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Where was I?: Engagement strategies for students with attention deficit disorders

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WHERE WAS I?:
ENGAGEMENT STRATEGIES FOR STUDENTS WITH ATTENTION DEFICIT
DISORDERS

A Thesis Submitted
in Partial Fulfillment
of the Requirements for the Designation
University Honors

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Entitled: Where Was I?: Engagement Strategies for Students with Attention Deficit Disorders

Has been approved as meeting the thesis requirement of the Designation University Honors

Date

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Purpose

Throughout my time in the elementary classroom I have been flooded with instances where my cooperating teacher or I, myself, have struggled with students who are inattentive or disruptive during class. This not only makes it difficult for that specific student to learn, but also has the possibility of preventing others from learning. My most memorable experience of teaching students like this has been with a brilliant student who was clinically diagnosed and medicated for the hyperactive subset of attention deficit disorders, more well-known as ADHD. The following thesis is the research and creation of strategies to help teach students with attention deficit disorders like the one I had the privilege of teaching. The end goal is educating myself and other teachers on how best to maintain the engagement of not only students who clinically have an attention disorder, but all students in general. By finding effective strategies to engage the three to seven percent of students with brains that prompt their minds to wander, I will in turn be finding ways to make the classroom more interesting, even for the students who focus more easily.

Literature Review

For students with attention deficit disorders (ADD), behaviors are often presented through inattentiveness, fidgeting, possible hyperactivity and more. Antecedents are stimuli in the classroom, or other environments, which cause unwanted behaviors in students. Classroom layout and management can be a very specific type of antecedent that can be controlled to benefit students through the stimuli they are taking in. The unwanted behaviors are often met with consequences of various kinds, some of which are very effective and others may be less so. Since students express behaviors and are affected by all environments, parents and teachers are advised to be in communication about students' antecedents, behaviors, and consequences. All of these

categories are full of strategies to help teachers, and parents, to decrease misbehavior in order to better educate their students.

Antecedent-based Strategies

All behaviors stem from an initial antecedent. This antecedent is what causes the behavior that follows, expressing itself in a multitude of ways. Teachers and researchers alike have labored to find ways to treat and manage the disruptive behaviors that arise from the mixture of antecedents and the student's attention deficit disorder. One category researchers have found to be useful is to look at which antecedents lead to unwanted behaviors and to address those antecedents. The strategies that have been developed within this category can all be labeled as *antecedent-based strategies*.

Attention deficit disorders often involve behaviors that disturb and disrupt the environment surrounding the student. Garrick Duhaney (2003) shared many different strategies for teachers to use to help manage the behavior of students with ADD. This research suggests a functional behavioral assessment (FBA) could be helpful because it determines why a student behaves in a certain way, followed by addressing that particular behavior in a positive way. It is most common for an FBA to be done using an ABC observation chart where the antecedent, behavior, and consequence are observed and analyzed. Students can be taught to use self-monitoring and self-evaluation to monitor their own behavior (Weaver, 1998). Students benefit from self-monitoring strategies where they can take control of their own behavior. This is because the students are able to take consequences into their own hands as they evaluate their behavior (DuPaul, 2006). Some of the self-managing strategies suggest decreasing the stimulants that promote impulsive behavior in the first place (Reiber, 2004). Peer mediation and the buddy system help students with their social skills by helping them learn how to interact positively with

classmates throughout the day (Garrick Duhaney, 2003). Using a FBA with students and encouraging other students to support them in their learning can greatly benefit the effectiveness of stopping or discouraging behaviors while building a tighter community within the classroom.

Due to the inattentive nature of attention deficit disorders, students often struggle academically, yet there are several strategies teachers can implement to encourage these students academically, while simultaneously curbing their inattentive behaviors. Shimabukuro (1999) showed that a variety of educational interventions such as: organizational strategies, self-monitoring, self-evaluation, and self-instruction procedures which may help students with ADD perform better in all educational settings. The results of these studies show self-monitoring can increase the time students are on-task. This study had three male participants in sixth and seventh grades who were observed in reading, mathematics, and written expression instruction using self-monitoring skills (Shimabukuro, 1999). Three variables were assessed during this study: student academic accuracy, academic productivity, and on-task behavior. The students were able to complete all or most of their independent assignments for reading comprehension and math using self-monitoring. With self-monitoring, the students' mean scores for accuracy increased by 22 to 31 points, with the highest mean scores achieved in math and the lowest mean scores being in written expression (Shimabukuro, 1999). Self-monitoring resulted in improvements of on-task behavior according to the teachers even though some of the results were more significant than others (Shimabukuro, 1999). Overall, this study shows that self-monitoring of academic performance increases academic productivity, academic accuracy, and on-task behavior which can allow all students to advance their learning.

Special education teachers and professionals have a variety of experiences with students with attention deficit disorders which makes their recommendations about working with these students very valuable. For disruptive students there are strategies called: frequent questions, on-

task chart, and following instructions. In the case of incomplete work, a teacher may try strategic skills or assignment aims (Kemp, 1995). Askew (1993) asked special education teachers about strategies to help general education teachers to teach students with ADD. For the preference questions, the majority of teachers recommended seating the student next to the teacher, dividing student work into smaller pieces, giving students feedback nonverbally, and teaching students self-monitoring skills (Askew, 1993). All of these recommendations could be greatly influential for specific students in the class with ADD.

The brain can be gradually re-wired daily because the brain changes with every new and repeated experience. This happens because every time a student returns to an idea, the neurons make a pathway that is easier to use (Valkenburg, 2012). Both metacognition and cognitive feedback can be useful in re-wiring the brain. Metacognition is self-awareness and the ability to recognize and regulate the learning with new and known information. Cognitive feedback is an awareness of the responsibility for one's learning. Brain development research shows that a method used with obsessive-compulsive disorder (OCD) patients in recognizing, reattributing, refocusing, and reevaluating also works with students with ADD (Valkenburg, 2012).

Recommended courses of action are to: find attention span, make meaningful links to prior knowledge, chunk small bits of information together, manage time, refocus, and use flash cards, graphic organizers, or diagrams. Some additional tips for test-taking may be to write down difficult information before beginning to answer the test questions or cover up everything except the question being answered (Valkenburg, 2012). Overall, each student is different so teachers have to differentiate for the needs of each student, and the students should understand how ADD works so they attribute any difficulty to the disability and not any failure or shortcoming.

There were strong findings considering classroom, academic, and behavior interventions that came out of a meta-analysis considering the effectiveness of the interventions for students

with ADD. Classroom interventions in general were seen to have a moderate effect on the behaviors of those students with ADD (DuPaul, 2012). The interventions were also seen to have a much greater effect on student behavior rather than on academic performance. Then, the study showed that interventions focusing on academic performance, such as contingency management and academic intervention, had some effect on academic performance, yet had a great benefit on student behavior (DuPaul, 2012). These strategies, such as self-regulation and academic interventions, are positive, preventative ways to address behavioral issues in students with ADD. Since academic and behavior interventions have shown to have significant effects on students with ADD, this study recommends using these interventions as a “first line of defense (DuPaul, 2012).” Furthermore, research has also shown that academic approaches impact the students’ behaviors more effectively than medical intervention because the academic approaches help the students in a way that medication cannot.

Consequence-based Strategies

Just as all behaviors stem from an initial antecedent, all behaviors have an eventual consequence. Consequences are often seen in the classroom through verbal responses or the administering or removal of responsibilities. For students with attention deficit disorders, the inattentiveness, fidgeting, and possible hyperactivity disrupt the classroom dynamic which normally leads to negative consequences. Another way to help teachers and families to support positive behaviors in and out of the classroom is to look at the productiveness of the consequences the students are receiving for their behavior. The strategies that are productive in using consequences to discourage undesirable behaviors are called *consequence-based strategies*.

Some external reinforcements can be used when verbal reinforcements are lacking. DuPaul (2006) recommended the consequent-based strategy of token reinforcement where students receive reinforcers and simple verbal responses to behavior. Token economy exchanges award-points for different behaviors and can be cashed in for a prize (Garrick Duhaney, 2003). Token economies are one of the most common and most effective behavioral strategies and can be used for the entire class, where all students receive rewards or, they lose them based on their behavior (Reiber, 2004; Fiore, 1993). While not all teachers agree with the idea of using extrinsic motivators to encourage positive behavior, this research show evidence that there can be significant advantages to using a token reinforcement strategy.

As with antecedent-based strategies, the experiences and recommendations of special education professionals can be very useful when comparing consequence-based strategies. In contingency contracting, the teacher and student discuss the behaviors and reinforcers that will be given based on student behavior (Garrick Duhaney, 2003). A partner board may help students with cooperation. Organization can be benefitted by think out loud and assignment logs. For increasing work accuracy, students can use checkout station and partner plus. Other strategies used for self-monitoring are performance checkouts and performance choices (Kemp, 1995). Various forms of time-out can be a last resort when other strategies are not working (Garrick Duhaney, 2003). These strategies and more can greatly benefit students which shows the importance of using fellow teachers as resources.

While the previous, more common strategies may be helpful for most students with ADD, some students may need less researched strategies that are either more simple, or much more complex. Fiore (1993) looked into many different treatment options for students with ADD. Behavior therapy options can use positive and negative reinforcers to target behavior. A simple strategy is using verbal and nonverbal feedback. It was found that negative feedback

encouraged the highest decrease in unwanted behaviors. A second therapy option is cognitive-behavioral therapy, which combines the behavior therapy with other cognitive or academic therapies. Research has shown, however, that cognitive therapy has little impact on students with ADD without the aid of medical intervention (Fiore, 1993). Even though behavior therapy and cognitive-behavior therapy are less researched options, they can be exactly what an individual student needs since all students are different.

Classroom Layout Strategies

While there are some specific strategies teachers might implement to control certain antecedents, they can also control the general stimuli that their students are exposed to in the classroom. This stimuli alone can be enough to overload students with ADD and cause inattentiveness or unwanted behaviors. Researchers and special education professionals share many classroom layout and management strategies that can greatly benefit students without them even noticing.

Students with attention deficit disorders can be a challenge to teach, thus the importance of finding strategies to help their academic success. Ostoits (1999) argued that, students with ADD normally prefer working in small groups of peers and using visual aids or kinesthetic manipulatives. Small groups are a great way to expose low-achieving students to the thoughts, skills, and processes of higher level students. Students with ADD often require movement, so allowing them to physically inhabit a classroom to discuss classwork with peers can be beneficial. Commonly, ADD students need to read to themselves to comprehend texts and pay attention because the repetition of their own voice reinforces attention and learning (Ostoits, 1999). Readers losing their place can be quickly remedied by using a marker. Structure and consistency, along with a comfortable environment, helps students to take productive risks that

help them think deeply about the content. Helpful strategies are those that are relevant to the student and motivating to them. It is important for ADD students to relate prior knowledge to the current text while pre-reading (Ostoits, 1999). Story mapping and retelling are two useful ways to increase comprehension because they promote attention and active involvement during and after the reading. It is often helpful for older students with ADD to take notes and write down what they are thinking and then discussing and sharing their thoughts (Ostoits, 1999). Mostly, all of these strategies are attempting to address the challenge of holding students' attention long enough for them to understand the content.

Many researchers share small and general strategies for teachers to keep in mind as they teach. ADD students do well in classrooms with an animated teacher and interesting content, along with multiple opportunities to succeed (DuPaul, 2006; Garrick Duhaney, 2003). Difficult transition times can be improved with small cues and reward systems as well. A positive and warm classroom atmosphere encourages students to respond and behave positively. One of the best ways to help students with ADD is to allow them to let out their energy with small and large bursts of physical activity (Garrick Duhaney, 2003). Implement allowing students to get out of their seats, or move and pair them with peer partners to work together and model behavior (Askew, 1993). Computer-assisted instruction can provide the positive stimuli students need to pay attention to the content with a variety of design strategies (DuPaul, 2006). Changing the colors in various tasks benefitted students with ADD for a short time and research claims these students understand more broad directions (Fiore, 1993). Students can do well with personal and consistent schedules. Block scheduling may also work well because it is student-centered and allows more room or teacher creativity (Garrick Duhaney, 2003). It is recommended that teachers use and learn from other resources--such as the special education teachers to help make their classroom a prime place for learning.

While there are many general ideas to keep in mind when teaching, some strategies are too broad, while others are simply not effective in the general education classroom. Louden (2013) conducted research over the use and effectiveness of research-based strategies in classrooms with students with ADD. The majority of teachers stated that opportunities for physical movement and teacher positioning were effective. The study saw that shortened assignments, read alouds, extended time, frequent feedback, modified assignments, and parent-teacher communication were mostly effective strategies (Louden, 2013). Other interventions such as positive behavior intervention, ignoring inconsequential behavior, and peer-tutoring were said to be somewhat effective in helping their students with ADD. A strange finding in this particular study was that self-monitoring, computer-based instruction, modified assignments, slower pacing, and a specific agenda showed a small majority of teachers using these strategies and finding them effective, while one fourth to a third of the teachers did not use any of these strategies (Louden, 2013). The study also found that the majority of the surveyed teachers did not use audio, encourage kinesthetic activities, implement student choice, change activities often, and give little homework (Louden, 2013). Overall, we can see from this study that teachers are seeking out ways to encourage their students with ADD but the strategies that are most commonly used aren't always the ones that research shows to be the most effective.

Various strategies may be strongly effective when working with students with ADD, yet even the layout of lessons can be refined to better differentiate for students. Kemp (1995) elaborated on an instructional guideline for teaching students with ADD because simply improving attention is normally not enough to improve academics. This guideline is called T-G-I-F which stands for: Teacher-directed Instruction, Guided Practice Activities, Independent Practice Activities, and Final Measurement. In teacher-directed instruction, lessons should be fast-paced and involve student responses in order to maintain the students' attention. For guided

practice instruction, the teacher leads the students in relevant activities that allow them to practice what they just learned. Independent practice activities give students more freedom to generalize and build off what they are learning. Lastly, the final measurement is a continual assessment where the teacher can observe growth in areas that apply to the unit (Kemp, 1995). The T-G-I-F instructional layout has many positive attributes, but mostly it gives students the consistency and clarity they often need to succeed.

Students with ADD have the possibility of being greatly benefitted by legislation as well as other interventions. While ADD is not a specified category under Individuals with Disabilities Education Act (IDEA), students may still qualify for its services. Other ADD students may qualify for special education through their learning disabilities. If not, the student can often use services under Section 504 to experience equal and appropriate educational conditions. Weaver (1998) pinpointed a positive approach to helping and teaching students with ADD to be the combination of environmental management, or the classroom conditions; instructional accommodations, or how the content is taught; student-regulated strategies, also known as self-monitoring; and medical interventions. Modifications within the teaching can be made to differentiate for students through group work, seat work, and engagement. Finally, the teachers are not the only important factors in a positive educational experience for student with ADD; the entire district is key. Effective districts are shown to have: clear policies, common goals, an action plan, continual staff development, and frequent evaluation of all of the above (Weaver, 1998). Teachers, classrooms, and districts as a whole are greatly influential in the education of students and should be analyzed for their effectiveness in guiding the students they aim to serve.

One classroom layout strategy that is more researched than all the others for students with ADD is peer partners and tutoring. DuPaul (1998) studied the effectiveness of class-wide peer tutoring (CWPT) as an intervention for students with ADD. Multiple types of peer tutoring have

been investigated by various researchers including: focus, structure, and methods. This study saw that, on average, CWPT greatly improved active on-task behavior but decreased passive on-task behavior. Overall, off-task behaviors were greatly decreased while CWPT was implemented during this study. Pretest scores were unchanged by CWPT and the implementation of CWPT increased post-test scores for some of the students. The overall “success” of the testing was measured by a 10% or greater increase between the pretest and the post-test and that success depended upon the specific student. Mostly, this study showed that class-wide peer tutoring increased the amount of active on-task time, while decreasing the amount of off-task time in students with ADD (DuPaul, 1998).

The American Academy of Pediatrics says that students with ADD should be addressed with educational and behavioral strategies. Medication should never be an isolated treatment. Students can benefit from an organized environment with a clear and consistent schedule. All students, but especially those with ADD, are helped by interesting content and creative teaching styles. Peer reinforcement can be useful since it is efficient, consistent, and socially expansive. Overall, the first step to helping students with ADD/ADHD and to create adequate classroom layout, is to develop a one-on-one relationship with each individual student.

Collaboration Strategies

Students with attention deficit disorders do not only express symptoms at school. ADD is a lifelong disorder that affects every aspect of the student as well as every environment they enter. In this way, many adults are in contact with the student and are attempting to guide them in whatever way possible. This fact makes it very important for all the adults working with the student to be in communication with each other, searching for the best ways to help the student

as a team. The collaboration strategy, therefore, is the most important strategy for students with ADD, as it brings all parties together for the student's long-term success.

Communication between home and school can be essential for students with ADD as it provides consistency across all areas of their lives. It is useful for students' behavioral management to keep this consistency, as they often experience hyperactivity and distractibility at home and at school. By collaborating in this way, not only teacher goals for the students can be worked toward, but also the goals of the parents. It can be equally important to be in communication with doctors and psychiatrists, especially if the symptoms are uncertain, such as the similarities between ADD and anxiety. All of these important adults should be involved in helping the classroom teacher create an Individualized Education Program (IEP) for the student. As the student gets older, they can also be more motivated if they are involved in setting their own goals for an IEP. Teachers should share successful strategies for the student with parents since a similar strategy may help with behavior management at home as well. The consistency of the strategies helps them to be more effective with the student (Nahmias, 1995). Most of all, teachers should discuss students' behavior and possible strategies with parents in order to understand the consequences they receive at home and the cultural background some of the behaviors may be coming from (Garrick Duhaney, 2003). Some parents do not know where to turn to seek more support, while teachers can provide them with knowledge from past experiences (Askew, 1993; Nahmias, 1995). Moreover, the written communication between home and school can help to document problems and progress, as well as provide useful information doctors might need to diagnose or medicate the student (Nahmias, 1995). All these forms of communication seek to guide the teacher, inform and work alongside parents, and most of do what is best for that individual student.

Since ADD affects all environments of a student's life, it is important that adults from all those environments collaborate for the benefit of the student. This collaborative group should remain relatively the same, including a physician or someone well-educated in ADD leading the group and only a teacher changing from year-to-year. Teachers are responsible for the academic interventions used with the student in the classroom. These teachers, along with parents, spend the most time with the students and are able to see them in a variety of contexts which can provide valuable observations to the whole group. This group, as well as a school policy, can greatly support and benefit parents as they seek to help their child. However, parents should mostly be encouraged to simply love and support their child while being a major part in decision-making with the group. Doctors and psychiatrists can easily become key parts of the group if the student needs medical intervention and they should communicate with the entire group as doses and medications change (Fell, 1995). The child should also see a medical professional for an evaluation before any advances are made toward a medical intervention (Greenspan, 2006). The student themselves should continually be better educated about ADD as they develop and should become increasingly more active in the collaborative group. This is an easy way for the child to self-monitor not only their behavior, but their academics and symptoms as well. This also allows students to have more control over their own lives. ADD is a lifelong disability, so this collaborative group should aim to work together on a long-term basis to help the student as they change and develop so they can become a contributor to society.

Central Themes to Be Addressed

The research question that guided this study was: what are the effective strategies found in the literature that allow teachers to maintain the engagement of their students with attention deficit disorder? To find conclusions about this question, I used the literature to find and create

classroom engagement strategies. I used research to elaborate on the strategies that the literature has found effective. This research was then developed into a packet of detailed strategies that teachers can use to help their students with ADD and other symptoms of inattentiveness. These strategies were integrated into a literacy unit plan made up of five lesson plans. The lessons will allow teachers to see how the strategies explained in the packet might be implemented in their classroom.

Suggested Strategies for the Classroom

By using the research of the literature, I collected and developed a packet of effective classroom strategies for teachers to use with their students with ADD. This packet is included in the following section of the thesis. Each strategy in the packet includes a list of possible symptoms the strategy could address, an explanation of the strategy, and a list of any recommendations on how to manipulate the strategy to better meet the needs of individual students.

Antecedent-based Strategies
for Students with Attention Deficit Disorders
in the Classroom Setting

Functional Behavioral Assessment

(Garrick Duhaney, 2003)

Possible Symptoms:

Inappropriate behaviors at home or in the classroom

Explanation of the Strategy:

Using a chart similar to the one below, teachers and parents alike have a place to observe common behaviors of their students. A chart like this also allows one to dig deeper into why a behavior might occur as well as process the effectiveness of consequences. Within the analysis parts of the chart users are recommended to think of what else may cause a similar behavior and what the underlying feelings and assumptions might be based on the observed behaviors and consequences.

	Observation	Analysis
Antecedent	<i>What is happening before the undesired behavior(s)?</i>	<i>How are these events affecting the student(s)?</i>
Behavior	<i>What is/are the undesired behavior(s)?</i>	<i>How often does this occur? How does this affect the class/other students?</i>
Consequence	<i>How is/are the undesired behavior(s) being addressed?</i>	<i>How effective and reasonable are these consequences?</i>

Differentiations:

Older students can be prompted to take more ownership of their actions by filling out a similar chart for themselves. Teachers may also want to include a culture column for students to talk and think through other factors of an original behavior or reaction to a consequence.

Self-monitoring

(Weaver, 1998; Shimabukuro, 1999)

Possible Symptoms:

Inappropriate behaviors at home and in the classroom

Difficulty managing classwork and homework

Explanation:

In this strategy students are able to monitor their own behavior, take control of their behavior, and take consequences into their own hands. It is recommended that teachers have one-on-one conversations with the students they wish to use this strategy with to agree on appropriate and inappropriate behaviors and the consequences that will follow those behaviors. Users may also want to develop signals or words for the teacher and student to use together to quickly communicate that a behavior has been recognized or as a reminder that a consequence should be administered. Students could also monitor themselves in behaviors such as the completion of assignments or other student-specific ways they are lagging behind or being disruptive in class.

Differentiations:

Older students may be able to monitor their behaviors mentally or by using short, indicator phrases. However, most students, especially those in lower grades, may still benefit from this strategy with the help of charts or other external ways to remind or help them keep track of behaviors.

Cognitive Feedback

(Valkenburg, 2012)

Possible Symptoms:

Difficulty managing classwork and homework

Difficulty focusing on task at hand

Explanation:

All students can benefit greatly from specific and constructive feedback. Using a chart similar to the one below, teachers can assess different causes for difficulty and experiment with tasks to aid the students. The tips given in the chart are a good head start, but the “4 R’s” down the left side are the main ideas for teachers to focus on to guide them in helping their students.

	Tips	How did it go?
Recognizing	<ul style="list-style-type: none"> ● Find attention span 	
Reattributing	<ul style="list-style-type: none"> ● Make links to prior knowledge ● Chunk small bits of information together ● Manage time 	
Refocusing	<ul style="list-style-type: none"> ● Flash cards ● Graphic organizers ● Diagrams 	
Reevaluating		

Differentiations:

It is important for the teacher to make the given chart their own in this strategy. One might recognize many more factors hindering the students from reaching their full potentials in the classroom and there are many other ways to refocus students such as place markers and using sticky notes.

Academic Intervention

(DuPaul, 2012)

Possible Symptoms:

Inappropriate behaviors at home and in the classroom

Difficulty managing classwork and homework

Explanation:

Interventions are common in the teacher vocabulary for a reason--they work. Academic interventions are often written into curriculum and recommended in teacher textbooks. These common ways to help the students understand the academic material can manifest itself in many forms such as answering questions during individual work time, pulling a student aside for more help, teaching students material in small groups with centers, reteaching material, and more. A less-known fact about interventions with students is that they also prevent inappropriate behaviors. By scaffolding students using interventions the students understand more and are more likely to be on-task which decreases the amount of time available to misbehave.

Differentiations:

With such a vague strategy there is plenty of room for differentiation. It is recommended to analyze the usefulness of the specific interventions in the given curriculum, as well as using observations and relationships with individual students to discover the best interventions for each student.

Consequent-based Strategies
for Students with Attention Deficit Disorders
in the Classroom Setting

Token Reinforcement

(DuPaul, 2012; Garrick Duhaney, 2003; Reiber, 2004; Fiore, 1993)

Possible Symptoms:

Inappropriate behaviors in the classroom

Explanation:

In this strategy students receive reinforcers and verbal responses to their behavior. Common reinforcers are awards or points given or taken away based on different behaviors. Some teachers only give reinforcers while others find it useful to give and take them away. The behaviors deserving of awards should be decided beforehand by the teacher and could include anything from walking quietly in the hall to staying back to help someone clean up spilled classroom supplies. These “tokens” can then be cashed in for a pre-chosen prize at a time designated by the teacher. It is important for the teacher to remain consistent in their awarding of tokens and to designate a prize with the student to work toward.

Differentiations:

While this strategy is useful for individual students, it can also be used for entire classes. The tokens teachers want to give out can also differ with favorites being stickers and “dollars” with the teacher’s picture on them. The end prizes can differ between classes depending on the students and the time of year. Because of this, the various prizes throughout the year may be different from one “cash in” time to the next.

Contingency Contracting

(Garrick Duhaney, 2003)

Possible Symptoms:

Inappropriate behaviors in the classroom

Explanation:

Students often refrain from behaviors and/or are less likely to complain about the consequences to their behaviors if they know the consequences beforehand. In contingency contracting, the teacher and student discuss the behaviors and reinforcers that will be given based on student behavior at the beginning of the school year, or at the implementation of this strategy. From this conversation students are able to see how the consequence is fair based on the behavior which also promotes trust in the teacher. Some teachers prefer to write up the agreed upon consequences and sign the contract along with the student.

Differentiations:

This strategy can be beneficial for the entire class to allow all students to have a voice in the consequences of their behaviors and be held accountable. These rules and consequences may differ from year to year and can be influenced with the prompting of the teacher. Written contracts may be more beneficial for older students while ELL and younger students may benefit from the posting of something resembling classroom rules.

Behavior Therapy

(Fiore, 1993)

Possible Symptoms:

Inappropriate behaviors at home and in the classroom

Explanation:

One behavior strategy that can be used by teachers and parents alike is behavior therapy. This idea could be supported by a therapist if parents felt it necessary but, even so, the parents, teachers, and therapist should all use the same methods to target behavior for the most benefit. Some simple ways parents and teachers can create their own behavior therapy is through positive and negative reinforcers for the target behavior. These reinforcers would most likely include verbal and nonverbal feedback for the students and need to be very clear.

Differentiations:

Various students will respond to different reinforcers in different ways. Some may only need non-verbal cues while others may not pick up on those nonverbals. It is important for teachers and parents to discuss what is best for that specific student, as well as make sure the student knows exactly what the reinforcers and cues mean so there is no misunderstanding.

Classroom Layout Strategies
for Students with Attention Deficit Disorders
in the Classroom Setting

Tips for Classroom Setup and Environment

(Ostoits, 1999; Garrick Duhaney, 2003; Askew, 1993; DuPaul, 2006; Louden, 2013; Weaver, 1998; Reiber, 2004)

- Utilize small groups
- Use visual aids or kinesthetic manipulatives.
- Allow students to read to themselves
- Maintain structure and consistency
- Have students take notes and write down what they are thinking
- Story mapping and retelling
- Computer-assisted instruction
- Block scheduling
- Effective districts
- Build one-on-one relationships

T-G-I-F

(Kemp, 1995)

Possible Symptoms:

Inappropriate behaviors at home and in the classroom

Difficulty managing classwork and homework

Difficulty focusing on task at hand

Explanation:

Instead of “thank goodness it’s Friday” this T-G-I-F stands for: Teacher-directed Instruction, Guided Practice Activities, Independent Practice Activities, and Final Measurement. Teacher-directed instruction prompts teachers to have fast-paced and student-centered lessons. Guided practice instruction as how teachers lead students in activities to practice what they have learned. Independent practice activities give students more ownership so they can build deeper understanding and build more knowledge. The final measurement is a continual assessment for teachers to observe growth.

Differentiations:

Teachers can change up ideas within this format and they can decide based on their specific students how long each of the parts of the lessons should be, but it is highly recommended that teachers follow this format. This way students change up their activities to stay on task and engaged as well as digging deeper into a topic.

Peer Partners

(Askew, 1993; DuPaul, 1998; Reiber, 2004)

Possible Symptoms:

Inappropriate behaviors at home and in the classroom

Difficulty managing classwork and homework

Difficulty focusing on task at hand

Explanation:

Having students pair up with each other creates many positives within the classroom. Students feel more obligated to behave when people besides the teacher are holding them accountable for their behavior. After working together and helping each other with various academic activities the students also build a personal relationship which creates a safer and more positive classroom environment that welcomes learning. Teachers cannot catch everything their students do or need so having one or a few students responsible for each other can allow students to be helped quicker and lessons do not need to be paused to discipline students.

Differentiations:

With a lot of research on this strategy teachers have more freedom to make this strategy their own and try out different things. Students can be paired in partners or clusters for parts of the school day or the entire day. Teachers could choose to change up the partners every once in awhile or keep them the same for long periods of time. This can be especially helpful for students who are learning English as well.

Collaboration Strategies
for Students with Attention Deficit Disorders
in the Classroom Setting

Communication between Home and School

(Nahmias, 1995; Garrick Duhaney, 2003; Askew, 1993)

Possible Symptoms:

Inappropriate behaviors at home and in the classroom

Difficulty managing classwork and homework

Difficulty focusing on task at hand

Explanation:

Solid communication between parents and teachers is a great practice to have for the benefit of all students, but it is especially important for students with attention deficit disorders. Teachers should discuss students' behavior with parents in order to understand the consequences they receive at home and where some of the behaviors may be coming from. This way parents can support teachers in the strategies they are using in the classroom and the goals of both the parents and the teachers can be worked toward. Most importantly, all strategies and potential progress should be documented for the use of future teacher and doctors who might need to diagnose or medicate the student.

Differentiations:

Everyone has a different preference on communication styles so it is important for teachers to be flexible with the communication types parents have available to them and which ones they prefer to use. Some parents may prefer all meetings to be face-to-face while others might respond better to emails or other forms of communication. How often teachers should meet with parents also depends on the family.

Collaborative Group

(Fell, 1995; Greenspan, 2006)

Possible Symptoms:

Inappropriate behaviors at home and in the classroom

Difficulty managing classwork and homework

Difficulty focusing on task at hand

Explanation:

Similar to an IEP meeting, a collaborative group can be made of teachers, parents, and other professionals in order to discuss what is best for a specific student. Within this group teachers are responsible for the interventions used with the student in the classroom. Parents are encouraged to love and support their child and, within the group, be a major part in decision-making. Depending on the student doctors and psychiatrists can be involved in the group for conversations about any medical intervention and communicating doses and medication change. For the greatest benefit the group should remain similar from year-to-year with only the teacher changing as the student increases in grade-level.

Differentiations:

The collaborative group can be manipulated in whatever way will be most beneficial to the individual student. General education and/or special education teachers could be included. Any professionals the student may be working with including therapists and counselors could be included. As the child gets older, it may also be beneficial to include them in this group as well.

Sample Unit Plan for Integrating Strategies into the Classroom

From the literature, I have developed a packet of effective classroom strategies for teachers to use. The strategies within the packet were then integrated into five lesson plans that work together as one week-long unit plan for kindergarten in the subject of writing. This unit plan includes sample objectives based on Iowa Core State Standards and content along with teacher tips to recommend and point out how some strategies from the packet were implemented and incorporated into each of the lessons.

My First Story! Five day writing unit for Kindergarten

(The superkids reading program, 2017)

Unit Standards Based on the Iowa Core:

- W.K.8: With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
- L.K.2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. (Capitalize the first word in a sentence and the pronoun I. Recognize and name end punctuation. Write a letter or letters for most consonant and short-vowel sounds (phonemes). Spell simple words phonetically, drawing on knowledge of sound-letter relationships.)
- SL.K.4: Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
- SL.K.5: Add drawings or other visual displays to descriptions as desired to provide additional detail.

Unit Learning Objectives:

- The students will be able to form a list of ideas by recalling information from experiences.
- The students will be able to plan a writing piece using descriptions of what they are familiar with.
- The students will be able to write sentences to tell a story and demonstrate their understand of the conventions of standard English.
- The students will be able to add drawings to their stories to provide additional detail.

Pre-assessment data:

Before this unit the students know how to decompose words into sounds and how to blend sounds together into words. They know the general sounds of all the letters in the alphabet and how to write those letters in lowercase and uppercase. They also have knowledge of capital letters beginning sentences and a form of punctuation ending sentences.

Materials:

- Large paper to write and display shared story
- Markers (white board and/or regular)
- Whiteboard to display teacher modeling
- Book covers for modeling and each student
- Pencils
- Other coloring utensils
- Book pages for modeling and two or more for each student

Lesson One: Write a shared story

Instruction Plan:

- Bring the students together at the carpet
- Brainstorm ideas of things the class has done together they want to write about
- Write this list on the whiteboard or a large, poster-size sticky note
- Choose a topic to write about from the list
- As a class, come up with two events you want to be in the story with the topic you chose
- Create a title to the story and write it at the top of a new large, poster-size sticky note
- Have the students guide you in blending sounds together to make the words in your title
- Ask the students to read the title together
- Have the students recall the two events you wanted in the story
- With student guidance, write the first event in the story on the sticky note
- Ask the students to read the sentence together
- With student help, write the second event in the story on the sticky note
- Ask for volunteers to read each part of your story for the class
- Hang the story in the classroom to refer to in later lessons
- Call on students with good body basics to return to their seats and pull out a pencil

Keeping the writing block of your schedule at the same time everyday along with other forms of consistency can greatly benefit students with ADD.

Class-wide tokens can also be given to reinforce positive behaviors in various classroom settings. These tokens should be followed by a pre-determined reward.

Lesson Two: Teach planning a story

Instruction Plan:

- Bring the students together at the carpet
- Review the shared story you wrote from the lesson before
- Note the first thing you did as a class was brainstorm ideas and choose a topic
- Model coming up with a topic for your own story
- Remind students they want to have at least two events
in their story
- Give students time to brainstorm their own ideas quietly
to themselves
- If you plan on sharing some of their work online or in newsletters, tell the students to be
thinking about if they want to volunteer their work
- Have students share their topics and at least two events
with a partner
- Ask a few volunteers to share with the entire class
- Call on students with good body basics to return to their seats

The opportunity for students with ADD to talk, read or write to themselves encourages them to focus and stay on task during instruction and individual work time.

The use of “elbow partners” or small groups can give students more confidence in working through what they want to say along with the accountability of responding to questions more often.

Lesson Three: Teach creating a book cover

Instruction Plan:

- Bring the students together at the carpet
- Review your modeled topic and events from the day before
- Model choosing a title and creating a book cover using the sheet the students will be using, or an enlarged version
- Have students think quietly to themselves about a title that goes with their own topic and events
- Call on students with good body basics to get a cover page from you, return to their seats, and pull out a pencil
- Scaffold the students in writing their title if needed
- Once they have finished writing their title, provide students with coloring utensils to illustrate their book covers
- When students are finished, ask them to read their title to their partner and explain their illustration
- Ask the students to place their finished book covers in the turn-in tray
- While they are waiting for other students to finish the students can read short stories and note things they might want to include in their own stories
- If the students cannot read independently have them make up their own story based in the illustrations in a short story

Academic intervention with students, especially those with ADD, can benefit them by steering them from frustration and keeping them on-task.

Lesson Four: Teach writing an event in a story

Instruction Plan:

- Bring the students together at the carpet
- Review the book cover you modeled from the day before
- Model visualizing the first event of your story and write a sentence about it
- Model illustrating your sentence and visualization
- Remind students to only write about one event today
- Have students take time to close their eyes and visualize the first event in their stories
- Give the students time to share with their partner what they visualized and the sentence they want to go along with it
- Call on students with good body basics to get their first page from you, return to their seats, and pull out a pencil
- Ask the students to write the sentence that they shared with their partner
- Scaffold the students in writing their sentences if needed
- Provide students with coloring utensils to illustrate their sentences
- When students are finished, ask them to read their sentence to their partner and explain their illustration
- Ask the students to place their finished book pages in the turn-in tray
- While the students are waiting for other to finish, give them the option of reading short stories quietly to themselves or playing a sight word game individually

“Elbow partners” can also be peer partners who become responsible with holding each other accountable to the expectations of work time and the classroom as a whole.

Lesson Five: Guide writing an event in a story

Instruction Plan:

- Bring the students' attention to your modeled story
- Review everything you have modeled with your own story
- Remind students of how you visualized, wrote, then drew about your event
- Return the students' first events to remind them of what they have already wrote
- Give students time to visualize their second event
- Have the students share with their partner what they visualized and what sentence they want to write to go along with it
- Provide the students with a second page for their stories
- Have students write the sentence they shared with their partner about what they visualized
- Give students coloring utensils to illustrate what they wrote
- If students finish, allow them to write and draw about any other events they want to add to their story
- Note that every drawing must have a sentence to go with it in their stories
- Collect all the students' story pages; later on, staple their stories together
- Select volunteers to take pictures of their stories and share it on your teacher blog and/or in class newsletters to show parents/guardians

Utilizing teacher blogs and/or regular class newsletters are a great way to maintain communication between home and school. Keep your class in mind as not all of them could have access to the internet or speak English at home.

Conclusion

Classroom engagement is a constant problem for many elementary educators and most are seeing it only get worse. In a time of decreased recess and fine arts, standardized testing, and quick diagnoses, it can seem simple to put students on medication and hope that will be the easy answer. But are there strategies out there, research-based strategies, that work just as well or even better to keep our students focused during the school day? This work has gathered recent research on engagement strategies to compile ways that teachers, and parents, can encourage students to attend to classroom material. The educational argument over the necessity of various curricula being pushed on students will always be constant. What we know now is that a large and steadily increasing percent of students have been diagnosed with attention deficit disorders alone which is drastically changing classrooms and the way teachers perform their jobs, and rightfully so. By focusing on strategies to help these students with specific disorders that impede on their attention, teachers are in turn creating classrooms that are more fun to be in and more interesting for all students.

This research is nowhere near exhaustive and more research is still needed to show significant results for more strategies for all ages. The articles used were only from the past thirty years and looking mostly into students in primarily elementary grades, even though others were hinted at. This brings up the question, how do these strategies affect students in middle school, high school, or even college? As an undergraduate pre-service teacher certain resources were also unavailable for review which further limited the resources for this work. Even with all of the research that was done, simple and well-known strategies such as brain breaks and the use of technology in the classroom were not found in the literature for this work. Readers are recommended to do their own research in addition to this collection. However, the literature was poured over and very carefully selected. The fact that the research mentioned lines up and adds

onto each other shows the quality of the ideas presented on top of the peer reviewed journals much of the literature is published in.

In deciding how to create a work that would most benefit the lives of classroom teachers, it was decided to develop a packet of strategies that are formed and tested through high-quality research. Each strategy includes examples of possible symptoms the strategy may improve, an explanation of said strategy, and more common differentiation examples. Since each strategy included is only a single page, other ideas that could potentially be included in the strategies have been left out based on necessity to the strategy. Readers are asked to manipulate the strategies given to meet their specific students' needs. Some strategies may improve more than the symptoms listed and not all symptoms will be improved for all students. These strategies may also need to be differentiated in substantial ways for some students, Therefore, readers are welcomed and encouraged to use the packet as a starting point in creating their own strategies that are specifically catered to the needs and preferences of their individual students.

While there is a lot of positive research on token reinforcement strategies and peer partners within the classroom, it is key to look at the whole student in order to help guide them through education and life. This idea leads to the more holistic approaches of the collaboration strategies. All students can be benefitted in some way by teachers being in constant and specific communication with parents and guardians about what is happening in the classroom and at home. Students can also have a boost in self-esteem and have a greater level of autonomy as they become more influential in the collaborative group that works as a unit to find what is best for the student in- and outside of the IEP meetings. These collaborative strategies help the student to see the force behind them, working for them and to keep expectations consistent throughout all the settings the student experiences.

As the packet of strategies was developed, the idea of creating an example of how the strategies might be implemented into lesson plans became more necessary. The strategies within this work do not seem difficult, but it is important to understand that they have to be incorporated into the everyday life of the student. While creating the sample unit plan “My First Story” for a kindergarten classroom, a unit from the Superkids curriculum was re-shaped to incorporate the TGIF strategy (Zaner-Bloser, 2019). Since some districts require the use of certain curricula, this changing and adding of lesson plans is very common. This TGIF strategy can be seen within the lessons as it starts Teacher-directed with modeling, followed by Guided practice where the students tried out what was modeled with help. Next, the students experienced Independent practice of creating a second event in their stories with the safety of a teacher there to scaffold them if need. Finally the teacher collected the students’ work for the Final measurement of the TGIF strategy. The lessons themselves are very simple, but the teacher tips within them can easily be transferred to any lesson.

As readers examine and test the strategies laid out in the packet, the given sample unit plan is to guide teachers as they seek to incorporate the strategies into their own lesson plans. The teacher tips within this sample unit do not include all of the strategies listed in the packet. Readers are recommended to find ways to include any strategy they decide may be useful in their own classrooms and lessons as well as to share their successes with others. The ultimate desire for this thesis is that others may become as well educated as I have on the ways to maintain student engagement so that we might continue to create better learning environments for all students through the research into the struggles of the students with attention deficit disorders.

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