself or others, I do not play with objects at my desk.
- □ I ask my neighbor if I have a question about the assignment.
- □ I ask the teacher if I still have a question about the assignment.
- □ I use any extra time when I have finished the assignment to check my work.

Checklist Item – Group Work

- □ I am talking only with my work partners.
- □ I participate in discussion with my partners.
- □ I do my share of the work when in pairs or groups.
- □ I talk only about the topic(s) assigned by the teacher.
- □ I keep my voice level down so that I don't distract other students.
- □ I seek help from my partners if I don't understand something.
- □ I ask the teacher for help if my partners cannot answer my question.

Source: Retrieved from Intervention Central (www.interventioncentral.org)

Frequently Asked Questions

How much work will self-regulating be for the teacher?

Self- regulating requires a minimal amount of time for the teacher. Once the strategies are taught and the student understands how to self-record, the teacher only needs to provide feedback and adjust goal on occasion.

How disruptive will self-regulating be for other students?

There is minimal disruption for the other students. The prompts given may bring about interest from other students but will quickly lose its novelty.

What happens if a student in accurate in recording.

The student does not need to be perfect in their recording of behaviors. As long as the desired behavior is increasing, the errors are unimportant. If it is found that the recording is inaccurate and behaviors are not changing, strategies may need to be retaught to the student.

With what type of student is self-regulating most effective?

Self-regulating works best with students who can do their assignments but may have problems with attention. Self-regulating is most applicable when students are beginning to learn a skill and have show that they are able to perform the skill, although they are choosing to use it on a regular basis.

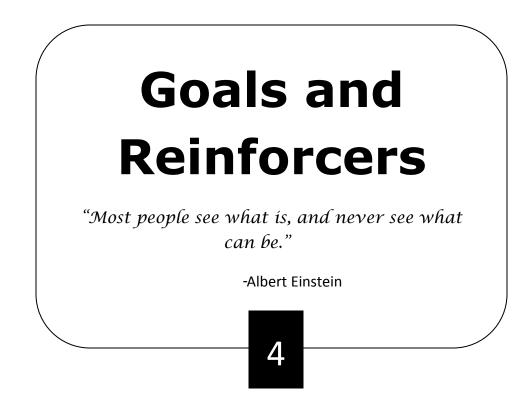
What type of behaviors is self-regulating most effective?

Self-regulating is best for decreasing off-task behaviors such as out-of-seat behavior and talking with peers during work time. It is also beneficial in bringing about on-task behaviors to complete tasks.

How long will a student need to continue self-regulating?

The duration of self-regulating is dependent upon the student's rate of behavior change.

Source: Vanderbilt, A. A. (2005). Designed for Teachers: How to Implement Self-Monitoring in the Classroom. *Beyond Behavior*, *15*(1), 21-24.



We all set personal goals for ourselves. Perhaps we have goals to read more or to lose weight. The purpose of the goal is to set a standard we want to achieve. But for that goal to be worthwhile, it needs three things....it must be definable, measureable and attainable.

Here's an example. My goal is I want to read more. I know what the goal is however what does more mean? I have to determine how much I am reading now to determine what would be increasing. Can I measure that goal? Again, I have to determine a specific amount of increase in order to be able to measure it. Finally, is it attainable? If I set my goal to read 3 hours a day, will I attain it? Or have I set myself up for failure.

The same occurs when we set goals for our students. Whether the goals are academic or behavioral, they must be defined, measureable and attainable. First a target behavior must be chosen. What is most important to change in the child? This goal could be academic or behavioral, but often a change in behavior will bring about positive gains in academics. Baseline data is collected to determine the typical behavior of the student. Finally, a goal is set at or just above the baseline to ensure success. The steps for setting a goal follow.

Steps for Setting a Goal

Step 1 – Choose a target behavior.

- What change do you want to see in the student?
 - Academic?
 - Accuracy of Work?
 - Completion of Work?
 - Behavioral?
 - Increased on-task behavior?
 - Not blurting?

Step 2 – Determine the baseline.

- Collect data to determine where the student is at before implementing an intervention.
- Baseline determines typical behavior of student
- Data should be collect over at least 3 observations

Step 3 – Set the Goal

- The goal should be at or just above the baseline.
- If the student is not successful in reaching the goal, lower it.
- Revisit the goal often and change when needed.

List of Forms for Goals and Reinforcers

Forms for Goal Planning

- Teacher Planning Form Pg. 61
- Student Observation Forms
 - Time on-task Pg. 63
 - Completion of Problems Pg. 65
 - Accuracy of Problems Pg. 67

Forms for Choosing a Reinforcer

- Forced-Choice Survey Intermediate Pgs. 71-74
- Forced-Choice Survey Primary Pgs. 79-83

Teacher Planning Form for Goal Setting

Name:	Date:
Step 1 – Targe	t Goal:
Step 2 – Deter	mine Baseline (see pages 64-69)
• •	Method of Collecting Data Number of periods for data collection Baseline
Step 3 – Set th	e Goal
•	New Goal Goal will be revisited on
Name: <u>Jack</u>	Teacher Planning Form for Goal Setting <u>Smith</u> Date: <u>1/14/14</u> t Goal: <u>Complete 15 Math problems during work time.</u>
Step 1 – Targe	t Goal: <u>Complete 15 Math problems during work time.</u>
Step 2 – Deter • •	mine Baseline Method of Collecting Pata Use Completion of Problems form. Number of periods for data collection <u>5 days</u> Baseline <u>Average of 25% complete</u>
Step 3 – Set th	ne Goal
• • Created by Dana	New Goal <u>25-30% of problems with be completed</u> Goal will be revisited on <u>1/21/14</u> Muehl (2015)

Student Observation Form

Student	Date	Session

Setting _____

On-task = working during independent work time

- Writing down answers
- Looking up or computing answers
- Filling in self-recording sheet

Off-task= any behavior other than those listed above

Interval	1	2	3	4	5	6	7	8	9	10
	:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00
On-task										
Off-task										

Interval	11	12	13	14	15	16	17	18	19	20
	5:30	6:00	6:30	3:30	7:00	7:30	8:00	8:30	9:00	9:30
On-task										
Off-task										

Interval	21	22	23	24	25	26	27	28	29	30
	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30
On-task										
Off-task										

Observations

Behaviors	Totals		
On-task	/	=	%
Off-task	/	=	%

Observation Notes

Source: Adapted from Behavior Management – Zirpoli (2012)

Student Observation Form

Student	leff Smíth	Date	3/14/13	Session	3

Setting Math work time. Lesson taught. Students working on assignment

On-task = working during independent work time

- Writing down answers
- Looking up or computing answers
- Filling in self-recording sheet

Off-task= any behavior other than those listed above

Intorval	1	2	2	1	E	6	\checkmark	0	9	10		
Interval	T	2	3	4	5	6		8	-	10		
	:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00		
On-task	Х	Х	Х	Х	X <	X	∖×∕	X	Х	Х		
					\square	\setminus \setminus						
Off-task					$\langle \nabla \rangle$	$\backslash \backslash \backslash$						

			~	///	///					
Interval	11	12	13	14	45/	16	17	18	19	20
	5:30	6:00	6:30	3:30	Z:00~	^{>} 7:30	8:00	8:30	9:00	9:30
On-task	Х	(
Off-task		×	\sum	X	Х	Х	Х	Х	Х	Х
			$\overline{}$							

Interval	21	22	23	24	25	26	27	28	29	30
	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30
On-task										
Off-task	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

Observations

Behaviors	Totals
On-task	11/30 = 37%
Off-task	19/30 = 63%

Observation Notes

Jeff is off-task after about 5 minutes. This is similar to the first 2 sessions. While he begins promptly, he cannot stay with the assignment. Jeff needs to be moved away from the door. It is too distracting for him.

Teacher Recording Form for Completion of Problems

124

Name	Date

Subject_____Topic_____

	Monday	Tuesday	Wednesday	Thursday	Friday
# of problems assigned					
# of problems completed					
% of problems completed					

Average percentage of completed problems		/	=	%	
# of problems completed/ # of total p	roblems	; = a	iverage		
New Goal					

Daily Notes and Observations:

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday ______

Source: Retrieved and adapted from Intervention Central (www.interventioncentral.org)

Teacher Recording Form for Completion of Problems

Name	Jack Smith	Date	5/9/14	
Subject	Math	Topic	Adding Fractions	

	Monday	Tuesday	Wednesday	Thursday	Friday
# of problems assigned	15	15	15	15	15
# of problems completed	4	3	5	4	3
% of problems completed	27%	20%	33%	27%	20%

Average percentage of completed problems $19 \times 75 = 25\%$ (# of problems completed) # of total problems = Average)

Goal for next assignment $-\frac{25}{27}$ proplems completed

Daily notes and observations

Monday Jack is very distracted by the people that sit around him. He was redirected several times with no changed behavior.

Tuesday Jack has a cold. Constantly up for tissues.

Wednesday _____

Thursday Jack is struggling with the concept of fractions.

Friday <u>Worked with small group over fractions. Still off-task</u> <u>during the work time</u>.

Teacher Recording Form for Accuracy of Problems

Name	Date	
Subject	Торіс	

Average percentage of completed problems/ =%	
<pre># of problems completed/ # of total problems = average</pre>	
New Goal	

Daily Notes and Observations:

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday _____

Source: Retrieved and adapted from Intervention Central (www.interventioncentral.org)

Teacher Recording Form for Accuracy of Problems

Name	Jack Smíth	Date	5/9/14	
Subject	Math	Topic	Adding Fractions	

	Monday	Tuesday	Wednesday	Thursday	Friday
# of problems assigned	15	15	15	15	15
# of problems correct	4	3	5	4	3
% of problems completed	27%	20%	33%	27%	20%

Average percentage of correct problems 19 / 75 = 25%(# of problems correct # of total problems = Average) Goal for next assignment ______ 25-27% correct problems

Daily notes and observations:

Monday Jack is very distracted by the people that sit around him. He was redirected several times with no changed behavior.

Tuesday Jack has a cold. Constantly up for tissues.

Wednesday _____

Thursday Jack is struggling with the concept of fractions.

Friday <u>Worked with small group over fractions. Still off-task</u> during the work time.

Reinforcers

Reinforcers are another important aspect of bringing about a change in a student. Certainly our goal for all of students (and ourselves!) is that an implicit change promotes a change in behavior, something from inside the student. We want students to want to learn and want to behave well because of an internal motivation or desire.

However many students are not at this point in their maturation. Our students are flooded with the idea that everyone must be a winner, or everyone has to get a prize for simply participating. They have become accustomed to getting something for nothing and while we may strong disagree with that notion, it is the reality for many students.

How do we change this mentality? It is a process. In order to get a change in many of our students, some type of positive reinforcement is often necessary. and it is necessary to meet our students where they are at in the process.

A reinforcer takes many forms such as verbal praise, a token, a piece of candy and so forth. Reinforcers can illicit a change if it is something desired by the student. Reinforcement surveys help teachers determine what is meaningful for the student and beneficial in determining what type of reinforcement will work. When determining an appropriate reinforcement, consider the following:

- If what is used as a reinforcer does not bring about a change, it is not a reinforcer and should not be used.
- The reinforcer must be of value to the student.
- Reinforcers given too freely will lose their effect.
- As goals are met and adjusted, reinforcers are also changed.
- The goal is to fade out reinforcers yet keep the desired behavior.
- Fading is necessary to determine if a true implicit change has taken place.

Forced Choice Reinforcement Survey

Why should I do it:

- Provides valuable insight as to what type of rewards and incentives a student desires or prefers
- Gives direct feedback from the student's perspective
- Quick and easy to administer
- Anyone can administer the survey or the student can take it on their own
- Easy to score and interpret
- Gives good data for developing behavior plans and reward or incentive systems

When should I do it:

- When students do not respond to rewards
- When nothing seems to motivate a student
- When a student is disinterested in school work, following directives, rules, expectations, etc
- As part of developing a Behavior Intervention Plan (BIP)
- When you need to know what motivates a student, what kind of rewards they prefer, and what they might be more likely to work for
- When students cannot directly express or is not sure what kind of reward they would work for.
- When a student expresses they do not care about rewards

How do I do it:

- Either read the instructions and questions on the survey to the student, writing their answers in, or have the student complete the survey on their own, giving assistance and reading directions as necessary
- Once the survey is complete, simply tally up the results in the scoring section at the end and utilize the results to develop a reward system, behavior plan, etc.

Two different forced choice surveys are included. Pages 66-73 provide an example of a survey that is appropriate for students in grades 3-8. Pages 74-78 provide an example of a survey to be used with students in grades K-2.

FORCED-CHOICE REINFORCEMENT MENU

Name:

In order to identify possible classroom reinforcers, it is important to go directly to the source, namely, you the student. Below is a paragraph that provides the instructions for completing a series of "controlled choice" survey items about individual reinforcement preferences. Please read the following paragraph carefully:

"Let's suppose that you have worked hard on an assignment and you think that you have done a super job on it. In thinking about a reward for your effort, which one of the two things below would you most like to happen? Please choose the one from each pair that you would like best and mark "X" in the blank that comes in front of it. Remember, mark only one blank for each pair."

1.	 Teacher writes "100" on your paper. (A) Be first to finish your work. (CM)
2.	 A bag of chips. (CN) Classmates ask you to be on their team. (P)
3.	 Be free to do what you like. (I) Teacher writes "100" on your paper. (A)
4.	 Classmates ask you to be on their team. (P) Be first to finish your work. (CM)
5.	 Be free to do what you like. (I) A bag of chips. (CN)
6.	 Teacher writes "100" on your paper. (A) Classmates ask you to be on their team. (P)
7.	 Be first to finish your work. (CM) Be free to do what you like. (I)
8.	 A bag of chips. (CN) Teacher writes "100" on your paper. (A)
9.	 Classmates ask you to be on their team. (P) Be free to do what you like. (I)
10.	 Be first to finish your work. (CM) A bag of chips. (CN)
11.	 Teacher writes "A" on your paper. (A) Be the only one that can answer a question. (CM)

12.	 A candy bar. (CN) Friends ask you to sit with them. (P)
13.	 Be free to go outside. (I) Teacher writes "A" on your paper. (A)
14.	 Friends ask you to sit with them. (P) Be the only one to answer a question. (CM)
15.	 Be free to go outside. (I) A candy bar. (CN)
16.	 Teacher writes "A" on your paper. (A) Friends ask you to sit with them. (P)
17.	 Be the only one that can answer a question. (CM) Be free to go outside. (I)
18.	 A candy bar. (CN) Teacher writes A on your paper. (A)
19.	 Friends ask you to sit with them. (P) Be free to go outside. (I)
20.	 Be the only one who can answer a question. (CM) A candy bar. (CN)
21.	 Teacher writes "Perfect" on your paper. (A) Have only your paper shown to the class. (CM)
22.	 A can of soda. (CN) Classmates ask you to be the class leader. (P)
23.	 Be free to play outside. (I) Teacher writes "Perfect" on your paper. (A)
24.	 Classmates ask you to be class leader. (P) Have only your paper shown to the class. (CM)
25.	 Be free to play outside A can of soda
26.	 Teacher writes "Perfect" on your paper. (A) Classmates ask you to be the class leader. (P)
27.	 Have only your paper shown to the class. (CM) Be free to play outside. (I)

28.	 A can of soda. (CN) Teacher writes "Perfect" on your paper.
29.	 Classmates ask you to be the class leader. (P) Be free to play outside. (I)
30.	 Have only your paper shown to the class. (CM) A can of soda. (CN)
31.	 Teacher writes "Excellent" on your paper. (A) Have your paper put on the bulletin board. (CM)
32.	 A pack of gum. (CN) Friends ask you to work with them. (P)
33.	 Be free to work on something you like. (I) Teacher writes "Excellent" on your paper. (A)
34.	 Friends ask you to work with them. (P) Have your paper put on the bulletin board. (CM)
35.	 Be free to work on something you like. (I) A pack of gum. (CN)
36.	 Teacher writes "Excellent" on your paper. (A) Friends ask you to work with them. (P)
37.	 Have your paper put on the bulletin board. (CM) Be free to work on something you like. (I)
38.	 A pack of gum. (CN) Teacher writes "Excellent" on your paper. (A)
39.	 Friends ask you to work with them. (P) Be free to work on something you like. (I)
40.	 Have your paper put on the bulletin board. (CM) A pack of gum. (CN)

Other suggestions about classroom rewards:

Thank you for taking the time to complete this survey.

Reinforcement Inventory

SCORING KEY

 Adult Approval (A)
 Competitive Approval (CM)

_____ Peer Approval (P)

Independent Rewards (I)

____ Consumable Rewards (CN)

Source: Modified by Gable, R. A. (1991) from: Cartwright, C. A., & Cartwright, G. P. (1970). Determining the motivational systems of individual children. Teaching Exceptional Children, 2:3, 143-149.

FORCED-CHOICE REINFORCEMENT MENU

Name: <u>John Smíth</u>

In order to identify possible classroom reinforcers, it is important to go directly to the source, namely, you the student. Below is a paragraph that provides the instructions for completing a series of "controlled choice" survey items about individual reinforcement preferences. Please read the following paragraph carefully:

"Let's suppose that you have worked hard on an assignment and you think that you have done a super job on it. In thinking about a reward for your effort, which one of the two things below would you most like to happen? Please choose the one from each pair that you would like best and mark "X" in the blank that comes in front of it. Remember, mark only one blank for each pair."

1.	X	Teacher writes "100" on your paper. (A) Be first to finish your work. (CM)
2.	X	A bag of chips. (CN) Classmates ask you to be on their team (P)
3.	<u> </u>	Be free to do what you like. (I) Teacher writes "100" on your paper. (A)
4.	X	Classmates ask you to be on their team. (P) Be first to finish your work. (CM)
5.	<u>x</u> (Be free to do what you like. (1) A bag of chips. (CN)
6.	<u></u> X	Teacher writes "100" on your paper. (A) Classmates ask you to be on their team. (P)
7.	X	Be first to finish your work. (CM) Be free to do what you like. (I)
8.	X	A bag of chips. (CN) Teacher writes "100" on your paper. (A)
9.	 	Classmates ask you to be on their team. (P) Be free to do what you like. (I)
10.	X	Be first to finish your work. (CM) A bag of chips. (CN)
11.	X	Teacher writes "A" on your paper. (A) Be the only one that can answer a question. (CM)

12.	X	A candy bar. (CN) Friends ask you to sit with them. (P)
13.	X	Be free to go outside. (I) Teacher writes "A" on your paper. (A)
14.	 	Friends ask you to sit with them. (P) Be the only one to answer a question. (CM)
15.	X	Be free to go outside. (I) A candy bar. (CN)
16.	X	Teacher writes "A" on your paper. (A) Friends ask you to sit with them. (P)
17.	X	Be the only one that can answer a question (CM) Be free to go outside. (I)
18.	X	A candy bar. (CN) Teacher writes A or your papel. (A)
19.	X	Friends ask you to sit with them. (P) Be free to go outside. W
20.	X	Be the only one who can answer a question. (CM) A candy bar. (CN)
21.		Teacher writes "Perfect" on your paper. (A) Have only your paper shown to the class. (CM)
22.	X	A can of soda. (CN) Classmates ask you to be the class leader. (P)
23.	X	Be free to play outside. (I) Teacher writes "Perfect" on your paper. (A)
24.	<u> </u>	Classmates ask you to be class leader. (P) Have only your paper shown to the class. (CM)
25.	<u>X</u>	Be free to play outside (I) A can of soda (CN)
26.	X	Teacher writes "Perfect" on your paper. (A) Classmates ask you to be the class leader. (P)
27.	X	Have only your paper shown to the class. (CM) Be free to play outside. (I)

28.	X	A can of soda. (CN) Teacher writes "Perfect" on your paper. (A)
29.	 	Classmates ask you to be the class leader. (P) Be free to play outside. (I)
30.	X	Have only your paper shown to the class. (CM) A can of soda. (CN)
31.		Teacher writes "Excellent" on your paper. (A) Have your paper put on the bulletin board. (CM)
32.	X	A pack of gum. (CN) Friends ask you to work with them. (P)
33.	<u>X</u>	Be free to work on something you like. (N) Teacher writes "Excellent" on your paper. (A)
34.	X	Friends ask you to work with them. (P) Have your paper put on the bulletin board. (CM)
35.	<u> </u>	Be free to work on something you like. (I) A pack of gum. (CN)
36.	<u></u>	Teacher writes "Excellent" on your paper. (A) Friends ask you to work with them. (P)
37.	X	Have your paper put on the bulletin board. (CM) Be free to work on something you like. (I)
38.	X	A pack of gum. (CN) Teacher writes "Excellent" on your paper. (A)
39.		Friends ask you to work with them. (P) Be free to work on something you like. (I)
40.	X	Have your paper put on the bulletin board. (CM) A pack of gum. (CN)

Other suggestions about classroom rewards:

Thank you for taking the time to complete this survey.

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Reinforcement Inventory

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SCORING KEY

13	Adult Approval (A)
----	--------------------

_____ Competitive Approval (CM)

<u>15</u> Peer Approval (P)

____4 ___ Independent Rewards (I)

<u>8</u> Consumable Rewards (CN)

Notes: This student is clearly motivated by peer and adult approval. While tangible rewards may have some influence, they appear to have significantly less impact than the attention from a teacher or peer. Finding rewards that involve the teacher or peers will likely have a greater positive outcome in bringing about the desired change for the student.

Name		Date
1	Get a star from the teacher (A)	Be a line leader (CM)
2	A bag of popcorn (CN)	Play with a friend (P)
3	Play with toys(I)	Get a star from the teacher(A)
4	Play with a friend (P)	Be a line leader(CM)
5	Play with toys (I)	A bag of popcorn (CN)
6	Get a star from the teacher (A)	Play with a friend (P)
7	Be a line leader (CM)	Play with toys (I)
8	A bag of popcorn (CN)	Get a star from the teacher (A)
9	Play with a friend (P)	Play with toys (I)

Primary Forced Choice Reinforcement Survey

	De e line leader (CNA)	A has of noncorr (CNI)
10	Be a line leader (CM)	A bag of popcorn (CN)
11	Get a hug (A)	Be calendar helper (CM)
12	A piece of candy (CN)	Sit with friends (P)
13	Play on the computer (I)	Get a hug (A)
14	Sit with friends (P)	Be a calendar helper (CM)
15	Play on the computer (I)	A piece of candy (CN)
16	Get a hug (A)	Sit with friends (P)
17	Be a calendar helper (CM)	Play on the computer (I)
18	A piece of candy (CN)	Get a hug (A)
19	Sit with friends (P)	Play on the computer (I)

20	Be a calendar helper (CM)	A piece of candy (CN)
20		A BAR
21	Teacher helper (A)	Show your work (CM)
	Tinder	
22	A juice box (CN)	Read with a friend (P)
23	Color or draw (I)	Teacher helper (A)
23		
24	Read with a friend (P)	Show your work (CM)
25	Color or draw (I)	A juice box (CN)
26	Teacher helper (A)	Read with a friend (P)
27	Show your work (CM)	Color or draw (I)
~ /		
28	A juice box (CN)	Teacher helper (A)
	Appro	
29	Read with a friend (P)	Color or draw (I)
30	Teacher helper (A)	Read with a friend (P)
	Trader	

	Teacher helper (A)	Plant waterer (CM)
31		
32	A cookie (CN)	Read with a friend (P)
52		
22	Do a puzzle (I)	Read with the teacher (A)
33		
21	Lunch with a friend (P)	Plant waterer (CM)
34		
	Do a puzzle (I)	A cookie (CN)
35		
20	Read with the teacher (A)	Lunch with a friend (P)
36		
27	Do a puzzle (I)	Plant waterer (CM)
37		
20	A cookie (CN)	Teacher helper (A)
38		isotre and a second sec
20	Lunch with a friend (P)	Do a puzzle (I)
39		
10	Plant waterer (CM)	A cookie (CN)
40		

Reinforcement Inventory

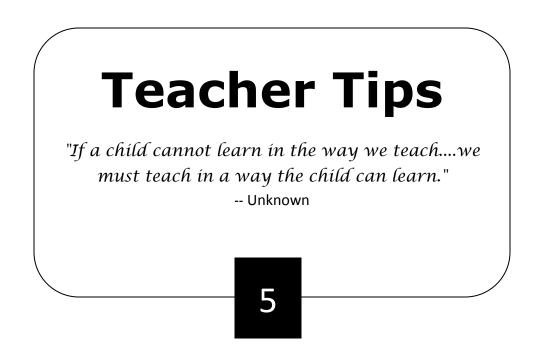
SCORING KEY

Adult Approval (A)	
	Competitive Approval (CM)
	Peer Approval (P)

_____ Independent Rewards (I)

____ Consumable Rewards (CN)

Source: Modified by Gable, R. A. (1991) from: Cartwright, C. A., & Cartwright, G. P. (1970). Determining the motivational systems of individual children. Teaching Exceptional Children, 2:3, 143-149.



Teachers are challenged with students from a variety of backgrounds, learning styles as well as abilities. While we challenge ourselves to differentiate our instruction based on the needs of our students, the reality is that teachers have an enormous task in reaching the needs of every student.

While every teacher has gone through training, some recently, some years ago, it seems as though we all need reminders of what we have been taught. The following pages are some general tips for teachers. Covered in this section will be General Tips for Teachers, Behavioral Interventions, Academic Interventions, Environmental Interventions, Accommodations and Modifications, and a list of Teacher Don'ts.

General Tips for Teachers with ADHD Students

- Learn about the specific presentation type for your student.
- Recognize the uniqueness of your student.
- Provide highly engaging instruction.
- Talk less! Students will tune you out the more you talk.
- Use visual. Highlight or circle important words.
- Allow physical activity breaks.
- Seat student away from doors, windows and high traffic areas.
- When possible, provide highly academic subjects in the morning.
- Write important information down for the student to reference.
- Divide larger assignments into small segments. Have the student check off as each segment is completed.
- Provide frequent breaks for the student to get a drink or walk around.
- Allow the student to run an errand for you.
- Provide the student with a stress ball or other object to manipulate.
- Write the schedule of the day on the student's desk and allow him to cross off each as it is completed.
- Recognize and praise aloud all good behaviors. Specifically state what the student is doing correctly.
- Allow the student to work in a quiet area.
- Establish a signal for the student as a reminder when he is off-task.
- When giving instructions, keep the brief. Limit the number of directions.
- Use auditory cues. Set a timer and have the student work until the timer goes off. Provide a break after each work period.
- Form small groups for ADHD students to work in so they are not lost in the large group.
- Give opportunity for choice.
- Allow for frequent participation in class.
- Provide constant but brief feedback.
- Give continual guidance and compassion to the student and parent as they manage you work together to manage the disability.

Source: Retrieved and adapted from Teaching Children with ADHD: Classroom Strategies to Engage the Easily Distracted and Intervention Central (www.interventioncentral.com)

Behavioral Interventions

The purpose of behavioral interventions is to assist students in displaying the behaviors necessary to achieve their own learning and that of their classmates. Well managed classrooms prevent many discipline problems and provide the best environment for learning.

- Provide students with verbal reinforcement.
- Provide specific praise statements
 - Focus on what the student did right.
 - Rather than praising for not disturbing the class, praise for working quietly.
- Give praise immediately.
- Vary the statement of praise.
- Be consistent and sincere with praise.
- Selectively ignore inappropriate behaviors.
- Remove nuisance items.
- Provide calming manipulatives.
- Allow for an escape when a student is frustrated BEFORE they engage in an inappropriate behavior.
- Partner with parents by sharing strategies and progress.
- Provide visual cues as reminders for appropriate behaviors.
- Move to where the child is when speaking with them instead of talking to them from across the room.
- To help ADHD students remain on-task during discussions, have them raise their hand to answer every question. If their fist is closed, they don't know the answer. If the fist is open, you may call on them.
- Use behavioral contracts and token economy systems.

Source: Retrieved and adapted from LD Online (www.ldonline.org)

Academic Interventions

Students with ADHD learn best with a carefully structured academic lesson that clearly explains the skills and knowledge to be learned by the student. Effective teachers preview their expectations and clearly convey those to their students.

- Provide an organizer to the student before the lesson begins.
- To begin the lesson, preview the previous lesson.
- Set learning expectations.
- State the needed materials before instruction to allow the student to be prepared before instruction begins.
- Simplify instructions, highlighting the important words.
- Use larger type in an easy to read font.
- Provide plenty of space for writing on worksheets and tests.
- Frequently give short quizzes instead of long tests.
- Avoid any type of timed test. Most of your students with ADHD will not perform well under timed situations.
- Provide an environment that is free of distractions.
- Modify tests and assignments. Remember, its quality not quantity.
- Allow the student to provide answers through various methods other than writing such as recording, typing or scribing.
- Allow the student to work with a peer tutor.

Environmental Interventions

- Make clear rules and post them, with logical consequences and with rewards.
- Provide a highly structured classroom and be consistent in expectations.
- Move the student's desk to where there are fewer distractions, close to the teacher to monitor and encourage, or near a well-focused child from time to time.
- Avoid seating the student in a high-traffic area.
- Privacy boards can work well, but should never embarrass a child. Use them for short-term projects, not as his permanent home.
- It is usually better to use rows for seating arrangement and to try to avoid tables with groups of students.
- In the ideal setting, provide tables for specific group projects, and traditional rows for independent work.
- ADHD student's desk should be near the teacher (for prompting and redirection), away from other challenging students, and not touching others' desks.
- Experiment with seat location in the front of the classroom (near the board) and instructional area if your student is more visually distracted.
- Seat those really smart and quiet girls next to the ADHD child. The girl won't really like it, and you don't want this to impact her learning. But it might help you a bit, and might help the ADHD child just a bit as well.
- Stand near the attention deficit student when giving directions or presenting the lesson.
- Try to make extra eye contact with him.
- Use the ADD ADHD student's worksheet as an example when possible. And that is only as a positive example.

School Accommodations and Modifications

Some students with disabilities need accommodations or modifications to their educational program in order to participate in the general curriculum and to be successful in school. While the Individuals with Disabilities Education Act (IDEA) and its regulations do not define accommodations or modifications, there is some agreement as to what they mean. An *accommodation* as used in this document allows a student to complete the same assignment or test as other students, but with a change in the timing, formatting, setting, scheduling, response and/or presentation. This accommodation does not alter in any significant way what the test or assignment measures. For many, the idea of an accommodation is leveling the playing field between a child with and without a disability. The difference is not what is being taught but HOW the student is taught. Many students receive accommodations even though an IEP is not present. For many not be used on standardized tests unless they are documented on the IEP.

A *modification* as used in this document is an adjustment to an assignment or a test that changes the standard or what the test or assignment is supposed to measure. A modification is altering the playing field. In other words, what the student is doing is different from other students. Examples of possible modifications include a student completing work on *part* of a standard or a student completing an alternate assignment that is more easily achievable than the standard assignment.

Needed modifications and accommodations should be written into a student's Individualized Education Program (IEP) or Section 504 Plan. These changes should be chosen to fit the student's individual needs. It's important to include the student, if appropriate, when discussing needed accommodations and modifications. Asking the student what would be helpful is a good first step.

Here are some ideas for changes in textbooks and curriculum, the classroom environment, instruction and assignments, and possible behavior expectations that may be helpful when educating students with disabilities. When reviewing these ideas, keep in mind that any accommodations or modifications an IEP team chooses must be based on the individual needs of students, and the changes must be provided if included in the child's IEP.

Textbooks and Curriculum

BOOKS

- Provide audiotapes of textbooks and have the student follow the text while listening.
- Provide alternative books with similar concepts, but at an easier reading level.
- Provide summaries of chapters.
- Provide interesting reading material at or slightly above the student's comfortable reading level.
- Use peer readers.
- Use marker to highlight important textbook sections.
- Use word-for-word sentence fill-ins.
- Provide two sets of textbooks, one for home and one for school.
- Use index cards to record major themes.
- Provide the student with a list of discussion questions before reading the material.
- Give page numbers to help the student find answers.
- Provide books and other written materials in alternative formats such as Braille or large print.

CURRICULUM

- Shorten assignments to focus on mastery of key concepts.
- Shorten spelling tests to focus on mastering the most functional words.
- Substitute alternatives for written assignments (clay models, posters, panoramas, collections, etc.).
- Specify and list exactly what the student will need to learn to pass. Review this frequently.
- Modify expectations based on student needs (e.g., "When you have read this chapter, you should be able to list three reasons for the Civil War.").
- Give alternatives to long written reports (e.g., write several short reports, preview new audiovisual materials and write a short review, give an oral report on an assigned topic).

CLASSROOM ENVIRONMENT

• Develop individualized rules for the student.

- Evaluate the classroom structure against the student's needs (flexible structure, firm limits, etc.).
- Keep workspaces clear of unrelated materials.
- Keep the classroom quiet during intense learning times.
- Reduce visual distractions in the classroom (mobiles, etc.).
- Provide a computer for written work.
- Seat the student close to the teacher or a positive role model.
- Use a study carrel. (Provide extras so that the student is not singled out.)
- Seat the student away from windows or doorways.
- Provide an unobstructed view of the chalkboard, teacher, movie screen, etc.
- Keep extra supplies of classroom materials (pencils, books) on hand.
- Use alternatives to crossword puzzles or word finds.
- Maintain adequate space between desks.

Instruction and Assignments

DIRECTIONS

- Use both oral and written directions.
- Give directions in small steps and in as few words as possible.
- Number and sequence the steps in a task.
- Have student repeat the directions for a task.
- Provide visual aids.
- Show a model of the end product of directions (e.g., a completed math problem or finished quiz).
- Stand near the student when giving directions or presenting a lesson.

TIME/TRANSITIONS

- Alert student several minutes before a transition from one activity to another is planned; give several reminders.
- Provide additional time to complete a task.
- Allow extra time to turn in homework without penalty.
- Provide assistance when moving about the building.

HANDWRITING

- Use worksheets that require minimal writing.
- Use fill-in questions with space for a brief response rather than a short essay.
- Provide a "designated notetaker" or photocopy of other student or teacher notes. (Do not require a poor notetaker or a student with no friends to arrange with another student for notes.)
- Provide a print outline with videotapes and filmstrips.
- Provide a print copy of any assignments or directions written on the blackboard.
- Omit assignments that require copying, or let the student use a tape recorder to dictate answers.

GRADING

- Provide a partial grade based on individual progress or effort.
- Use daily or frequent grading averaged into a grade for the quarter.
- Weight daily work higher than tests for a student who performs poorly on tests.
- Mark the correct answers rather than the incorrect ones.
- Permit a student to rework missed problems for a better grade.
- Average grades out when assignments are reworked, or grade on corrected work.
- Use a pass-fail or an alternative grading system when the student is assessed on his or her own growth.

TESTS

- Go over directions orally.
- Teach the student how to take tests (e.g., how to review, to plan time for each section).
- Provide a vocabulary list with definitions.
- Permit as much time as needed to finish tests.
- Allow tests to be taken in a room with few distractions (e.g., the library).
- Have test materials read to the student, and allow oral responses.
- Divide tests into small sections of similar questions or problems.
- Use recognition tests (true-false, multiple choice, or matching) instead of essays.

- Allow the student to complete an independent project as an alternative test.
- Give progress reports instead of grades.
- Grade spelling separately from content.
- Provide typed test materials, not tests written in cursive.
- Allow take-home or open-book tests.
- Provide possible answers for fill-in-the blank sections.
- Provide the first letter of the missing word.

MATH

- Allow the student to use a calculator without penalty.
- Group similar problems together (e.g., all addition in one section).
- Provide fewer problems on a worksheet (e.g., 4 to 6 problems on a page, rather than 20 or 30).
- Require fewer problems to attain passing grades.
- Use enlarged graph paper to write problems to help the student keep numbers in columns.
- Provide a table of math facts for reference.
- Tape a number line to the student's desk.
- Read and explain story problems, or break problems into smaller steps.
- Use pictures or graphics.

OTHER

- Use Post-it notes to mark assignments in textbooks.
- Check progress and provide feedback often in the first few minutes of each assignment.
- Place a ruler under sentences being read for better tracking.
- Introduce an overview of long-term assignments so the student knows what is expected and when it is due.
- Break long-term assignments into small, sequential steps, with daily monitoring and frequent grading.
- Have the student practice presenting in a small group before presenting to the class.
- Hand out worksheets one at a time.
- Sequence work, with the easiest part first.
- Use blackline copies, not dittos.
- Provide study guides and study questions that directly relate to tests.

- Reinforce student for recording assignments and due dates in a notebook.
- Draw arrows on worksheets, chalkboard, or overheads to show how ideas are related, or use other graphic organizers such as flow charts.

BEHAVIOR

- Arrange a "check-in" time to organize the day.
- Pair the student with a student who is a good behavior model for class projects.
- Modify school rules that may discriminate against the student.
- Use nonverbal cues to remind the student of rule violations.
- Amend consequences for rule violations (e.g., reward a forgetful student for remembering to bring pencils to class, rather than punishing the failure to remember).
- Minimize the use of punishment; provide positive as well as negative consequences.
- Develop an individualized behavior intervention plan that is positive and consistent with the student's ability and skills.
- Increase the frequency and immediacy of reinforcement.
- Arrange for the student to leave the classroom voluntarily and go to a designated "safe place" when under high stress.
- Develop a system or a code word to let the student know when behavior is not appropriate.
- Ignore behaviors that are not seriously disruptive.
- Develop interventions for behaviors that are annoying but not deliberate (e.g., provide a small piece of foam rubber for the desk of a student who continually taps a pencil on the desktop).
- Be aware of behavior changes that relate to medication or the length of the school day; modify expectations if appropriate.

Source: Retrieved from U.S. Office of Special Education Programshttp://www.osepideasthatwork.org/parentkit/school_accom_mods_eng.asp

A List of Don'ts for Teachers

- Don't assume the student is lazy. Students with ADHD and other learning disabilities are typically NOT lazy. There is usually some other reason for their nonperformance in the classroom.
- Don't be fooled by inconsistency. Students with ADHD have inconsistency as s a hallmark characteristic of their disorder. Sometimes they "get it" and other times they don't.
- Don't give up on any student. These children need your persistence and belief in their ability to succeed no matter how difficult and frustrating it may be.
- Don't give up using behavior modification techniques. Revise and try again.
- Don't be afraid to ask questions. Classroom teachers are not expected to be experts on students with special needs. Ask for information and advice from others who may be able to help you.
- Don't neglect to involve parents. Be sensitive to parents' frustrations and fears.
- Don't surround yourself with negative peers who are critical of students, aren't open or receptive to new techniques and are not updating their skills.
- Don't listen to previous teachers who only want to pass on the negative traits and characteristics of their students to you. Assume the best of the child. Allow each student to start the year with a fresh, clean slate.
- Don't forget the quiet student in the back who can easily go through the school year unnoticed. Often these students are in the greatest need of supports.
- Don't work alone. Collaborate with other colleagues.
- Don't put yourself in the position of suggesting to parents that their child has ADHD and needs to be evaluated. Do state your objective observations regard the child's behavior and performance in the classroom.
- Don't be afraid to modify, make exceptions, and alter assignment for students as needed. Your goal is the student's success and building/maintaining self-esteem. This requires flexibility and special arrangements with certain students. It is OKAY and FAIR to make accommodations for individual students with special needs.

Source: Adapted and used with permission from The ADD/ADHD Checklist, by Sandra Rief.

Tell merand I forget Teach merand I learn

"Tell me and I forget. Teach me and I learn. Involve me and I remember".

-Benjamin Franklin



Parenting a child with ADHD can be far more challenging than parenting a child without the disorder. When a child is hyperactive and impulsive, the behaviors can be very difficult to deal with. It is common to have stress and conflict in the home and for others to be very judgment – blaming the parent for the child's inappropriate behaviors.

The follow pages include checklists for parents in managing behaviors in and out of the home, organization help, homework tips, giving directions, environmental tips for home, and advocating for the child.

Managing Behaviors

The first section with provide a checklist for managing behaviors. Children with ADHD need greater supports for controlling their behaviors. The section will also provide strategies for the prevention of behaviors in and out of the home.

Organizational Tips

A common characteristic of individuals with ADHD is the weakness in organization and study habits. It is important for both parents and teachers to structure the environment and provide support and assistance. This section provides strategies and guidance for parents regarding how to improve their child's skill in these areas.

Homework Tips

Homework issues are often a source of major conflict and frustration in homes of children with ADHD. This section includes checklists with homework tips to help lessen the challenges for parents in working with their children.

Giving Directions

Children who are distractible and inattentive typically have a hard time with listening and following directions. One of the checklists provides tips for parents on effectively giving direction so that the child is more like to do what is asked.

Advocating for Your Child

Parents are the strongest advocates for their child. To ensure that the child's needs are being met in the classroom, the parent must often step in with the school and advocate on their child's behalf. A checklist is provided for effective parent advocacy.

What Children and Teens with ADHD Need at Home

While children or teens may not effectively convey their feelings, they do care about the approval of their parents and desire to be able to trust and believe in them. Those with ADHD can become easily discouraged with amount of negative feedback and disapproval they receive on a day-to-day basis. Parents can help their children build confidence and self-esteem by fostering a positive environment in the home and communicating their love and support of their son or daughter. Children and teens need:

- Unconditional love and acceptance of their families
- The patience, understand, and tolerance of their parents
- Forgiveness
- Numerous opportunities to develop their areas of strength (e.g., sports, music)
- To be able to pursue their interests and participate in extracurricular activities
- Special time with parents
- To feel safe and comfortable, and able to "let down their guard"
- To be treated with dignity and respect
- To be able to express their feelings, worries, concerns, and ideas
- To feel they have choices and are involved in some decision-making
- To be listened to
- To be given a lot of reassurances and building up of self-esteem
- Parents who focus on important issues and down-play less critical ones
- An emphasis on their own personal best efforts in self-improvements
- Ongoing reminders, support and prompting without nagging or sarcasm
- Fun and humor
- Praise and recognition for what they are doing correctly
- Structure not chaos
- Fair, clear, and reasonable rules and expectations
- Predictability of schedules and routines
- Supervision and follow-through
- Consistency and logical consequences
- Help with organization and study skills
- Help getting chores, assignment, and projects started
- Help with planning ahead, following schedules, and keeping on target with deadlines

Effective Behavioral Strategies for Parents

- Establish a few specific rules/expectations that are clearly understood.
- Praise and positively reinforce your child for following the rules/expectations.
- Establish clear-cut consequences (that are logical, reasonable, and fair) in advance with your child for breaking the rules.
- Enforce with consistency.
- Provide structure, routine, and predictability.
- Set limits and let your child know you mean what you say.
- Catch your child behaving appropriate as frequently as possible. Immediately reinforce that good behavior with a positive consequence. Use the smallest reinforcer necessary. Keep rewards reasonable – no big-ticket items.
- Establish rewards and punishment that are easy to do and as simple as possible.
- Use a system of rewarding with stickers, stars, points, etc. on a chart, working on earning a prize, privilege or reward once they have earned enough.
- Realize that children with ADHD can't wait very long for reinforcers. It is better to use more frequent, smaller reinforcers, but ones that are still motivating.
- Reinforcers need to be changed frequently. Children with ADHD won't stay interested in the same reinforcers for too long.
- Consequences should be enforced as immediately following the infraction of rules as possible – giving no more than one warning.
- Always praise the behaviors you want to increase or continue to occur.
- Use more positive than negative consequences.
- Some effective punishments include: ignoring (particularly attention-getting behaviors), removal of privileges, response costs (receiving a "fine" such as losing stars or tokens), time-out (isolation for a brief amount of time), and verbal reprimands (NOT yelling and screaming at the child).
- If using a time-out, choose a location that is boring. It should be clear what behaviors bring about a time out. Typically one minute for each year old.
- Punishments must have a clear beginning and clear ending.
- Anticipate and plan ahead how to deal with challenging behaviors.
- Avoid getting into a power struggle with your child. Take time to calm down.
- Focus on the behavior that is inappropriate. Don't refer to a child as bad.
- Prioritize on what important. You can't make issues out of everything.
- Use "do" statements rather than "don't" statement.
- When delivering consequences, deliver them with a calm voice.
- Trying lowering your voice rather than raising it.

Preventing Behavior Problems at Home

- Establish clear rules and expectations.
- Set limits; be clear and consistent.
- Responses to your child's behavior should be predicable, not random.
- Anticipate problem situations and avoid them.
- Set up routines and adhere to them as closely as possible.
- Try to keep clam and avoid discipline that is reactive.
- Remove items or objects you don't want your child to touch or play with.
- Anticipate stressors and frustrating expectations and circumvent them.
- Avoid fatigue your child's and your own.
- Focus on the appropriate behaviors.
- Try giving your child with ADHD as much of his or her space as possible.
- Plan ahead which behaviors you will work towards increasing and how it will be rewarded.
- Plan ahead how you will deal with inappropriate behaviors and make sure all adults agree on the consequence and that each will enforce the consequence consistently.
- Be observant. Notice when your child it getting angry, frustrated, or over stimulated. Try redirecting your child's attention on something else.
- Only give your child chores and responsibilities they can handle.
- Provide supports for your child to follow-through with chores. Remember that forgetfulness, procrastination, and disorganization are all part of ADHD. Your child will need reminders, help getting started, etc.
- Provide physical outlets (bike riding, swimming etc.)
- Avoid sarcasm, ridicule, criticism, nagging, yelling and screaming.
- Prepare your child for changes at home (visitors, change in work schedule). Talk about the change and avoid surprises.
- Avoid competitive activities. Reinforce good sportsmanship. Praise and reward behavior when playing games that require your child to have self control.
- Provide a limited number of choices. Don't allow your child to pull out all the toys or all the movies. Have them pick a few to choose from.
- Be aware of siblings who are teasing and provoking your child with ADHD and intervene.

Prevention Behavior Problems Outside of the Home

- Teach, model and practice appropriate behaviors and manners that you expect your child to display outside of the home (eg., follow directions, clean up after yourself, say "please" and "thank you").
- Anticipate and prepare for potential problems. Don't be caught unaware.
- Give your child time to get ready and talk about what to expect. Give advance notice. Remember how any change of routine can be stressful and unnerving. Children with ADHD need preparation; avoid catching them off guard.
- Before going to public places, talk to your child about behavioral expectations. State the rules simply. Review. Have your child repeat them back to you.
- Establish rewards that your child will be able to receive if he or she behaves appropriately and follows the rules.
- Don't put your child in situations that are too taxing on his or her self control and attention span.
- Avoid shopping with building in the opportunity for your chld to get something small.
- Let your child know the consequences if he or she behaves inappropriately. Mean what you say!
- Give written directions if appropriate.
- Don't take your child to place that you know will be too stimulating or difficult to manage the behavior and supervise.
- Remove your child from the situation when he or she is behaving inappropriately or showing signs of losing control.
- Supervise. Supervise. Supervise.
- Talk with your child about the natural consequence of inappropriate behaviors (e.g., friend won't invite you over, children won't want to play with you).
- Be prepared with a "bag of tricks". Children with ADHD become bored easily and need to be kept busy.
- Give your child feedback when you are with him or her outside of the home. "I'm proud of how you are......"
- Avoid fatigue. Don't take your child out when he is she is tired.

What Parents Can Do to Help Their Children Get Organized

Disorganization and lack of time awareness are common characteristics of ADHD. Your child is likely weak in these skills and will need your help, support, and coaching in order to be successful in school. Try not to be critical; instead, keep in mind that this is part of the disorder.

Help for Organizing Your Child's Work Space and Materials

- Provide all the necessary supplies for school AND for working at home.
- Label your child's possessions with their name in case they are lost.
- Together with your child choose a place in the home that is a comfortable place to work and free from distractions (Not their bedroom).
- Remove the clutter by having your child clear out work from the previous year. Decide together what is to be saved.
- Use a dry erase board in the kitchen to provide messages to your child.
- Provide a colored file system for paper storage.
- Keep trays and bins on the desk to keep the clutter away.
- Provide a master schedule of family events.
- Help your child reorganize on a regular basis.
- Provide the tools needed for your child to be organized at school.
- Help your child clean their room regularly.
- Encourage and help your child get in the habit of putting all books, notebooks etc. inside their backpack before bed.
- Have your child pack their backpack and put it in the same place each night.

Help for Time Management and Awareness

- Assist your child in prioritizing activities and workload.
- Help your child break down larger assignments into manageable amounts.
- Assist your child with time management for long-term projects.
- Work with your child to post due dates on calendars.
- Ask to see assignment calendar/books every day.
- Teach your child to make "things to do" lists.
- Set a schedule for homework.
- Help transfer important extracurricular schedules on your child's personal calendar. Refer to it often.

Homework Tips for Parents

- Establish a routine and schedule for homework (a specific time and place) and stick to the schedule.
- Examine assignment sheet/notebook with your child after school. Help with planning a things-to-do list of tasks for the evening.
- Limit distractions in the home during homework hours (e.g., reduce noise, turn off phones, turn off TV).
- Encourage your child to cross off-tasks as they are accomplished.
- Allow your child breaks between homework assignments. You may choose to reward your child after the completion of each assignment.
- Make sure your child has a quiet, uncluttered workspace.
- Be sure your child has the necessary supplies to complete their work.
- Assist your child in dividing assignments into smaller arts or segments that are more manageable and less overwhelming.
- Assist your child in getting started on assignments (e.g., reading the directions together, doing the first items together then watch your child do the next on their own). Then get up and leave.
- Monitor and give feedback without doing all the work together. You want your child to attempt as much as possible independently.
- Once your child has started, give them a short amount to accomplish independently. Check over that work to make sure it's done accurately. Then give another small amount, leave, and check again.
- Look over the homework, checking for completion, careless errors, and legibility.
- Praise and compliment your child when he or she puts forth good effort.
- It is not your responsibility to correct all of your child's errors on homework or make him or her complete and turn in a perfect paper.
- If the homework is too confusing or difficult for your child to be able to do (or for you to understand from the directions what is expected) let the teacher know.
- Remind your child to do homework and offer incentives: "When you finish your homework we can play a game....".
- A contract for a larger incentive/reinforce may be worked out as part of a plan to motivate your child to persist and follow through with homework. ("If you have no missing or late homework this week you will earn.....").
- If homework is a frequent cause of battles, tears, and frustrations, seek help. Request modifications and adjustment in homework assignments.

- Let the teacher know your child's frustration and tolerance level in the evening. The teacher needs to be aware of the amount of time it takes your child to complete tasks, and what efforts you are making to help at home.
- If your child's teacher is not willing to make reasonable accommodations, go to the administrator.
- Be available to answer questions, support, and help your child stay on-task. But do not get in the habit of having your child rely on you overseeing every minute.
- Use a timer to challenge your child to stay on-task, rewarding work completed with relative accuracy during that time frame.
- Use the time to tell your child that you will come back to check his or her progress on homework when the timer rings.
- Help your child study for tests. Study together. Quiz your child in a variety of formats.
- If your child struggles with reading, help by reading the material together or reading it aloud.
- Help your child with reading and comprehending content area textbooks by photocopying the chapter of the book your child is studying. It is much easier to write notes directly on the pages, underline or highlight main ideas and so forth.
- Allow your child to dictate to you while you do the writing and recording of responses. The accommodations to help bypass writing difficulties are reasonable for children with ADHD. Speak about it with the teacher.
- Work on a certain amount of work then take a break. Do not force your child to spend an excessive amount of time on homework. If you feel your child worked enough for one night, write a note to the teacher and attach it to the homework.
- Make sure everything is in the backpack before going to bed. Put the backpack in front of the door so it can't be missed.
- It is very common for students with ADHD to fail to turn in their finished work. This is very frustrating to know your child struggled to do the work, and then doesn't get credit for having it done. Papers seem to mysteriously vanish! Supervise that completed work leaves the home and is in the backpack. You may want to arrange with the teacher a system for collecting the work immediately upon arrival at school.
- If your child frequently forgets to bring home textbooks, ask if you can borrow another set for home.
- For long-range homework assignments (reports, projects) ask for a copy of the project requirements. Post at home and go over it together with your child. Write down due dates on the master calendar. Then plan how to break down the project into manageable parts, scheduling steps along the way. Start at once!

Giving Directions

- Get your child's attention directly before giving directions. This means face to face and direct eye contact not just calling out what you expect your child to do.
- You may need to walk over to touch or physically cue your child prior to giving directions.
- Don't attempt to give directions or instruction if you are competing with the distractions of TV or music, etc. First turn those off to get their attention.
- Show your child what you want him or her to do. Model and walk through the steps. Check that your child understands.
- Depending on the developmental skill of your child, one direction at a time is often all that can be remembered. Don't give a series of directions.
- Provide multisensory instructions. Use a visual chart of task or chores.
- A helpful technique for young children is to draw or cut out pictures on a chart hanging in the room that show the sequence of activities: (1) clothing-to get dressed, (2) cereal bowl – to show eating breakfast and so on. As you child completes the task have them move a clothespin down on the chart next to the corresponding picture.
- For older children, write down directions in addition to giving them orally.
- Always check for understanding of directs. Have your child repeat them.
- Keep directions clear, brief, and to the point.
- Give directions as statement, no questions. Say, "Lights off in 15 minutes." Don't say, "Are you ready to turn off the lights?"
- Give frequent PRAISE and POSITIVE FEEDBACK when your child follows directions and/or is making a good attempt to do so.
- Avoid vague directions (e.g., "Clean up your room"). Be specific in defining what you expect done (e.g., "Fold up your clothes and put them away").
- Provide needed support by working alongside your child on a task together. Try turning unpleasant chores into games.
- Once you have provided the necessary support and guidance it is important that your child work independently to the best of his or her ability. You don't want to establish co-dependent behaviors that can be disabling to both you and your child.

Advocating for Your Child

- If your child has ADHD, you will need to educate yourself about attention deficit disorders. It will be your responsibility to step in and intervene on behalf of your child whenever the situation arises that he or she is in need of extra support and understanding.
- Make every effort to learn about AHD and any other coexisting disorders or difficulties your child may have (e.g., learning disabilities). Over the past few years a great deal of information has become available about ADHD through books, magazines, websites and many other services.
- Learn about your child's rights under the law to a free, appropriate education; and to the accommodation and/or direct special services if the ADHD is affecting your child's ability to learn or perform successfully at school.
- To be an effect advocate, you will need to establish a partnership with the school. You will have to communicate with school staff regarding your child with ADHD to a far greater degree than necessary for most other children. Your level of involvement with the school greatly increases when you have a child with any special needs.
- Many parents feel uncomfortable at school meetings, particularly team meetings that involve several members of the school staff. Try to enter meetings/conferences with an open mind and cooperative attitude. Be willing to share your opinions, feelings, observations, suggestions and any other information about your child/family that may help in planning and intervention.
- Don't be afraid to ask questions, and to request that any language (educational jargon) be explained. Ask for clarification on anything you don't understand. At meets such as a Student Support Team (SST) meeting and IEP meetings, you cshould receive a copy of any reports or paperwork that staff member are referring to. In not, request a copy.
- Take some notes during meetings. It is helpful it you enter meetings prepared with a few notes to yourself, regarding items you wish to share, discuss or ask about. You are welcome to bring someone with you to the meetings if you prefer. It is most helpful if both parents are able to attend school meetings together. If parents are divorced but share custody, it is very beneficial to have both parents attend. Schools are used to working with sensitive family situation, and will do what they can to effectively communicate and work with parents and guardians.
- Avoid becoming defensive, aggressive, accusatory, or hostile with school personnel. Try to remain polite and diplomatic.

- One of the most effective ways to help your chld is to provide resources and information about ADHD to teachers coaches, and other adults directly working with and interaction with y our child on a regular basis. Much of the teacher training and public awareness about ADHD in the country and others is a direct result of parents' strong efforts to educate others about the needs of their children.
- It is highly recommended to join organizations such as *Children and Adults with Attention/Deficit/Hyperactivity Disorder* (CHADD) to learn how to help your ADHD child and keep updated about what is new in the field. Local chapters provide the opportunity to learn from and network with others in your situation: parents of children/teens, other adults with ADHD, professionals interested in and working with individuals who have ADHD. Generally there are meetings with guest speakers form the community addressing a number of relevant topics and issues. (See Chapter 8 for Resources).
- Parents will find that often the best way to establish a positive relationship with the school is to be a helpful, involved parent who gives time and service to the school. There are countless ways that schools can use the direct or indirect services of parents. All schools are seeking parent involvement in the classroom or various school committees/programs and projects. Volunteer your time and become more involved in the school community.
- Let teachers or other staff members who are making a strong effort on behavior If your child know that you are appreciative. It is generally the little things that make a difference.
- Communicate frequently with the classroom teachers. Find out as much as you can about how your child is functioning at school and ways you can support at home.

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Daily report card programs are commonly used in schools to help manage behavior and academic performance of students. The daily report card program is a form of behavior modification. Teachers have applied the principles of behavior modification in classrooms for many years. Behavior modification is based on the assumption that teachers can increase, decrease or eliminate specific behaviors of their students by manipulating responses that follow those behaviors. Three types of responses can affect behavior: positive reinforcement, negative reinforcement, and punishment or response-cost.

The daily report card specifies the behaviors the student is required to exhibit and the rewards (points) the teacher will provide contingent on the behavior. We have provided three types of daily report cards in the treatment tools section of myADHD.com: a primary version for children in preschool through first or second grade, an elementary version, and a middle school version. They differ in the number of behaviors that are targeted to improve and the frequency of ratings the student receives each day.

Most children in elementary school will be able to use a single rating daily report card because they will be evaluated by one teacher one time per day. Those elementary school students who require more frequent daily ratings, due to high rates of inappropriate behavior, or because they are evaluated by more than one teacher each day, will need a multiple rating card. Middle school students, who usually have several teachers in one day, will need to use the multiple rating card.

Regardless of whether the child is evaluated one or more times a day the target behaviors will often differ from one child to the next. Below are some examples of commonly targeted behaviors:

- Paid Attention
- Completed Work
- Completed Homework
- Was Well Behaved
- Desk and Notebook Neat

The student may be rated on some type of point scale (1=Poor, 2=Improved, 3=Fair, 4=Good, 5=Excellent or 1=Poor, 2= Some of the time, 3= All the time. When a category of behavior does not apply for the student for that day, e.g. no homework assigned, the teacher marks N/A and the student is automatically awarded 5 points.

Below are examples of daily report cards. You can find the actual forms in the Treatment Tools section of myADHD.com.

STEP 1: Explaining the Program to the Child

The daily report card program may be introduced to the child by his parents alone, together with his teacher, or with the assistance of a health care professional. The program should be described in a positive manner as a method by which to help the child achieve more success in school.

1. The child is instructed to give the daily report card to his teacher(s) each day for scoring.

2. The teacher(s) scores the card, initials it and returns it to the student to bring home to his parents for review.

3. Each evening the parents review the total points earned for the day. If the child is using the single rating card, it is to be brought to school each day for the rest of the week to be completed by the teacher. If a multiple rating card is used, then the child should be given a new daily report card to bring to school for use the following day.

4. Encouragement is offered to the child by the parents in the form of verbal praise and tangible rewards for his successes, while loss of privileges is applied for point totals below a prescribed amount each day (see below). It is important that a combination of rewards and consequences be utilized since children with ADHD are noted to have a high reinforcement tolerance. That is, they seem to require larger reinforcers and stronger consequences than non-ADHD children.

5. Explain to the child that if he forgets, loses, or destroys the daily report card he is given zero points for the day and appropriate consequences should follow.

If we are to expect complete cooperation from the child then **both** parents and teachers need to demonstrate a strong involvement with the program through daily evaluation by the teacher and nightly review by the parents.

STEP 2: Setting Up Rewards and Consequences

When using the daily report card program be careful to set your reinforcement and punishment cut-off scores at a realistic level so that the child can be successful on the card provided that he is making a reasonable effort in school. Although individual differences need to be considered, we have found that a daily report card score of 17 points or more per day is an effective cut-off score for starting the program.

As the child improves in performance, the cut-off score can be raised a little at a time in accordance with the child's progress. If the child receives less than the cut-off number of points on any given day then a mild punishment (e.g. removal of a privilege, earlier bed time, etc.) should be provided, however, for points at or above the amount expected, a reward should be forthcoming.

Constructing a List of Rewards

The child and parents should construct a list of rewards which the child would like to receive for bringing home a good daily report card. Some sample rewards are:

- Additional time for television in the evening after homework
- Staying up later than usual
- Time on video game
- A trip to the store for ice-cream, etc.
- Playing a game with mom or dad

- Going to a friend's house after school
- Earning money to buy something or to add to savings
- Exchanging points for tokens to save up for a larger reward at some future time

Constructing Negative Consequences

The child and parents should construct a list of negative consequences one of which could be imposed upon the child for failure to earn a specified number of points on the Goal Card. Negative consequences should be applied judiciously given consideration for the ADD student's inherent difficulties. Some examples are:

- Early bedtime for not reaching a set number of points
- Missing dessert
- Reduction in length of playtime or television time
- Removal of video game for the day

STEP 3: Using the Program—The Parent Record Form

During the first three days of the program, baseline data should be collected. This is the breaking-in phase wherein points earned by the student will count toward rewards, but not toward loss of privileges. As with any new procedure, it is likely that either the child or teacher will occasionally forget to have the daily report card completed. Such mistakes should be overlooked during this breaking-in phase.

After this brief period it is essential that the teacher score the report card daily. The teacher should ask the child for the card even when the child forgets to bring it up for scoring and should reinforce the child for remembering on his own to hand in the card for scoring. If the child repeatedly does not bring the card to the teacher for scoring the teacher should explain the importance of daily review of the card to the child. A mild consequence may be applied if the child continues to forget the card.

Generally the best time to score the card for elementary school students who are on a single rating system is at the end of the day. Middle school students, of course, should obtain scores after each period. Ignore any arguing or negotiating on the part of the student regarding points earned. Simply encourage the child to try harder the next day.

Parents should be certain to review the daily report card on a nightly basis. It is not wise to review the card immediately upon seeing the child that afternoon or evening. Set some time aside before dinner to review the card thoroughly and dispense appropriate rewards or remove privileges if necessary. After reviewing the card parents should fill in the number of points earned each day on a monthly calendar to record points earned each day for that month. This will serve as a permanent record and can be used for students who are earning points for long term rewards.

STEP 4: Self-Evaluation Training

The self-evaluation phase of the daily report card program is important in that it offers the child the opportunity to evaluate his own performance in school and creates greater self-awareness of behavior. After the child has been successful on the program for at least one month, the teacher should ask the child to complete his own report card each day and to compare his ratings with that of the teacher's for the day. When child and teacher ratings for a particular behavior are substantially different, the teacher should explain why the child received the teacher rating.

Continue with the self-evaluation phase if the child's performance continues to be positive.

STEP 5: Phasing Out the Program

Initially, the delivery of rewards and the prudent use of negative consequences drives the daily report card program and provides the initial motivation to the child to succeed. When the program is working well and the child consistently brings home good marks on the Goal Card, he gains a sense of pride about his performance. The joy of a job well done becomes an even more powerful incentive to the child than extrinsic rewards or the fear of negative consequences. When such a result is achieved the parents and teacher should discuss phasing out the program so as not to build reliance on the daily report card.

Begin the phasing out procedures as soon as the student's behavior is consistently positive for a six week period. Partial phasing out has already been instituted by the child's self-evaluating behavior (Step 4). Additional phasing out of the program can be accomplished by using the card less frequently (every other day or every other week). Teachers need to continue to positively reinforce the child for demonstration of appropriate target behaviors, even well after the program is discontinued.

Source: Adapted from The ADD/Hyperactivity Handbook for Schools (Parker, 2010)

Daily Report Card Forms

Various examples for Daily Report Cards (DRC's) are included. Each of these forms can be changed to meet the needs and goals of individual students. Based on the need of the child, reporting may change from daily to weekly reports. The form along with a brief description follows.

- Initial Parent/Teacher Collaboration Form Used for collaborating as a DRC is being established. Provides an opportunity to discuss behavior goals, reinforcers, and the steps to how the program will work (see pages 108-109)
- Sample Teacher Daily Report Cards Forms which may be filled out daily and sent home to inform parents about the day's progress on goals (see pages 110-116)
- Sample Student Daily Report Cards Forms which may be filled out daily by the student to assess their own behaviors (see page 117)
- Sample Behavior Checklists Customizable forms using to focus on various areas during the school day such as instructional time, independent work time etc. Forms may be sent home daily or laminated and attached to the student's desk where the student can check off each of the behaviors at the appropriate time. Sample forms from Intervention Central (www.interventioncentral.com) (see pages 118-119)

Initial Parent/Teacher Collaboration: Establishing a Daily Report Card Student: _____ Parent: Teacher(s): _____ Behavior(s) to Change: _____ Reinforcer(s) Selected: _____ Frequency of Reinforcer: _____ Person Responsible for Reinforcer: _____ Procedure to assure parent receives report; what to do if report is not delivered: Frequency/Method of Parent/Teacher Contact: ______ Parent Signature ______ Teacher Signature _____ Source: Retrieved from Diana Browning Wright, Behavior/Discipline Trainings, 2009

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Initial Parent/Teacher Collaboration: Establishing a Daily Report Card
Student: <u>Jacob Anderson</u>
Parent: Patrícia and Michael Anderson
Teacher(s): John Smith
Behavior(s) to Change: Incomplete homework
<u> </u>
Reinforcer(s) Selected: <u>15 minutes computer time</u>
Frequency of Reinforcer: <u>Nightly</u>
Person Responsible for Reinforcer: Pourents
Procedure to assure parent receives report; what to do if report is not delivered:
<u>Jacob with check with Mr. Smith daily to make sure</u>
planner is filled out and homework it together. Mr. Smith will
<u>ínítíal planner. If planner ísn't ínítíaled, Jacob cannot receíve</u> <u>hís daíly computer tíme.</u>
Frequency/Method of Parent/Teacher Contact: <u>Mr. Smith will email</u>
parents each Fríday afternoon.
Parent Signature <i>John Smith</i>
Teacher Signature <u>Patricia Anderson</u>

Sample Daily Report Card

Name		Date			_
Behaviors: 1) 2) 3)		2 Points - Yes 1 Point - Somewhat			
Class	М	Т	W	тн	F
Total Points for the Day					
Teacher Initials					
Parent Initials					
Teacher Comments:					
Parent Comments:					

Source: Retrieved from Diana Browning Wright, Behavior/Discipline Trainings, 2009

Sample Daily Report Card

Name <i>John Smith</i>							
Behaviors: 1) No blurting out 2 Points - Yes							
2) <u>Respectful to teacher and class</u> 1 Point - Somewhat							
3) <u>Complete homework</u> 0 Points - No							
Class	М	Т	w	тн	F		
Math	2	2	2	2	1		
Science	1	1		1	0		
Hístory	0		0	0	0		
Physical Education	F	\sum_{k}	2	2	2		
English			2	1	0		
Reading		1	1	2	0		
Other -							
Total Points for the Day	8	7	7	8	3		
Teacher Initials	SP	SP	SP	SP	SP		
Parent Initials	LKS	LKS	LKS	LKS	LKS		
Teacher Comments: John did very well in Math this week and made his points this week. He seems to be having some trouble getting his History work done. Let's talk with Mr. Jones about this next week. Parent							
comments: John said Mr. Smith hates him and he doesn't want to do his work							
in that class. I would like to meet with him when possible.							

Daily Classroom Report

NAME:	
DATE:	
TEACHER:	
TEACHER'S INITIAL	

	Yes	Partial	No
Did the student	2 pts.	1 pt.	0 pts.
Raise hand when wanting to give answers?			
Follow along during instructional time?			
Follow directions?			
Fill out assignment book?			
Speak courteously?			
Not disturb others?			
Use the hallways and restrooms appropriately?			
Teacher was satisfied with his or her performance today?			
Points on today's classwork, was acceptable, or evaluation			
of work quantity or quality was adequate?			
Grades on tests, assignments or projects were adequate?			

Teacher Comments:

Parent Signature _____

Parent Comments:

Source: Retrieved from Diana Browning Wright, Behavior/Discipline Trainings, 2009

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TEACHER: <u>Sarah Porter</u>			
TEACHER'S INITIAL	> 		
\sim	Yes	Partial	No
Did the student	2 pts.	1 pt.	0 pts.
Raise hand when wanting to give answers?	$\searrow 2$		
Follow along during instructional time?		1	
Follow directions?		1	
Fill out assignment book?			0
Speak courteously?	2		
Not disturb others?		1	
Use the hallways and restrooms appropriately?		1	
Teacher was satisfied with his or her performance today?		1	
Points on today's classwork, was acceptable, or evaluation of work quantity or quality was adequate?	2		
Grades on tests, assignments or projects were adequate?	2		

Teacher Comments: Jacob had a better day today. He is still struggling with getting his planner filled out. I am going to have him buddy check each day with a friend.

Parent Signature <u>Mary Smíth</u>

Parent Comments: He is having a much better attitude at home. Thank you for your support.

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Name ______ Week of ______

COMMENTS

	Was prepared for class	
Ϋ́	Exhibited good behavior	
Monday	Stayed on-task	
٨٥	Completed class work	
-	Turned in homework	
	Was prepared for class	
lαγ	Exhibited good behavior	
Tuesday	Stayed on-task	
лЧ	Completed class work	
-	Turned in homework	
λ	Was prepared for class	
Wednesday	Exhibited good behavior	
nes	Stayed on-task	
edi	Completed class work	
≥	Turned in homework	
>	Was prepared for class	
da	Exhibited good behavior	
Thursday	Stayed on-task	
ЧЧ	Completed class work	
'	Turned in homework	

Teacher Signature _____

Parent Signature _____

Comments:

Source: Retrieved from Intervention Central (www.interventioncentral.org)

Teacher Daily Behavior Report Card Student: _____ Date: _____ Teacher: Class: Directions: Please rate the student each day on the behavioral items below: The student was quiet during work time. Usually/Always Never/Seldom Sometimes The student waited to be called on or given permission before talking. Never/Seldom Sometimes Usually/Always The student waited his/her turn in discussions and did not interrupt others. 4 5 6 Never/Seldom Sometimes Usually/Always The student followed along during instruction. Never/Seldom Sometimes Usually/Always Source: Retrieved from Intervention Central (www.interventioncentral.org)

	Teacher Daily Behavior Report Card								
	Student:				_ Date:			_	
	Teacher:		Class:						
Direct	tions: Please	e rate the s	student ea	ach day on t	the behavi	oral items	below:		
Goal 2	1:								
1	2	3	4	5	6	7	8	9	
	Never/Se	Seldom Sometimes Usually/Always							
Goal 2	2:		_						
1	2	3	4	5	6	7	8	9	
	Never/Se	eldom		Sometime	es	Us	sually/Alwa	ays	
Goal 3	3:								
1	2	3	4	5	6	7	8	9	
	Never/Se	eldom		Sometime	25	Us	sually/Alwa	ays	
Goal 4	4:								
1	2	3	4	5	6	7	8	9	
Never/Seldom Sometimes Usually/Always									
Source	e: Retrieved fro	om Interven	tion Centra	l (interventior	icentral.org)				
				122					

Student Daily Behavior Report Card Student: _____ Date: _____ Teacher: Class: Directions: Please rate yourself on the behavioral items below: I was quiet during work time. 5 6 7 8 9 4 1 2 3 Usually/Always Never/Seldom Sometimes I waited to be called on or was given permission before talking. 6 7 5 4 3 1 2 8 9 Never/Seldom Sometimes Usually/Always I waited my turn in discussions and did not interrupt others. 5 6 3 1 2 4 7 8 9 Never/Seldom Sometimes Usually/Always

I followed along during instruction. 1 2 3 4 5 6 7 8 9 Never/Seldom Sometimes Usually/Always

Source: Retrieved from Intervention Central (www.interventioncentral.org)

		Stu	ıdent Da	ily Behavio	or Repor	t Card			
	Student: Date:								
Teacher:Class:									
Direct	ions: Pleas	<u>e rate you</u>	<u>rself on th</u>	e behaviora	al items be	elow:			
Goal 1	1:								
1				5	6	7	8	9	
	Never/S	eldom		Sometime	2S	Us	ually/Alwa	iys	
Goal 2			-						
1	2	3	4	5	6	7	8	9	
	Never/S	eldom		Sometimes			ually/Alwa	iys	
Goal 3	3:								
1	2	3	4	5	6	7	8	9	
	Never/Seldom Sometimes Usually/Alway					iys			
	-								
Goal 4	1:								
1	2	3	4	5	6	7	8	9	
	Never/Seldom Sometimes Usually/A						ually/Alwa	iys	

Source:Retrieved from Intervention Central (www.interventioncentral.org)

Sample Student Behavior Checklists

Checklist Item – Morning Routine

- □ I have a sharpened pencil.
- □ I have my homework ready to turn in.
- □ I have cleared my desk of unneeded materials.
- □ I am sitting quietly.
- □ I am working on the assigned start-of-class activity.

Checklist Item – During instruction.

□ I am looking at the teacher.

- □ I am not talking to other students.
- □ I am sitting up straight.
- □ I raise my hand and wait to be called on to comment or ask a question.
- □ I ask questions if I don't understand what is being taught.
- □ To avoid distracting myself or others, I do not play with objects at my desk.

Checklist Item – Independent Worktime

□ I am sitting up straight.

- □ I have cleared my desk of unneeded materials.
- □ I am working on the assignment.
- □ I am not talking to other students.
- □ To avoid distracting myself or others, I do not play with objects at my desk.
- □ I ask my neighbor if I have a question about the assignment.
- □ I ask the teacher if I still have a question about the assignment.
- □ I use any extra time when I have finished the assignment to check my work.

Checklist Item – Group Work

- □ I am talking only with my work partners.
- □ I participate in discussion with my partners.
- □ I do my share of the work when in pairs or groups.
- □ I talk only about the topic(s) assigned by the teacher.
- □ I keep my voice level down so that I don't distract other students.
- □ I seek help from my partners if I don't understand something.
- □ I ask the teacher for help if my partners cannot answer my question.

Source: Retrieved from Intervention Central (www.interventioncentral.org)



The internet is readily available to teachers and parents and provides an abundance of information in various areas. The following list is not exhaustive, but provides many resources to be used by teachers and parents in regards to ADHD as well as other disabilities. Many of the resources are free but some have a subscription or member fee. All of them offer valuable insights on helping students in various areas.

ADHD & LD Organizations & Sources of Reliable Information

www.chadd.org (Children & Adults with Attention Deficit Disorders) www.ldanatl.org (Learning Disabilities Association of America) www.add.org (Attention Deficit Disorder Association - ADDA) www.greatschools.org

www.ldonline.org (Learning Disabilities: Information and Resources)
www.help4adhd.org (National Resource Center for AD/HD)
www.nrcld.org (National Research Center on Learning Disabilities)
www.ncld.org (National Center for Learning Disabilities)
www.cec.sped.org (Council for Exceptional Children)
www.cldinternational.org (Council for Learning Disabilities)
www.nichcy.org (National Dissemination Center for Children with Disabilities)
www.interdys.org (International Dyslexia Association)
www.dldcec.org (Division for Learning Disabilities)
www.nichd.nih.gov (National Institute of Child Health & Child Development)

Resources for Managing Behavior and Self-Regulation Interventions

http://pinterest.com/sandrarief.com

www.ccf.buffalo.edu/resources_downloads.php (12 page packet on Daily Report Cards developed by Dr. William Pelham, Jr., et al. and lots of other resources)

www.apbs.org (The Association for Positive Behavior Supports)

www.pbis.org (The OSEP Technical Assistance Center of Positive Behavioral Interventions and Supports)

www.FreePrintableBehaviorCharts.com

www.directbehaviorratings.org Direct Behavior Ratings

www.interventioncentral.org (Jim Wright's website)

www.BEHAVIORAdvisor.com (website of Dr. Thomas McIntyre (Dr. Mac)

www.myrewardboard.com (online reward system)

www.whytry.org Why Try program (social-emotional learning)

www.specialconnections.ku.edu (Univ. of Kansas' site for research-validated strategies to help kids with special needs in general education classrooms)

Resources Related to Teaching & Learning

http://iris.peabody.vanderbilt.edu (The IRIS Center: Provides free on-line interactive resources that translate research about educating students with disabilities into practice.)

http://coe.jmu.edu/LearningToolbox (James Madison University Learning Toolbox: learning strategies)

http://kc.vanderbilt.edu/casl National Center for Accelerating Student Learning

www.unl.edu/csi Cognitive Strategy Instruction at University of Nebraska Lincoln

www.ku-crl.org The University of Kansas Center for Research on Learning

www.interventioncentral.org (lots of instructional interventions and strategies)

www.fcrr.org (Florida Center for Reading Research)

www.whatworks.ed.gov What Works Clearinghouse of the Institute for Education Sciences in the U.S. Dept. of Education

www.readwritethink.org (affiliated with International Reading Association)

www.readingrockets.org (Reading Rockets)

www.centeroninstruction.org The Center on Instruction for K-8 interventions

www.k8accesscenter.org The Access Center funded by OSEP to improve outcomes for elementary and middle school students with disabilities

www.homeworkopoly.com (Check out this game for motivating homework completion)

www.nancyfetzer.com (literacy materials/charts)

www.wholebrainteaching.com (Chris Biffle's site)

www.help4teachers.com (Kathy Nunley's site – Layered Curriculum)

www.sdcoe.net (San Diego County Office of Education - curriculum and instructional resources under info for teachers)

http://rubistar.4teachers.org (free site for making rubrics)

http://www.freeology.com (resources for teachers)

http://www.teach-nology.com (resources for teachers)

www.timetimer.com (online timers)

www.learningresources.com (Time Tracker) and www.stokespublishing.com

http://pinterest.com/sandrarief.com (There is a lot of content with numerous strategies to apply in the classroom on this topic.)

Other Recommended Sites for information about ADHD

www.sandrarief.com (Sandra Rief's official site)

www.russellbarkley.net (Dr. Barkley's official site)

www.additudemag.com (ADDitude magazine)

www.adhdsharedfocus.com

www.adhdandyou.com

www.drthomasebrown.com (Dr. Thomas Brown's website)

Source: Provided by Sandra Rief (2014)

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Chapter 6

Discussion and Reflection

Introduction: Summary of The Project

Teachers are faced with various challenges in the classroom. One common theme is the challenge to keep students engaged during the school day. For many students, this challenge is compounded due to ADHD. Teachers need effective strategies to bring about more on-task behaviors. By doing so, teacher time can be spent in ways which benefit the entire classroom due to greater instructional time. Research indicates that self-regulating strategies are an effective intervention to increase on-task behaviors. A single-subject study and a handbook on self-regulating strategies were developed in an effort to provide teachers with easy to implement strategies for students with ADHD.

Literature Review. The extensive research of peer reviewed articles on ADHD revealed several findings. The literature clearly revealed that teacher knowledge of ADHD was lacking. Various myths about the causes of ADHD were still widely accepted by teachers. Additionally, teachers recognized the lack of knowledge in how to effectively work with students with ADHD, recognizing that on-task behavior was necessary for learning to take place.

Research clearly identified educators' need for strategies to help in effectively working with students with ADHD. Further research brought about an extensive study of various behavioral interventions for students with ADHD. Several self-regulating strategies were identified as effective interventions to bring about an increase in on-task behavior, increase in the completion of tasks, and improved classroom behaviors. While the research revealed the frustrations of teachers in dealing with students who were offtask, self-regulating strategies allowed students take control of their own behaviors which provided the opportunity for the teachers to spend less time managing behaviors and more time teaching.

Single Subject Study and Limitations. A third grade student with ADHD was identified as struggling to remain on-task during independent work time in Reading and Math class. After the extensive literature review about the benefits of self-regulating strategies, a single subject study was developed for the third grade student. The purpose of the study was to evaluate the effectiveness of four self-regulating strategies on a student with ADHD and that by teaching the student to take control of his own behavior, more on-task behaviors would be evident and academic success would follow. A baseline was used to determine the amount of on-task behavior for the student during independent work time in Reading and Math class. The student was taught four self-regulating strategies, self-monitoring, self-monitoring plus reinforcement, self-reinforcement, and self-management and data was collected on each intervention to determine the effectiveness of each self-regulating strategy on on-task behaviors. All of the interventions brought about an increase in on-task behaviors during independent work time in both Reading and Math class.

Limitations existed in the single-subject study. The first limitation was a lack of interrater agreement. The baseline data as well as the observations of the student during the interventions were only from the investigator. Therefore if there were errors in accuracy, there was no ability to compare data from another observer and therefore it was less reliable. Another limitation in the single-subject study was using an individual student. While the information gleaned from the study was beneficial, it does not reflect whether the interventions are effective on more than one student. It is unclear whether it is an intervention that a particular student responds to positively, or an intervention that brings about positive behavioral changes in various students.

Strengths of the Handbook. Various handbooks about ADHD were viewed, but none provided detailed information about all four of the self-regulating strategies that were implemented in the study. Therefore a new handbook, *A Teacher's Guide to ADHD* and Self-Regulating Strategies, was created to provide teachers needed information about ADHD and provide strategies for positive interventions in the classroom. The handbook provides teachers basic information about ADHD written in non-technical language. The handbook speaks to some of the well-known myths about ADHD and provides accurate information about those myths. The handbook also provides detailed information on selfregulating strategies. Various reproducible resources are included in the handbook to provide teachers with the necessary forms for data collection and student forms for selfmonitoring. Easy to follow steps to implement the four different self-regulating strategies are included. Finally, the handbook offers tips for parents to effectively work with their own child with ADHD and gives strategies to promote good communication between home and school.

Weaknesses of the Handbook. While the handbook provides many suggestions for teachers to effectively work with students with ADHD, its primary focus is on self-regulating strategies. While research supports the benefits of self-regulating strategies, there may be some students who do not respond positively to this intervention. Additionally, students are not "one size fits all". While forms and inventories for teacher use have been provided, these may not fit the needs of teachers.

Reflections of The Special Project

Teachers face many challenges in the classroom. Research suggests that one of the greatest sources of frustration for teachers is not effectively working with students with challenging behaviors. Among those challenging behaviors is the off-task behavior of students, specifically for those with ADHD. The desire to provide teachers with information about ADHD and effective interventions became the focus of the project.

Three major goals were identified for the special project. The first was to gain a deeper understanding of students with ADHD as well as identifying the challenges teachers face in dealing with their often difficult behaviors. The research provided valuable information about ADHD characteristics and the need for effective research based interventions to meet the needs of students with ADHD. The research also led to an in depth research in the area of self-regulating strategies as being effective interventions to bring about on-task behaviors for students with ADHD. The second goal of the project was to implement self-regulating strategies for a student with ADHD. The desire was to help the student take control of his off-task behaviors and bring about greater success due to greater on-task behaviors. The case study was successful in that it increased the student's on-task behaviors and was positively perceived by the student. The final goal for the project was to create a useful resource for teachers. Due to the immense time constraints for teachers, there is rarely time to research interventions. By providing a handbook about ADHD and self-regulating strategies based on a thorough study of research based articles, teachers have a useable resource to use immediately with their students.

The handbook helps teachers gain basic knowledge and understanding about their

students with ADHD and provides step-by-step instructions and related resources to effectively implement four evidence-based self-regulating strategies in their classrooms. As teachers are continually challenged with poor on-task behaviors from their students, especially those with ADHD, the handbook can be a readily available and reliable resource for teachers to increase and maintain on-task behaviors.

The entire process to put this project together has been one which has brought about a new appreciation for research as well as a reminder about the need to be a lifelong learner. By continuing with research in other areas for students with exceptionalities, the desire is to increase in knowledge to share to share that knowledge with those who work with struggling students. By working together using research based strategies, and by teaching students in the way in which they learn, all will be a part of seeing students succeed.

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Principal's Letter

IRB Application

Appendix C



HUMAN RESEARCH PROTECTION PROGRAM INSTITUTIONAL REVIEW BOARDS

To:	JEONG-IL CHO NF 250E
From:	JEANNIE DICLEMENTI, Chair Social Science IRB
Date:	10/31/2014
Committee Action:	Approval
IRB Action Date	10/31/2014
IRB Protocol #	1410015291
Study Title	An investigation of the Effects of Self-Regulating Strategies to Increase On-Task Behavior for a Student with Attention-Deficit/Hyperactivity Disorder
Expiration Date	10/30/2015

Following review by the institutional Review Board (IRB), the above-referenced protocol has been approved. This approval permits you to recruit subjects up to the number indicated on the application form and to conduct the research as it is approved. The IRB-stamped and dated consent, assent, and/or information form(s) approved for this protocol are enclosed. Please make copies from these document(s) both for subjects to sign should they choose to enroll in your study and for subjects to keep for their records. Information forms should not be signed. Researchers should keep all consent/assent forms for a period no less than three (3) years following closure of the protocol.

Revisions/Amendments: If you wish to change any aspect of this study, please submit the requested changes to the IRB using the appropriate form. IRB approval must be obtained before implementing any changes unless the change is to remove an immediate hazard to subjects in which case the IRB should be immediately informed following the change.

Continuing Review: It is the Principal investigator's responsibility to obtain continuing review and approval for this protocol prior to the expiration date noted above. Please allow sufficient time for continued review and approval. No research activity of any sort may continue beyond the expiration date. Failure to receive approval for continuation before the expiration date will result in the approval's expiration on the expiration date. Data collected following the expiration date is unapproved research and cannot be used for research purposes including reporting or publishing as research data.

Unanticipated Problems/Adverse Events: Researchers must report unanticipated problems and/or adverse events to the IRB. If the problem/adverse event is serious, or is expected but occurs with unexpected severity or frequency, or the problem/even is unanticipated, it must be reported to the IRB within 48 hours of learning of the event and a written report submitted within five (5) business days. All other problems/events should be reported at the time of Continuing Review.

We wish you good luck with your work. Please retain copy of this letter for your records.

Emeat C. Young Hall, 10th Floar - 155 S. Grant St. - West Lafayette, IN 47507-2114 - (765) 404-5042 - Fax: (765) 404-0211

Appendix D

Timeline for Special Project

September

- Topic and Rationale 9/3
- ➢ Nuts and Bolts Training − 9/10
- Citi Training and Certification 9/10
- IRB Draft 9/17
- ➤ Timeline 9/24
- Research Journal Articles 3 weekly
- Journal Summaries 3 weekly
- Principal Approval Letter
- Begin Literature Review

October

- IRB Application Submitted 10/1
- Research Proposal Draft 10/1
- Research Proposal Final 10/8
- Literature Review Draft 10/8
- Literature Review pages 1-5 Final 10/15
- Methodology Review Draft 10/22
- Methodology Review Final 10/29

November

- Work on Methodology and Literature Review
- Begin Data Collection 11/1 or once IRB approval is given
- Drafts of Chapters 1-3 11/12
- Final Project Chapters 1-3 11/19

December

- Data Collection for Self-Regulating 12/1-12/19
- Powerpoint for Chapters 1-3 12/3
- Final Revisions for Chapters 1-3

January

- Revised Timeline 1/21
- Finalized Table of Contents 1/21
- Design of Final Handbook 1/2
- ➤ Chapter 4 1/28
- Proposal to Research and Creative Endeavor Symposium 1/28

February

- First 3 pages of each chapter of handbook 2/11
- Chapter 6 2/25

March

- Draft of Handbook Chapters 3/4
- References and Appendices 3/4
- Resume 3/4
- Final Project Submitted to Faculty 3/25

April

- Powerpoint Presentation Draft 4/8
- Powerpoint Presentation Rehearsal 4/15
- ➢ Final Powerpoint Presentation − 4/22
- ➢ Final Submission of Project for Approval − 4/22
- ➢ Final Copies of Project − 4/29
- Posting on OPUS 4/29

May

Commencement – 5/13

Resume