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A report of action research projects by teacher education candidates in the School of Education at Baylor University in collaboration with clinical instructors, mentor teachers, and Baylor faculty on PDS campuses in Waco ISD and Midway ISD as well as at partner schools throughout the area.

A Research Symposium

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Staying Focused During Independent Work

Primary Researchers
Andrew Edward Amor, Intern, Baylor University
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Rationale/Introduction

An active and engaged classroom is a great learning environment for most students as they are working independently; however, a classroom "can also restrict learning by being too visually appealing and overstimulating," causing students to lose focus with too much sensory detail (Blyth, 90). In the spring semester of my Intern year, there were a few of our second graders who would constantly lose their concentration during independent reading activities due to being distracted by their surroundings. Kuhaneck and Kelleher (2015) state that "an environment that does not meet their sensory needs may magnify their difficulties," resulting in students getting behind in their work and ultimately losing concentration.

Question/Wondering

How effectively could students focus if there were tools and strategies implemented to help them concentrate during their independent work?

Methodology/Results

Participants in this study were from a middle SES neighborhood and included three boys and three girls in a second grade classroom. Four students were Caucasian, one was African American, and one was Hispanic. Data was collected through interviews, weekly engagement samples, and surveys, as the students used tools provided for them. These tools included privacy dividers, headphones, and sand timers. Over the course of four weeks students were assessed on their engagement at the beginning and end of the week in their independent reading time. Each week students were introduced to a new tool. The first week students had an initial engagement average of 53%. As I implemented each tool, their engagement rose to an average of 85.8%. The final result was a 26.8% engagement increase of all the students. Implementing these tools was an effective way to help students concentrate during their independent work time.

Implications/Recommendations

The results of this research suggest that students concentrate better with tools incorporated into their independent time. This research also supports other studies that say too much stimuli causes the students to lose focus. It is recommended to include tools in the classroom to help students who are over-stimulated. Strengths of this research allow the teacher to specifically address individual student's needs and what tools work best for him or her; however, weaknesses include limited class layout and a small group. Future research could be to incorporate this study with the entire class and use different tools.

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Kuhaneck M., and Kelleher, J. "Development of the Classroom Sensory Environment Assessment (CSEA). *The American Journal of Occupational Therapy*, vol. 69, no. 6, 2015, pp. 1-9. ProQuest, http://ezproxy.baylor.edu/login?url=https://search.proquest.com/docview/1734464937?accountid=7014.

Messy Hands

Primary Researchers
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Rationale/Introduction

Research was conducted in a Preschool Program for Children with Disabilities on a student who exhibited an arousal with certain textures. The student would escape from an activity if it involved using a liquid based material that can cause his hands to become messy. The student escaped from the task by refusing or expressing that he could not complete the task. When the student`s hands became messy when touching a certain texture, he began to over-react from the sensory stimulus by showing behavior such as crying, defiant, or rushing to go wash his hands. This behavior required an intervention to decrease intensity of emotions when engaging into sensory experiences. According to Green, and Ben-Sasson (2010), "exposure therapy might influence sensory over responsivity to the following mechanism: exposure to fearful objects might provide an opportunity for children to become more aware of the contingencies for when aversive events occur and less likely to experience generalized context conditioning and behavioral avoidance".

Question/Wondering

How will the implementation of exposure therapy paired with a visual routine, verbal praise, and edible reinforcement affect the student`s motivation to engage in a messy sensory activity? Based on the assessment, the function of the behavior was determined to be an escape/avoidance of sensory stimulation. The cause of this behavior is believed to be due to his anxiety causing him to overreact about sensory stimulation. Exposure therapy may increase his engagement with sensory play once the intervention is implemented.

Methodology/Results

The Behavior Intervention Plan (BIP) that was implemented to decrease the student`s undesired behavior was based on his characteristics. The student was a Caucasian male that was 3 years old. To gain information for designing a BIP, I first collected 15 minutes of observations for three days to gather baseline data on the behavior. I observed using dry and wet textures. Second, I interviewed the student`s mother and PPCD teacher regarding his behavior. This informed me if the behavior was occurring different times of the day or if they had observed the same behavior. Third, I conducted Applied Behavior Analysis observation using Antecedent, Behavior, Consequence (ABC) data using wet textures only. The ABC data that was collected on three different days allowed me to identify the function of the behavior, which was defined as an escape/avoidance of sensory stimulation. The self-stimulations that were causing the student to escape, are liquid based textures that would leave his hands dirty such as glue, paint, slime, lotion or shaving crème. After much research conducted on this behavior, I decided to implement exposure therapy to decrease his anxiety that caused him to have a sensory over responsivity to the texture. I exposed the student to different textures by creating a visual schedule. Due to the student`s age and characteristics, the visual schedule presented what he would be doing Monday - Thursday and included a visual picture of the type of textures. Creating a visual schedule for the student was essential because it helped him process and store the information. Having a strict routine schedule of what type of texture, the student was expected to be explore, may have lowered his anxiety by allowing him to be prepared for the expectation. I also provided the student with visual transition warnings 2 minutes before the sensory activity. On Mondays the student did a messy activity with shaving cream. On Tuesdays he finger-painted, Wednesdays he got messy with glue, and Thursdays he engaged in messy slime. Each day he was required to put a certain number of fingers in the texture for at least 10-15 minutes or until the task was completed. According to the preliminary results the student had a baseline of 0 fingers engaging in the textures. When intervention was implemented, the student made progress with certain textures. He is currently using all 10 fingers at 100% to engage in shaving cream and slime. He enjoys playing with these textures now and does not escape the activity. For finger paint he uses 10 fingers at 75%. Lastly, the student engages in glue activities using at least 6 fingers at 25%. The student does the required expectation with the two types of textures but tries to escape the work by completing the task slow within the 10 minutes. When this is observed, the student becomes more engaged when he is offered to complete several required tasks with the texture instead of engaging in the activity for a certain amount of time.

Implications/Recommendations

Having a visual routine and transition warnings will help lower the student's anxiety. I recommend future teachers in working with messy materials, provide the student with visual warnings prior to the day and on the current day leading up to the messy activity. It is important to explain to the student the goal and the required expectations, so he is aware he must work toward the goal.

Reference(s)

Green, S.A., & Ben Sasson, A (2010) *Anxiety disorders and sensory over-responsivity in children with Autism Spectrum Disorders: Is there causal relationship?* Journal of Autism and Developmental Disorders.

Decreasing Off-Task Behavior Using a Token Economy

Primary Researchers
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Rationale/Introduction

I am an intern in the academic development classroom where there are seven kindergarten students and six first grade students. The target behavior I decided to focus on is off-task behavior with one student during writing/alphabet review, which is a 15-20 minute period in the morning. Off-task behavior with this student looked like: getting out of seat, talking out of turn, and inappropriate peer interactions. Based on the baseline data taken, the student was off-task an average of 13 times during a 15-minute period. It was important to address this behavior because it affects how the student is learning and it affects the other students in the classroom as well. Having challenging behaviors in a school setting can have a negative impact on a numerous factor related to the academic and social climate of the classroom (Chafouleas, Goddard, Johnson, Maggin, 2011).

Question/Wondering

From the results of the data taken during observations, I believe the function of the behavior is an escape from demands placed on the student and from non-preferred tasks. Knowing this, I wondered what the effects are of a token economy on off-task behaviors in the classroom?

Methodology/Results

The student I worked with was a five-year-old white male in kindergarten. Data was taken over an eight-week period, once a week on Thursday. First, I took baseline data over three 15-20 minute observations. After taking baseline data, it was evident that the student had the highest frequency of off-task behaviors during the classroom's morning writing/alphabet review, which is from 9:25-9:45. During this time, the student showed off-task behaviors during whole group instruction and independent table work. After taking baseline data on the student, I interviewed the student's main classroom teacher, his specials teachers, and the student's parents. Based on the baseline data and interviews with the student's teachers, I reached the conclusion that the student's function for his off-task behavior is an escape from non-preferred tasks and attention. Based on this information, the intervention I chose to implement for my student is a token economy. During the 25 minutes of writing/alphabet review, the student was shown several choices for what he would like to do. The four choices chosen were highly preferred items that were noted by the classroom teacher and through observation of the student. These four items were stickers, a stamp, a high five, or a hug. The student must be on-task to earn the tokens. On-task behaviors for this student looked like: a quiet voice, sitting in seat, having eyes on teacher, appropriate peer interactions, and complete work. Each time I saw the student on-task, the student received a token. Once the student earned 5 tokens, he exchanged those tokens for his reward. For this token economy, the student was reinforced immediately after earning 5 tokens and given his chosen reward. He was able to earn rewards as many times as he was able to earn those 5 tokens within that time frame.

Implications/Recommendations

The results of my research were that while the token economy did help decrease off-task behavior with this student, he has not currently reached the goal created for him. His lowest frequency was 6 instances of off-task behavior during alphabet review and writing, which occurred towards the end of the intervention. Seeing that the token economy had helped decrease the student's off-task behavior overall, I would say that a token economy as an intervention is successful when the student is highly motivated by certain rewards. I feel that the strengths of my study is that there was a noticeable decrease in off-task behavior which means the token economy did work for its intended purpose with the student. The student has an increase in motivation to do independent work at his table and had been more engaged during whole group instruction, which is something that previously was not seen with this student. I feel that the study may need a more practical goal based on the student's characteristics. I felt that less than 5 was a good place to start with the student, however I felt that maybe it would have been more practical to start with a higher number of instances, based on the student's characteristics. For this student, I would like to continue seeing the token economy incorporated throughout the student's day to increase on-task behavior as

needed. I have found that the student was highly motivated by car stickers, so having that as a motivator and a reward for the token economy is something I would recommend to future teachers that work with this student.

Reference(s)

Chafouleas, S. M., Goddard, K.M., Johnson, A.H., & Maggin D.M. (2011). A systematic evaluation of token economies as a classroom management tool for students with challenging behavior. *Journal of School Psychology*, 49, 529-554.https://doi.org/10.1016/j.jsp.2011.05.001

What Genre of Music Helps with Student Engagement?

Primary Researchers
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Rationale/Introduction

The use of integrating music in the classroom has been researched extensively, especially the use of classical music. Su, Kao, Hsu, Pan, Cheng, and Huang's research shows how playing Mozart while reading can be beneficial to students reading rates and performance (2017). Darrow's research shows that integrating music into the classroom improves literacy and helps with attention and memory as well (2008). However, there is little research on how popular genres of music can help engagement. My research looks at four different lyricless genres of music (rock, country, pop, hip hop) and how these genres affect students' engagement while reading.

Question/Wondering

What genre of music (without lyrics) is best to play during silent reading or independent study to help students stay focused and engaged?

Methodology/Results

The study was conducted in an eighth-grade remedial class. Students in this class did not meet state standards on the STARR test, and therefore are given two consecutive periods of English instead of one. The first period is always used for independent reading and response. To track students' engagement while they read, I used the candidate engagement form. The form is to track the engagement of six students in the class for ten minutes. On each day of the experiment, I selected six students to watch and track their engagement while reading. Every thirty seconds for ten minutes I would check each student I selected to watch for the day to see if they were on or off task by writing down either a check (on task) or a minus (off task). Students who were doing anything other than reading silently I counted as off task. I then counted the number of checks and minuses for each student to give me the percentage of how on task they were while reading. I then combined the students' percentages to find out overall how well the class was engaged in their reading during the genre of music. I tested each genre of music twice. First, I played classical music in the experiment to compare the students' reading engagement with other genres of music that were playing. When classical music was played, students were on task 69.2 percent of the tested period. (The other genres played while the students read were pop, rock, country, and hip hop) Students were on task reading during pop music 71.6 percent of the tested period, 47.9 percent on task of the tested period during rock music, 47.1 percent on task of the tested period during country music, and 83.8 percent on task during hip hop music.

Implications/Recommendations

The final results show that the music genres pop and hip hop kept students more engaged while reading than classical music. One issue that arose during the experiment was that the results were also dependent on the students' attitudes during the day. Students who came to class already in a bad mood performed significantly lower no matter the music played. Also, students who have a higher attention span performed well no matter the musical genre that was played. Results recorded right after the students began to read also resulted in skewed data because students did not have time to settle down yet or focus on the task at hand. To gather data in the future, I recommend waiting to let the students settle down into class before playing music and allowing them to begin reading. I believe that the experiment would be able to produce more accurate results if there were more data taken over an extended time. Better results also could be obtained from a more extensive selection of students instead of limiting the data to one set of students in a class period.

Reference(s)

Su,Y.N., Kao, C.C., Hsu, C.C., Pan, L.C., Cheng, S.C., & Huang, Y.M. (2017). How does Mozart's music affect children's reading? The evidence from learning anxiety and reading rates with e-books. *Educational Technology & Society*, *20*(2), 101+. Retrieved from http://link.galegroup.com.ezproxy.baylor.edu/apps/doc/A500823923/AONE?u=txshr

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Problems are the Problem

Primary Researchers
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Rationale/Introduction

While working as an intern in Australia, I observed high levels of problem-solving skills, independence, and interpersonal skills within different classrooms in Queensland. In America, I found that my 1st grade students often whined, got distracted, or got very worked up if there was a problem throughout the day, whether it was perceived or a real issue, and they would often turn to my mentor teacher and I to solve these problems for them. If students are able to understand and fully learn these interpersonal skills, I feel that their learning will be positively affected, as they will be less distracted, overwhelmed, or confused if a problem does present itself.

Question/Wondering

In what ways might Problem Solving Partners help 1st grade students develop problem solving independence?

Methodology/Results

My class at Spring Valley had 19 students: 10 girls and 9 boys ranging in socioeconomic status, with a majority being middle class. Student academic and behavior needs varied greatly, as well, as we had students who received behavior and academic support, students who attended speech, students who qualified for Gifted and Talented programs, and students who were English Learners. Because our class required lots of attention, both academically and behaviorally, I implemented a new way for students to be less distracted by minor problems or tattles throughout the day. Rather than giving students real life partners, I introduced my class to a stuffed bear in the back of the room, Judge Bear, who they could use as a resource to be their Problem-Solving Partner. When there were problems, students felt the need to tattle, they were upset, or they just felt the need to say something while someone else is talking, students could write the situation onto a note or fill out a Google Form on their iPads. Judge Bear and I read through the problems at the end of the day and were able to see where a majority of our issues came from or what students felt were major problems that they need to tell someone about. Judge Bear did not typically conference with students unless they had not moved on from their problem, but if there was a pattern or consistency within the notes written, I quickly talked to the student who either wrote the problems or the student it was written about.

Before Judge Bear, I collected evidence of tattling, whining, and reliance on teachers to solve student problems by tallying every time a student tattled, classifying problems as "perceived" or "actual" in terms of seriousness of an issue, and tracked interruptions on the carpet or in the hallway. Data showed that over the course of a week, all students tattled at least one to two times a day, whether to help or hurt a situation. Findings also showed that almost every time, a problem was perceived or understood to be more serious by the student than it actually was, because major problems included: someone sitting in the wrong spot, tattling on someone on the other side of the room, not being chosen for an activity, being concerned with someone else's actions, or getting cut or distracted in line. Data showed that 19/19 students tattled over the course of 2 days and interruptions to the teacher and other students were high. After Judge Bear, data showed that students were more aware of their urge to tattle or interrupt (creating problems), they recognized when problems were big or small, and tattling levels decreased. Data showed that 2/19 students tattled rather than all 19 when Judge Bear was introduced, and with the implementation of a new behavior method that encouraged students to refer to Judge Bear rather than the alternative, the effects were positive.

Implications/Recommendations

With the decrease in tattles and the recognition of problems, our class atmosphere and attitudes were overall more positive, and students were slower to blame others and rely on teachers to solve issues. After doing this, I learned that it is important for students to feel that their voices are heard and to know that their feelings are validated. By having students self-reflect, there were fewer opportunities for them to vocalize their feelings or problems. If I were to do this again, I would have a spoken component where students would be able to actually vocalize their problems rather than focusing on writing down their responses and would dedicate a debrief time where students could discuss their problems, how to solve them, etc.

Reference(s)

eClassroom News. (2014). 5 Steps to a Problem Solving Classroom Culture. Retrieved from
        https://globaldigitalcitizen.org/5-steps-to-a-problem-solving-classroom-culture

The Key to Confidence and Good Behavior

Primary Researchers
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Rationale/Introduction

I believe that every student responds differently to a teacher's specific behavior system that is utilized in a classroom. While some students may thrive under a general behavior system used for the whole class, others require more attention and individualization. In the kindergarten class that I intern in, one specific child has stood out to me as a student who would benefit from an individualized approach to behavior management. First, I noticed that he frequently makes comments that reflect low self-confidence. When starting an assignment, he says that he won't be able to do it because he either doesn't understand the material or he is not good at the subject. When working in groups or in social settings like recess and lunch, he makes comments about not having friends or people in the class not liking him. I have noticed that when he doesn't feel confident, whether it be academically or socially, he is more likely to act out in behaviors that will get him attention- despite the fact that this is normally negative attention. I want to test an individualized behavior management system with him where I incorporate one-on-one mini meetings in the morning and afternoon that will be used to establish specific behavior goals and allow time for self-reflection and feedback. I also want to see whether or not providing incentives in the form of a sticker chart and/or note home to parents will improve his behavior and ultimately, provide him with enough positive attention to increase his confidence.

Question/Wondering

Will behavior and confidence improve in my kindergarten student if he receives specific and individualized behavior goals and one-on-one time to self-reflect and receive feedback?

Methodology/Results

This study was conducted over the course of four weeks. I used the first week to gather initial data on the student I would be working with. In order to be able to analyze results after my research was complete, it was important to make sure I had data that showed what my student's behavior and confidence was like before trying something new. During this week, I took detailed notes any time my student said something that showed low self-confidence or used poor behavior as a method to receive attention. I also create a data chart that I used to track how he had done behaviorally in 30-minute increments. Without letting him know that I was doing this, I gave him a + or – every 30 minutes based on the way he had acted in that time frame. From this initial week of gathering pre-data, I discovered that his behavior usually faltered when he was working on something individually at his table (during Writer's Workshop, guided reading, etc.). I believe this was a result of him feeling like other students were receiving more attention from myself or one of the other teachers in the classroom. Perhaps being in such close proximity to other students while they received direct attention and praise led him to feel that he wasn't receiving the same affirmation for his work. Through my anecdotal notes, I also noticed that his confidence usually was low during times like recess or lunch, when students were able to make decisions about who they wanted to play with or sit with. In my first week of trying out a new behavior system with him, I implemented a 5-minute mini-meeting at the beginning and end of each day. Each morning, I would pull him outside during announcements and ask him to establish a goal for the day. I would also provide with him any necessary encouragement or affirmation to achieve that goal. Throughout the day, I would closely monitor his behavior, noting specifically how he was or was not meeting his goal. At the end of the day, I would pull him out of class again for another mini-meeting. I would allow him time to self-reflect, asking him to share how he felt he did or did not meet his goal for that day. I would them provide him with feedback, making sure to encourage him for times that I saw him follow expectations or show self-confidence in his work and in himself. Finally, I would decide with him whether or not he should get a star sticker for that day. If he received 3 or more, star stickers in one week, he would receive a note home explaining his positive behavior and a small toy from the treasure box. After gathering data for 3 weeks, I was able to determine that 1-on-1 meeting time allowed him to not only feel more seen and affirmed in the classroom, but also gave him something to focus on and work towards each day with the goals that he set. In my final week of gathering data, I used the same chart that I had used in the first week. I gave him a + or – for every 30-minute increment, tracking his behavior. Similarly, I

took note of times when he expressed low self-confidence. At the end of my research, his behavior chart showed significantly more + signs and I noted many more instances of expressing high confidence rather than low confidence.

Implications/Recommendations

While this study was completed in a short time frame, I was able to recognize the importance of establishing an individualized behavior system for students who need more direct attention from a teacher. Especially in lower grades, I found that my student really thrived when he had something that he could call his own. Being able to have an individual goal to work towards each day allowed him to not only feel more successful at the end of each day when he met his goal, but also allowed him to receive the attention and feedback he needed from an adult. As a future teacher, I will be sure to implement individualized behavior plans for students who I feel need it.

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Wiggle Your Way to the Top

Primary Researchers
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Rationale/Introduction

In my classroom, there are several students who struggle to stay focused throughout the day. Students who struggle to remain focus tend to fidget, get off task, and distract themselves and others. These students need some way to be able to move around and wiggle without causing a distraction. After a little research I discovered that wiggle seats are a great way to help students who lack the ability to focus. "Wiggle seats are **removable and transportable seat cushions** that work to improve posture while also absorbing fidgeting and engaging the stomach and core muscles. They provide a sort of sensory stimulation for the child, through both the slight bounciness and the texture of the seat itself" (How to Reduce the Effects of ADHD by Using a Wiggle Seat, 2016). They are small, inflatable, rubber disks that fit right in the seat of a desk, are easily transportable, and quiet. Studies have shown that the movement and stimulation created when using a wiggle seat positively affects the brain's ability to focus and concentrate (Littman, 2016). My hope is that the use of the wiggle seats will increase student engagement, specifically during mathematic instruction and independent practice.

Question/Wondering

In what ways will the use of wiggle seats affect the engagement of students who struggle to focus during whole group and independent math instruction?

Methodology/Results

For this project, I studied three, fourth grade students who have consistently struggled to focus in class. Student One is a low SES, African American male, who is not diagnosed with any attention disorder, but whose behavior consistently indicates a lack of focus. Student Two is a low SES, African American male who has been diagnosed with an attention disorder but is unmedicated. Student Three is a Caucasian female, who has not been diagnosed with an attention deficit disorder, but consistently demonstrates behavior that indicates a lack of focus. In order to conduct my study, I began by taking six engagement samples for each my students, three during whole group math instruction and three during independent math work. I averaged the percentage of their engagement and recorded these numbers. Prior to the wiggle seats, Student One had an average engagement level of 80% during whole group instruction and 53% during independent work. Student Two had an average engagement level of 75% during whole group instruction and 41% during independent work, and Student Three had an average engagement of 85% during whole group instruction and 70% during independent work. These samples showed a lack of focus with room for improvement. I introduced the wiggle seats to the students and allowed some time for the students to get used to the seats. I then took six additional engagement samples for each student, three during whole group math instruction and three during independent work. After introducing the wiggle seats, Student One had an average engagement level of 90% during whole group instruction and 75% during independent work, Student Two had an average engagement level of 85% during whole group instruction and 75% during independent work, and Student Three had an average engagement of 95% during whole group instruction and 95% during independent work. Based on this data, I found that wiggle seats significantly increased the engagement of students who struggle to concentrate and focus. Students who used the wiggle seats left their seats less frequently, focused more in class, and were less distracting. These samples supported research that showed that students who used these seats showed an increase in their engagement levels. I believe that these wiggle seats are extremely beneficial in helping students focus and cause less distractions in class.

Implications/Recommendations

After studying these wiggle seats, I will be using these in my classroom frequently. I will use these seats with my students who struggle to stay engaged in class, cause frequent distractions, and lack focus throughout math lessons. One of the greatest strengths from this study was that I could really spend a significant portion of time focusing on students who already struggled to stay focused and in their seats. One of the weaknesses was that I did not have the

time or the resources to see how these wiggle seats would affect students who do not struggle to remain focused in class. I am curious to see if they would have such a significant impact on those students as well.

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Male vs. Female Engagement During Competitive Challenges

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Rationale/Introduction

My mentor teacher does "tribe challenges" which are competitive math table challenges, designed to focus students on specific tasks in a fun way. The challenges were both collaborative and competitive which according to Briggs is the best way to improve engagement with this type of activity (Briggs, 2016). These challenges are well liked by the students and regularly lead to higher engagement in the classroom. According to Lemus competition sparks intrinsic motivation in students so therefore aides in the learning process (Lemus, 2010). Throughout my time studying education though I have read a lot about competition being a stronger driving factor in males that in females. Because in our classroom we use competition regularly to focus our students I was interested in finding if male vs. female learning interests caused different levels of engagement during these challenges.

Question/Wondering

How will male and female engagement differ when doing tribe challenges?

Methodology/Results

To test whether male and female engagement differs when doing tribe challenges, I took engagement data of six students in each class period, three males and three females, during tribe challenges over a twelve-week time period. I found that the females were engaged 93.69 percent of the time and the male students were engaged 96.66 percent of the time during these challenges. So male engagement was 2.97 percent higher than females throughout the data collection period. Additionally, I conducted a survey of my students to see how male and female reactions to this challenge would differ. They ranked from 1 to 5 whether or not they agreed to with a series of questions I gave them 1 being they strongly disagreed with the statement 5 being that they strongly agreed with the statement. To the statement "I enjoy doing tribe challenges" females on average ranked the statement at a 3.87 and males at a 3.75. Therefore, females by a narrow margin enjoy the tribe challenges more. To the statement "I like that tribe challenges are competitive" females on average ranked the statement at a 3.68 and males at a 3.9 and males on average like the competitive element of tribe challenges 5.5% more than the females. To the statement "I am more focused during tribe challenges" females on average ranked the statement at a 3.34 and males at a 3.56. So male students felt slightly more focused on average during tribe challenges.

Implications/Recommendations

Through the results of this action research project males were more engaged in competitive tribe challenges by a narrow margin. Overall these tribe challenges increase the engagement of all my students, male and female. Males appeared to be slightly more driven due to the competitive nature of these challenges than females, but the data shows positive results for both groups of students. Therefore, using competition to push students to have higher engagement is overall a positive technique that teacher can use that doesn't favor one group of students greatly over another cue to their different learning interests.

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No More Eruptions

Primary Researchers
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Michelle Schlappe, M.S. Ed., Intern Supervisor, Baylor University

Rationale/Introduction

As an intern in second grade at Spring Valley Elementary School, I have discovered that my second graders love to talk, but they do not always speak at appropriate times. My students struggle with blurting out during teaching and learning times, causing my mentor teacher and I to stop and correct this behavior too many times each day. After reading My Mouth is a Volcano, by Julia Cook, we have incorporated the language of this text into our classroom. Students are encouraged to stop their mouths from "erupting," but without a system to monitor how many times a student erupts and disrupts learning, this encouragement has been met with little improvement. In order to increase time spent in our classroom learning and teaching, I developed a behavior tracking system that tracks the number of times students blurt out during whole group instruction. My goal was to reduce my students' "blurting" by making them visually aware of the blurts and the consequences of that behavior.

Question/Wondering

In what ways will implementing a behavior tracking system for "blurting out" affect students' talking out of turn during whole group instruction?

Methodology/Results

My research was conducted in my classroom which includes twenty- two second grade students. They range in age from seven to nine years old. There are ten boys and twelve girls. Three students are Hispanic, one is African-American, three are Asian, and the rest are Caucasian. Three students qualify for free and/ or reduced lunch. The data I collected consisted of three parts: a Volcano chart, student reflection journals, and interaction data. During each whole group lesson, I tracked students' volcanoes. If students blurted out during a lesson, they had to put a volcano on a chart. This method was inspired by Carolyn (Carolyn, 1970). I collected this data four days a week for four weeks. I collected student reflections twice throughout my research and interaction data three times. At the end of each week, if students did not have any volcanoes on the chart, they were able to spin a prize wheel. At the end of the four weeks, I looked at all the data to determine the effects of the volcano chart. I looked across the quantitative volcano chart data for all students for all weeks to determine if students erupted more, less, or the same amount during whole group lessons. The interaction data gave insight into the amount of praises and corrections that were given out during the volcano charting period. The student reflections gave a student perspective data piece on the research and allowed them space to express how they felt they were behaving with the chart up. The results of the volcano chart showed a decrease in the amount of interruptions during whole group lessons. Prior to the chart, students were collectively making twenty to thirty interruptions each whole group lesson. Now that we have begun tracking these interruptions the collective number is only around five to ten per whole group lesson. The ratio of praises to corrections has reached the appropriate four-to-one ratio as well since charting student behavior. Student journal reflections have indicated that students have seen improvement in their own behavior since charting their behavior.

Implications/Recommendations

Since the results of this study showed that blurting out decreased during whole group lessons when the behavior was charted, I plan to continue using this or a similar method for student behavior and classroom management in the future. These results are supported by the research done by Broden. His work shows that when students were tracking their own behavior, desired behaviors increased and talking out of turn decreased (Broden, 2013). I will also continue to use positive reinforcement and praises to manage student behavior. The physical chart in the room is a strength in my study; it allows students to visually track their behavior. Student reflection through journaling is also a strength, as it gives students an outlet to make the study meaningful to them. If I were to conduct this study again, I would still do the charting portion of the study and the student journaling. I might change the interaction

data to some other form of data such as engagement data or anecdotal records. I would have students journal more often to get a better idea of students' perspectives on the Volcano chart.

Reference(s)

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Music to Their Ears

Primary Researchers
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Rationale/Introduction

In my eighth grade English classes this year, we had an abundance of students diagnosed with ADD or ADHD. One of our classes has six different students with a 504 accommodation specifically for ADD or ADHD. Because of this, the focus within these classes this year became simply to keep the students on task. As a musician myself, I was aware of the well-known and often-quoted fact that classical music encourages brain development, and these studies and discussions came to mind as I was thinking through ways to assist my students' ability to focus on classwork during independent study times. I attempted to find research on the topic of whether or not classical music specifically helped with students who have been diagnosed with ADD/ADHD but was not able to match any research with that criteria.

Question/Wondering

How does the use of classical music in the classroom affect the engagement level of students with diagnosed ADD or ADHD?

Methodology/Results

The classroom in which I conducted my study was an on-level eighth grade English and Language Arts classroom. I recorded data from each student who was diagnosed as ADD/ADHD, as well as data from a handful of other students from each class. I made an effort to include both students who were habitually on-task as well as other students not labelled ADHD but who still required assistance staying on task throughout the day. I selected these students in an effort to get accurate data. For this study, I used a method borrowed from the Student Engagement Form that all Baylor Teaching Associates are required to fill out when observing their mentor teacher's classroom, and then again during their own teaching, as a method of marking how many students are "tuned in" at any given time. I modified this form slightly to include information on each listed student's engagement once every 30 seconds, for a time span of 10 minutes. I would take data on days when the students were expected to be working independently at their desks by scanning the room and simply marking yes or no for whether each listed student was currently on task. I first took data on students simply working in silence, to act as a natural norm for my students during this type of activity. I took a total of five class periods' data without music, and then repeated the practice for a total of five class periods' data as the students were listening to a playlist composed mostly of Mozart. I input all this data into Google Spreadsheets, and highlighted every "No" for easy viewing purposes. I then went through and calculated the percentage of students on-task for each class period studied.

There were two different groups of students used for this study: in my third period class, I observed two students diagnosed with ADD/ADHD, and eight students without diagnosis. In my sixth period class, I observed six students diagnosed with ADD/ADHD, and five students without diagnosis. The percentage of students on task during each day of collected data lies as follows: In third period, the two non-music days rated 83.5% and 83.33% overall engagement. The three days observed with music rated 90%, 82%, and 86.88% engagement. In sixth period, the three days observed without music rated 90.4%, 95.9% and 87.73% engagement. The two days observed with music rated 92.5% and 90.42% engagement.

Based solely on observations while researching before looking at data points, the music seemed to affect sixth period's ability to focus more strongly than it did third period. Within sixth, the class as a whole seemed to assume a more calm, focused energy on the days when we played music for them to study to. In third period, Student B is a disruption in their own way pretty much every day of the week, regardless of what we do. Many of the other students in the classroom have learned to tune this student out, and for these particular students the music appeared to have a small effect on their willingness to focus on the activity at hand. For students who are already easily distractible, however, Student B makes independent work almost impossible until they are removed from the classroom altogether.

When compared to the numerical data, playing classical music in the classroom led to a slight increase in average overall engagement from the students observed. However, the increase observed was not consistent enough student-by-student to make a solid statement claiming whether the application of classical music to study time increased or decreased the ability of each student diagnosed with ADD or ADHD to focus on his or her work. One ADHD student in particular was unable to focus whether with or without music playing, and so proved that, at least in extreme cases, music does not seem to have any effect at all.

Implications/Recommendations

While I do believe that the results found in this study are useful and important data points, my study has one weakness that I was only able to study days in which the students were expected to be working silently and individually. In my classroom, these types of work days are not overwhelmingly common, and so I was unable to get a very large sample size for my data. The small number of days studied definitely hindered the accuracy or reliability of my data points. Another weakness of my study was that in third period, Student B is so naturally disruptive that students would have a hard time focusing even in the perfect environment. There was a drastic difference noted on days when this student spent most of the time in the hallway or was absent, and even though this student was one of the main reasons for the study, they had a negative effect on the engagement levels of everyone else around them. Seeing that the music did very little for this student in any way, going forward I would find a different solution specifically for Student B that would reduce their ability to influence the focus of other students.

Based on my findings, I believe it would be beneficial to utilize classical music in my classroom during independent study times. Even though it did not affect the overall class as much as I had hoped, it did help significantly with individual students throughout the class to an extent that I believe would be beneficial overall. If I were to do this study again, I would want a much larger sample size and at least double the number of days recorded in order to get a more accurate depiction of a "true average."

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Ready, Set, Go! A Study on Engagement

Primary Researchers

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Rationale/Introduction

During independent work for all subjects, one of my first-grade students struggles to meet expectations. The student is continually distracted, takes frequent breaks, and fails to complete assignments. This directly affects the student's grades and decreases time to practice and apply new content knowledge. To increase engagement, I set a timer for the student while she completed independent reading station activities. According to Joseph and Konrad (2009), "a kitchen timer can be used to encourage students who quit easily to persevere through challenging assignments" (248). While the student worked, I measured and compared engagement samples with and without the timer. My goal for this student was to reach an engagement level of 70% while working independently.

Question/Wondering

Does setting an individual timer for one of my students during independent reading stations improve engagement?

Methodology/Results

This study involved one Hispanic female in a first-grade classroom in a Title I school. To begin my research, I collected baseline data for six days and observed my student while she worked independently without a timer. To consistently and fairly measure my student's engagement levels, I took engagement samples at the same time each day while my student completed independent reading station activities. My goal was to measure the impact of incorporating an individual timer on her productivity and engagement. Without the timer, my student exhibited on-task behavior 29% of the time, on average, over a six-day period. After collecting data without the timer, I explained to my student that she would begin using an individual timer during reading stations to help her complete her assignments. For the next six days, I gathered engagement data using 10-minute samples while she worked with the timer. After two days of using a timer, my student was able to set her own time goals for individual stations. This increased her motivation and confidence while she completed activities because she was able to meet her personal time goals. Based on the data I collected with the timer, my student exhibited on-task behavior 73% of the time, on average, over a six-day period. I created graphs to compare the quantitative data and to determine the impact of incorporating an individual timer on engagement and productivity. Based on the graphs and percentage of on-task behavior with and without the timer, my student's engagement increased, on average, 44%.

Implications/Recommendations

Based on my results, incorporating an individual timer increases the overall level of engagement during independent work. During my observations, I noticed that my student remained more focused while completing sorting or drawing and labeling activities compared to writing assignments. In addition, I gave my student consistent verbal reminders of her remaining time. Although my student's engagement increased due to the timer, I believe my student was also aware that I was monitoring her while she worked. This may have skewed the results during the engagement samples. To observe the influence of a personal timer without me monitoring, I collected pictures of student work while she worked with and without the timer. This qualitative data also provides evidence that my student made more progress independently. Joseph and Konrad (2009) offer many self-management skills that foster student success, and using a timer specifically encourages perseverance and endurance (246). Implementing this study in the future, I will explicitly explain how to use the timer consistently to promote student autonomy.

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Building Confidence Through Reading

Primary Researchers
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Rationale/Introduction

While interning in my first-grade classroom at Robinson Primary School, I noticed a child with very low self-confidence. This student wouldn't play with others, never answered questions in whole group activities, and was seen frequently alone. After observing this for a few days, I began to wonder if having him read aloud to me every day would increase his confidence. Colvin and Schlosser state that "One characteristic shared by most less proficient readers and writers is an eroding set of beliefs about their own abilities to achieve success in school (p. 273)." Kasperski and Katzir researched this in 2013 and found that "Results support an interaction between test and trait in explaining confidence ratings and emphasize the importance of this interaction in reading comprehension theory and practice (p. 60)."

Question/Wondering

How does developing reading skills build a student's social and academic confidence?

Methodology/Results

This study took place over a two-month time period and involved a six-year-old Caucasian male. The data I collected includes surveys, field notes, and his Developmental Reading Assessment (DRA) reading level before and after I worked with him. Over this time period, I had him read to me two to three times a week during independent reading time. Each week I had him fill out a survey. This survey asked him questions about how he felt in different situations. The first week he wrote that he only enjoyed working on school work by himself. He also wrote that he does not think he's a good reader and does not like reading out loud. By the end of the three weeks, he wrote that he enjoyed working on group work with the whole class. He also wrote that he does think he is a good reader and does enjoy reading out loud. My field notes show that he went from not wanting to read during readers theatre to wanting to read the hardest part. My mentor and I noticed that his social confidence improved greatly in the classroom and on the playground. He now looks forward to reading every day.

Implications/Recommendations

My research has shown that repeated oral reading improved this student's self-confidence and his reading ability. By increasing his reading skills, his self-confidence improved drastically. He was more involved in class discussions, wanted to read things aloud more often in guided reading groups, and overall showed his personality more. This was done in a first-grade classroom, but I believe it would work in second and third grade as well with struggling readers.

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Impact of Google Classroom on Student Engagement

Primary Researchers
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Rationale/Introduction

As an intern in a third-grade classroom, I have seen an acute need to increase engagement during the afternoon mathematics block in a select group of students. If students are unengaged, there is a further loss of instruction time and/or the student(s) fall farther behind on assignments and assessment. I had noticed that as students worked independently on their iPads, engagement increased. After conducting his own experiment on the effects of iPad implementation in the classroom, Dr. Oraib Mango (2015) noted that "students believed that the iPads played a significant role in their learning engagement thus promoting active learning in the classroom and paving way for student success." I wanted to conduct a similar experiment within my own classroom and identify whether or not I would attain the same results as Dr. Mango. I became further intrigued and encouraged to conduct my own research when I read Sherri Herbst's (2017) dissertation that stated, "Discoveries included the positive impact iPads have on structure-dependent engagement, critical engagement, and literate thinking along with discoveries about the positive impacts iPads have on students' perceptions of their learning, their engagement in classroom activities, and in strengthening their different learning modalities." Through both of these incredibly affirming resources, I decided this was an essential question to research for my own third-grade classroom. My research will track how the implementation of the use of *Google Classroom* on individual iPads increases student engagement levels and decreases undesired behaviors.

Question/Wondering

In what ways does the utilization of Google Classroom impact students' engagement levels and academic success during mathematics?

Methodology/Results

Throughout my research, I worked with five male and five female third-grade students during the afternoon mathematics block. I began by compiling a baseline of data using engagement samples, weekly mathematics test scores and student interviews tracking their responses to their enjoyment of the mathematics subject from the previous six-week grading period before the use of *Google Classroom* and before the use of one-to-one iPads were implemented. I tracked the students' engagement performance over the next six weeks using three specific forms of data. The first form of data consisted of using engagement data for the ten students during the afternoon math block. The second form of data used was compiling the students' six-week average grades before the implementation of *Google Classroom* and grades after the implementation. The third form of data was a student inventory consisting of the students' personal reflection of how *Google Classroom* helped him/her to focus during the afternoon mathematics block. After analyzing the results, it became evident through the three methods of attaining data that the implementation of *Google Classroom* and the use of one-to-one iPads implementation that the students' engagement levels increased from 46% to 81%, undesired classroom behaviors decreased, weekly test averages increased from 57% to 79%, and the implementation of *Google Classroom* was greatly supported by the students.

Implications/Recommendations

After seeing the positive results, I would continue to use the *Google Classroom* and one-to-one iPad use during the mathematics block. The most important aspect of the implementation of *Google Classroom* and iPad use within the classroom is ensuring that every student has mastered the content and procedures involved. Each student must be held to the highest form of accountability in the use of the iPad in order to ensure the most effective environment conducive to learning. If a student does not follow procedures with *Google Classroom*, there must be firm consequences from the beginning in order to cultivate an atmosphere where students are responsible for their learning.

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Encouraging at Home Reading with Student Created Tests

Primary Researchers
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Rationale/Introduction

Alternative testing has become an increasingly popular way for students to take responsibility of their own learning. Green, Ferrante, and Heppard explore testing and student motivation on a larger scale through research of standardized tests (2014), while Huddleston considers the pros and cons of open-book exams and their effect on student effort (2016). Through my research, it became clear that although there were studies on the extreme of standardized testing and various alternative testing methods tested in the classroom, there were no studies done on an alternative testing method where students created their own test. Consequently, my research seeks to address how ownership of an exam can be used to motivate students to participate in the required assignments to prepare for the exam.

Question/Wondering

Does allowing students to create their own test questions over a novel motivate them to do the at-home reading?

Methodology/Results

The study was conducted over five Advanced Placement Language and Composition classes. The first three surveys functioned as my control group, where students were asked to complete an anonymous survey over the novel EAARTH. Students were required to read this book at home to prepare for in-class discussions and an end of unit comprehensive exam. The survey asked them how much of the assigned reading they had completed, and students took the survey three times over a three-week period where they were required to read 170 pages. The last three surveys functioned as my experimental group, which students took over a four-week period as they read the novel The Things They Carried. This time, however, students were told that the comprehensive exam at the end of the unit would be created by them. Each class, after a section of reading was assigned, would scan a QR code that led them to a link where they submitted their own test questions and that it would be an open-book exam. I forewarned students that any questions which were unrelated or answers could be found on Spark Notes would not be on the test. Students were given full creative agency in how they structured their questions: multiple choice, short-answer, fill-in-the-blank, etc. They were encouraged to enter as many questions as they wanted because, the more they submitted, the more likely they would do well on the test. It was common for students to get into groups of two or three in order to submit test questions that they knew were fair to their peers.

Implications/Recommendations

The final results showed that student-created tests improve at-home reading participation. In the final surveys for both texts, the percentage of students who said they had read "none" dropped from 36 percent to 8 percent. Similarly, the amount of students who read "all" of the novel jumped from 24 percent to 46.8 percent. Interestingly, the feedback from students on whether or not submitting their own test questions motivated them to read was not significant. 53.2 percent of students said that it did not make any difference, whereas 40.4 percent of students said it did. However, feedback about whether or not students felt the test was fair was extremely positive. 87.2 percent of students felt the test was fair.

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Using Goal-Setting to Motivate Students

Primary Researchers
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Sara Barrett, M.S., Intern Supervisor, Baylor University

Rationale/Introduction

The majority of my students are content with their academic understanding and achievement level in mathematics. These students are satisfied with the knowledge they possess and do not seem motivated to advance their understanding of the subject. Through background research, I was able to find two separate studies that discussed different approaches to take in the classroom that could help reach these types of students who have no desire to improve their mathematical knowledge. The first was conducted by Shui-fong Lam, Pui-shan Yim, Law, and Cheung (2004) that examined the effect of implementing competition in the Chinese classroom. They found that competition in the classroom environment caused a positive impact towards the students' motivation to learn and overall academic success. The second study was conducted by Moeller, Theiler, and Wu (2012) that investigated the impact of goal-setting in the classroom and how it has been shown to have a positive impact toward overall student achievement. However, I was unable to find any research that merged these two topics. This caused me to wonder how combining competition with student goal-setting in the classroom environment could motivate students to improve their academic understanding. I wanted to determine if setting short term goals, specifically related to math, might push these types of students to try to exceed their normal performance and reach their full potential while competing against their fellow classmates through goal achievement.

Question/Wondering

In what ways will competitive, accountable goal setting in the classroom impact the motivation of 7th grade students who lack desire to reach their full potential and move them towards improving their overall attitude toward learning?

Methodology/Results

This research was conducted in a 7th grade mathematics classroom during the fall semester (approximately 15 weeks). For this specific study, we chose to track one student from each of our six classes that exhibited lack of motivation and poor class engagement. To begin the study, every student was given a short lesson on how to write a specific goal relating to the mathematics classroom. Each student was then tasked with writing a goal specific to what they hoped to achieve in mathematics that pushed them to become a better mathematician. Once their initial goal was written and submitted, every student would work towards the achievement of that goal. When their goal was accomplished, they would create a new goal and advance to a new color paper and begin the cycle again. All of the students' goals were posted on a master goal board in the classroom where every student could view what goal number they were on as well as the goal number their peers were on. This was implemented to try and create intrinsic motivation for the students through competition, over who could set and achieve the largest number of goals. To collect data for this research we had students complete a student survey after implementation of goal setting. We also used engagement forms of the students being tracked during the first and third grading periods. Finally, we watched student goal achievement, recorded the students' overall grades in the class, and kept a log of the students who attended tutoring or sought help in some way that related to the achievement of their goal.

The results of this research showed that every student being tracked in the study increased in their class engagement. From the first grading period to the third, every student held a greater engagement in class from the two separate engagement forms. Every student's motivation in math increased from the beginning of the school year to the end of this research except for one which we found from the student survey, and all but two students' grades had increased during each grading period. All six students accomplished at least one of their goals, and three students accomplished at least two goals. Students stated that setting goals in class helped them want to achieve their goal by working harder and studying more. Setting the goals in various colors allowed the students to be "reminded of the accomplishments" they had achieved over the semester and helped them to work towards improving in specific areas of math instead of feeling like they needed help in every aspect of the subject.

Implications/Recommendations

Based on all of the data collected from this study, I can conclude that setting goals in a classroom where all of the students can view every classmates' goal is beneficial. Goal setting helps create a classroom culture of accountability and growth. Having a goal board where all of the students place their goals allows students to visibly see how much they have accomplished over the school year and helps remind them of what else they can strive to achieve. While the competition aspect had little impact on students' motivation, I would recommend implementing some type of goal setting in the classroom. Goal setting allows students to always have something to strive for that can help them become a better life-long learner. It allows them to see how much they have grown throughout the school year, and how much they have been able to personally achieve in the classroom. I would be interested in continuing this study by tracking how goal setting specifically impacts students in advanced mathematical courses. From the data collected, all of the students' grades, motivation, and engagement increased except for students who were in Pre-AP math. How might accountable goal-setting in a mathematics classroom affect students who already show a high amount of intrinsic motivation for the subject?

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Giving Praise: Does it Really Motivate Students?

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Rationale/Introduction

In a typical high school classroom, many students are unmotivated. The material is either too difficult or students choose not to participate. The purpose of the research is to understand the meaning behind praising students for their good work or engagement during a lesson. The research stemmed from a survey and observations in the classroom during lessons from my mentor teacher and myself. According to Douglas Bartholomew in "Effective Strategies for Praising Students", praise should be used because teachers are interested in the students and want them to succeed.

Question/Wondering

Does praise increase students' engagement and participation in a regular Biology classroom? Is it reflected in student test scores? What is the correlation between the two?

Methodology/Results

Over the past four weeks, I have carefully observed seven of my Biology students. I chose seven students of varying academic and cognitive levels so the data would not be skewed in one direction because of a large pool of students. I began the research by having the students take a survey. The survey asks the students questions about their class participation, work ethic, and how well they listen to teacher's instructions. Students were asked to answer honestly and were told their responses would remain anonymous. From student responses, some said they do not always do their best work in the classroom, while 13% said they tend to write down what their classmates write in group activities. Furthermore, less than half of students (48%) said they "sort of" ask questions when they are confused during a lesson. Following the survey, I began to make observations and notes about students' engagement based on praise I gave. I gave praise based on student responses and the information I gathered from the engagement survey. I recorded how many times certain students raised their hands, what type of praise I gave them if any, and what result I observed from the praise I gave. For example, in a class period, one student raised her hand 4 times and received general praise for class participation and answering questions, while one student raised his hand once and received academic praise. From the data, students who received academic praise continued to take notes but didn't continue to raise their hands, whereas students who received general praise participated overall in class by continuing to take notes and ask questions. This is a result that was not anticipated but is supported by data. My results showed me that motivation and engagement does not increase from praise alone. Improvement was seen in some students, but not all.

Implications/Recommendations

During my research, I told students I would be taking notes on them. I did not inform the students what I was writing down on my iPad, but because the students recognized this, many began to actively participate when working with other students. It was challenging to collect data on the students while teaching or during group activities. I wanted to be available to answer questions and work one-on-one with students, but also write down which students raised their hands, those I give praise to, and what improvement I saw in the students that day. Utilizing my mentor teacher in this process would have been helpful and beneficial. However, there would be no way for her to document what kind of specific praise I gave to individual students when helping them, unless I informed her immediately after speaking to a student.

I did not find a correlation between giving praise and student test scores. The praise affected the students in that moment during a lesson or activity, but not a week later during a test. Students performed as they normally do. In addition, many young high school learners still remain unmotivated, even when given strong and encouraging praise. Some students require more intrinsic motivation than extrinsic from a teacher or classmate. Others in my classroom are motivated by receiving extra credit, bonus points, or even candy. When trying to increase motivation, it is important to consider all students' interests and needs and weave that into instruction.

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End of the Day Jitters

Primary Researchers
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Rationale/Introduction

During the last subject of the day (science/social studies), my second-grade students are ready to go home. This has a negative impact on their engagement and participation throughout the lesson. They do not want to participate in the lesson, their work is not their best, and they appear as if they are mentally checked out for the day. Research shows that small bursts of physical activity can produce increased attention, improved working memory, enhanced learning time, and a reduced number of off-task habits (Kohl, 2013). In an effort to try and help my students, I wanted to implement a "brain break" after writing. During this time, the students will dance to a routine on GoNoodle. In an article regarding research benefits of breaks, Youki Terada states that "students are easily distracted, but regular, short breaks can help them focus, increase their productivity, and reduce their stress" (Terado, 2018). I am hoping that if my students are given an opportunity to get some of their energy out before the last subject of the day, they will be more willing to participate and remain engaged in the lesson.

Question/Wondering

In what way will implementing a brain break after writing influence student engagement in the last subject of the day?

Methodology/Results

I conducted my research in a second-grade classroom with 22 students; 11 boys and 11 girls. The vast majority of my students were made up of Hispanic children that came from the same socioeconomic backgrounds. My classroom contained tiered students, SPED students, students with IEPs, and ELLs. Over the span of 2 weeks, I collected preliminary data to get a baseline for how engaged students were during the last subject of the day. I also collected engagement percentages over the course of ten minutes on each student; I wrote observation notes on each student, and I administered a student survey to see how they felt about the last subject of the day. For the following two weeks, I continued to collect data. However, before starting the last subject of the day, I projected a video from https://app.gonoodle.com on the screen at the front of the classroom. GoNoodle is a website that contains different guided dance videos for children ages 4-12. All of my students participated in the guided dance for five minutes. After the five minutes ended, I continued with the last subject of the day.

After collecting data, I compared the results from the first two weeks to the second two weeks. I discovered that taking a brain break does, in fact, increase student engagement while learning. The average engagement level from before implementing a break was 68%. The average engagement level after implementing a break was 85%. My observation notes also supported the concept that the students were more focused and more attentive after they had been given time to release their energy. Although my students' surveys showed that the majority of students were still ready to go home during the last subject of the day, 59% of students reported that they no longer had a difficult time paying attention throughout the last subject of the day. In addition, the engagement percentages and observation notes show that they were more focused in the two weeks they received a break.

Implications/Recommendations

After analyzing my data, it is evident that taking a short break before beginning the last subject of the day was beneficial to student engagement and focus. The quantitative data displayed that my students' engagement improved by 17%, with some students improving by 40%. Taking a break allowed students to release some of their energy by getting up and moving around. This study was helpful because it allowed me to see just how much taking a quick break can affect my students. Going forward, I would like to make this a part of my classroom's everyday routine.

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The Engagement of Technology

Primary Researchers
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Cindy Barrier, M.S. Ed., Intern Supervisor, Baylor University

Rationale/Introduction

I noticed that the interest and motivation of 3 or 4 of the higher-level, low socioeconomic kindergarten students seemed to peak whenever technology was involved during a math lesson. Following further research, I found that digital technologies provided students with another outlet to demonstrate their creativity and learning (NAEYC, Jan. 2012) and created a more engaging environment as a whole (Pew Research Center, Feb 2014).

Question/Wondering

How does technology-based math small group lessons impact the engagement of 3 or 4 higher level Kindergarten students?

Methodology/Results

For two weeks, 4 students in my Kindergarten classroom completed small group work using various applications on their iPads. For each of the lessons, I prepared three different activities through the technology application "Classkick" in order to differentiate the material for each of the students in the small group. I found that by simply introducing iPads to the lesson, student engagement increased to an average of 83% from the previous 67% engagement when students were completing their math assignments in a workbook. By using technology, engagement in the math small group increased by 16%, but test results remained constant throughout data collection. Through the use of KidWatch observations, I noticed that students were more excited for math lessons and eager to learn new material. In order to obtain an accurate control, using a set of engagement data prior to the use of technology, I measured each student's engagement in the group for two weeks while they worked within the math workbook. I found that the 16% increase in engagement was very noticeable through their eagerness to learn but was disappointed not to see it reflected onto math test results.

Implications/Recommendations

Following my research on the engagement of technology in the mathematics classroom, I would recommend the use of technology in the classroom but would discourage the removal of real physical-manipulatives for the students to use hands-on work with while they are thinking about content. The use of these manipulatives allowed them to express their thinking aloud and was very constructive when combined with the use of technology. Though when manipulatives were removed from the small group and students were only allowed to engage with the iPad, they seemed to have a much more difficult time expressing their thoughts and understanding complex questions. My recommendation would be to design a lesson using both technology and concrete manipulatives.

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The Power of Choice Gives Students a Voice

Primary Researchers
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Tracy Harper, M.Ed., Intern Supervisor, Baylor University

Rationale/Introduction

While working in a third-grade classroom, I found that my students did not have a lot of choice in their learning. To me, it seemed that more often, the only students who received choice were those at a higher academic level, such as the four gifted and talented (GT) students. I believe providing choice is highly enriching and motivating factor that is beneficial in every aspect for every student. This semester, I will be working with five students of a lower academic level to test whether taking a more active role in education would affect their reading comprehension.

Question/Wondering

In what ways does offering students choice and ownership in their learning positively impact reading comprehension?

Methodology/Results

My testing group was the five lowest students in my class. I had them for an hour and ten minutes every day in a small reading group. I had a mixed-gender group with 3 students on IEPs and several accommodations. I gathered data for three weeks using multiple forms of data - fluency (WCPM), comprehension (in fluency passages and assessments), motivation, and general feelings toward the work. After reading "Optimizing the power of choice: Supporting student autonomy to foster motivation and engagement in learning," I decided that it was a necessity to teach my students how to make good choices. I spent the first week teaching students how to make good choices while beginning to incorporate choices. The first and second weeks, I included choice with vocabulary activities, spelling activities, and how students presented information. For example, instead of saying you must complete pyramid writing, I stated they may choose between pyramid writing, fancy frames, or secret code spelling. On the third week, I only gave the students one option in spelling and vocabulary and I compared their scores, engagement, and overall feelings about the week. I found that on average, students did much better in all aspects when given a choice and their overall attitudes and engagement were always superior when they took a more active role in their education.

Implications/Recommendations

Based on my findings, I would highly recommend the students have a larger voice in the classroom. However, there does need to be some instruction about choices beforehand, such as teaching students how to make the choice that works best and will be the most beneficial for them. I introduced this topic the week before collecting data and slowly incorporated choice as to not overwhelm my students. I believe the better grades came from my students' attitudes about their work. They were excited to come to small group and get to choose their activity. It was such a small change that had such amazing impact.

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Write Here, Write Now

Primary Researchers
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Rationale/Introduction

Students in my kindergarten class were becoming easily distracted during writing time. The students would talk and become off task. When the students were distracted, they would lose their thought process. This was a problem because the students were not able to progress in their writing skills and because they would rush to finish at the end of independent silent writing time. When we held writing conferences with students, others were distracted by the teachers' voices. I wanted to try playing classical music during the writing time. I hoped that it would help my students stay focused during their independent writing time.

Question/Wondering

In what ways might music impact student engagement and stamina during independent writing time?

Methodology/Results

Prior to the study, I will have the 22 students participate in writer's workshop in complete silence, which is our predetermined classroom expectation. During the writing time, students will be given varying prompts to work through each day, and during the writing time students are responsible for their own learning and work. Musica creates an "arrested attention," within the brain. (Menon, 2007) The goal is to have the students writing in a continuous flow during the independent writing time. For two weeks, we used classical music. I collected data using videos, student work, and writing stamina. One week of data was collected where the students worked in the given classroom expectations. This was to create a baseline for the writing stamina and calculate if there was learning growth. Post baseline collection, data was collected for two weeks following the guidelines for the research. A variety of qualitative and quantitative data was collected throughout this process. Student work was collected to determine the before and after progress of writing. I collected a class record for how long the class could maintain their writing without distractions. Video footage was collected of the students before and during, to records how they are distracted during the learning time. I found that student produced writing increased in quantity and quality.

Implications/Recommendations

The results of this research showed positive student growth in their writing development. The students were able to effectively articulate responses to given prompts and free writes. The classical music that continually played in the background to promote the students focus on the given task. If I were to conduct the research again, I would make the recommendations to allocate extra writing time for the students who want to extend their writing.

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Future Coaches of America?

Primary Researchers
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Rationale/Introduction

The purpose if this study is to try and get my students who are usually not willing to participate in class more involved. My student's main reasons for not participating are that "this is boring" or "I don't like this sport, it's not fun". I would like to do this for my older classes to get them out of their "Senioritis" and to give them more of a reason to be engaged in lessons during class.

Question/Wondering

In what ways would allowing my students to take part in my lesson planning get them more excited and interested in participating in the class activities?

Methodology/Results

For my research, I used my 8th grade class in which I have the least amount of participation in. I attempted to find the link between motivation and participation using the Self-determination theory. "Self-determination theory is used as a framework for examining the relation between motivation and physical activity. (Lonsdale)" During my research, I used four of my lead teach weeks and alternated between lessons that my I planned by myself, and lessons that I collaborated on with my students. I began with a week of lessons prepared by myself in a unit/sport that I chose and wanted them to learn to have a basis of the number of students who actively participated in class. During that time, I planned with them activities that they would like to do the following week and adjusted my unit and objectives to fit their desires. Once the week came around in their lesson plan would be utilized, I tried my best to use the same class layout and procedures I have used in the previous weeks so that the only changed variable would be that we are doing the activity that they have chosen. While student engagement and participation did slightly increase during this time, the class dynamic didn't noticeably change and without counting the number of students who were engaged the class looked the same as it always has. The next week, I regressed to a lesson plan which was done by myself with collaboration from my mentor teacher to see if those few students who decide to participate the past week would continue to do so or revert to their old ways. Sadly, they did go back to not participating in activities and being disruptive during class. Also, something which I didn't plan for happened. A few of my students were excited and eager to plan for the following week. When that week came around, I had my best turnout in terms of student participation and engagement, it may not have been 100% all week, but progress is progress.

Implications/Recommendations

Although the results showed that students participation increased, there were still times the students would get off task or argue with each other or with me. Something else that I feel I could have done was to find out a way to decrease the students off task behavior and behavioral issues. I also would've liked to try this research on the classes of different ages instead of just my eighth graders. I could have tried it with my sixth and seventh graders to see if there's a correlation with the age and grade level and participation. In doing so, I could possibly find the true underlying problem and discover why students are not participating. While it may not be possible to have a hundred percent student engagement in your class at all times, that should still be the goal for a teacher. I would recommend that anyone looking to get their students to participate in any class talk to them and try your best to understand their reasons for doing so. Once figuring out the reason(s), collaborate with the students to find a solution rather than trying to come up with one by yourself.

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Hold that Thought: The Impact of Nonverbal Visual Reminders Combined with Rewards to Reduce Out of Turn Talking

Primary Researchers
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Rationale/Introduction

In my second-grade classroom, there are two students that constantly blurt out during whole group instruction. Their comments and questions are always related to the lesson in some way, but it takes away learning opportunities from their classmates. Prior to my research, my mentor teacher and I addressed this issue by writing notes to the parents in their planners when it had happened too many times in one day. This consequence was not effective in consistently changing the students' behavior. This made me wonder if combining a different consequence with positive reinforcement for not blurting out would prove to be more effective. I consulted with my mentor and another professional and came up with the idea of using a cube stick to allow students to monitor their own behavior. We also decided to implement an incentive system to go along with the cube stick.

Question/Wondering

In what way will the use of nonverbal visual reminders combined with a reward system impact two students' ability to refrain from speaking out of turn?

Methodology/Results

I focused my research on two target students, one girl and one boy, who had a history of blurting out the most. For 3 weeks, I used unifix cubes to act as visual reminders to the target students. Each student had their own stick of 8 cubes, and every time one of them blurted out during whole group instruction, one cube was removed. The cube sticks were placed close to where I stand when teaching, so I could easily remove a cube without detracting from the lesson. Each cube lost resulted in the student sitting out for two minutes during recess. I only implemented this during whole group instruction time for the various subjects taught each day. If a student made it through the whole lesson without blurting out, they received a sticker. If they earned two stickers during the day, I wrote a positive note in their planner about their behavior that day. If they earned the maximum amount of three stickers throughout the day, they received a punch on their punch card. The punch cards were a class-wide reward system already in place prior to my research. Each day, I tracked how many cubes each student lost and how they reacted to either losing a cube or receiving a sticker and the rewards that came with the stickers.

For the first two weeks each student had eight cubes on their sticks, but by the third week they were doing so well that I cut it down to five cubes per stick. Despite their progress with controlling their blurting out, the students were struggling to control their reactions to the consequences. There were many times both students broke down in tears when they realized they had lost a cube. There were also many times the students were very proud when they realized they had not lost any cubes. As the weeks progressed, the reactions became less extreme when cubes were lost, but more animated when stickers were earned. This progression showed me that both students were responding more to the positive reinforcement rather than the consequence.

The girl on average lost 18% of her cubes each day, while the boy on average lost 13.18% of his cubes each day. Neither student ever lost 100% of their cubes. There were five different days that the boy lost none of his cubes, whereas there were only three days that the girl lost none of her cubes. The girl reacted dramatically eleven times during the three weeks, but the boy only dramatically reacted seven times during the three weeks. I found that using the unifix cubes as a visual strategy for monitoring speaking out of turn was only moderately effective. The blurting out decreased at the beginning of my study, but as the weeks progressed it seemed to be less effective as the students became used to it. I concluded my research by giving the target students a survey about how they felt about the cubes and their implications. Both students chose the happiest smiley face when asked: "How do you feel about getting stickers when you don't lose cubes?" The girl answered with the saddest face when asked: "How do you feel about losing time at recess?" Surprisingly, the boy answered with a face that was neither happy nor sad when asked

the same question. This survey data showed me that both students responded better to the positive reinforcement rather than the consequence because they gave the stickers such a high rating.

Implications/Recommendations

If I were to use a visual reminder again, I would be more obvious when a cube was lost because there were a couple times when the students had not been aware that they had lost a cube. Students clearly respond better to positive reinforcement rather than consequence. Rewarding these students for raising their hand and using self-control motivated students to do this more often. Based on my research results, I would highly recommend using positive reinforcement combined with a visual reminder in the classroom.

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Teamwork Makes the Dreamwork:
Improving the Classroom Atmosphere Through Team Building and Community Circles

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Rationale/Introduction

At the very beginning of my time in this second-grade classroom, I noticed that the students were having a difficult time working together, whether that be in whole group, small group, or even in partner work. I realized that something needed to change. Although the students could recognize this as a problem in the classroom, they needed help changing this dynamic. I decided to implement team-building activities along with a community circle to our classroom routine to improve collaborative skills and respect for peers and authority in the classroom. My classroom consists of 22 second grade students who all live in similar demographics with their own individual backgrounds.

Question/Wondering

In what ways might implementation of team building strategies and daily community circles improve the classroom atmosphere?

Methodology/Results

I began by asking my students to complete a pre-assessment with questions asking them how they felt about working with other students in the classroom and what it means to work as a team. I wanted to get a sense for how the students felt about the collaborative atmosphere in the classroom along with their opinion of teamwork. I noticed some commonalities in their responses. The majority of the students did not enjoy working together and did not feel respected when responding during class discussions. After the assessment, we came together, had a discussion about what teamwork means, and what that might look like in our classroom. We created an anchor chart that listed several student suggestions. A few of those suggestions were: use kinds words, listen when others are talking, not blurting out, and not talking when the teacher is talking. After creating the anchor chart, we implemented a daily community circle first thing in the morning to set the tone for each day. In community circle, each student was given the opportunity to answer a fun question in front of their peers. This allowed them the chance to be heard, while simultaneously allowing the other students to practice showing respect. In addition to community circle, we also implemented other team building strategies throughout the day. One of those strategies was daily goal setting, which was implemented collaboratively by making it a competition between myself and the students. During the day, I would give the students a point each time I noticed them doing well with the chosen goal for the day. I would give a point to myself if I noticed that they were not doing well with the goal. Four out of the six days of research the students won the competition, while two of those days I won the competition. No matter the outcome each day, I observed the students encouraging each other to show good teamwork and to meet the daily goal. In addition to these team building strategies, at the end of each day I gave the students an opportunity to self-reflect on how they personally felt that they did implementing the goal of the day. I kept all of this data in organized charts and graphs so that I could best monitor their progress. Over the course of my research, I noticed an increase in positive responses. This was both in their self-reflections, as well as, in the post assessment that I gave. This showed me that the team building strategies that I implemented in the classroom were benefitting the overall classroom atmosphere. Throughout the research time, I noticed an exponential increase in their abilities to work together. The students were using kind words, they had a more positive attitude about group work, and showed respect during instruction. Looking back on my research, I do feel that implementation of team building strategies along with a daily community circle did result in a more positive classroom atmosphere.

Implications/Recommendations

There are so many benefits to the implementation of team building strategies and community circles in the elementary classroom. I saw exponential growth in my students' respect for one another and in their abilities to work together. I feel confident that I will implement these things into my future classroom. I would recommend that these

strategies be implemented at the very beginning of the school year to set a positive classroom atmosphere. Once they are introduced they need to be used consistently throughout the year to ensure their effectiveness.

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Teachers vs. Students

Primary Researchers
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Rationale/Introduction

In "Student Choice vs. Student Preference," I wanted to expand on past research showing that secondary students benefit by having options. Research shows that when students have choice in what they learn, they are more engaged and invested in what they are learning. "Project Menus" and choose-your-own-assessment-style projects have recently become prevalent in the secondary classroom. This study will not only utilize the concept of student choice, but also reveal the preferences students have regarding how they choose academic material. If students have the freedom to choose their own method of learning, what are the outcomes?

Question/Wondering

When students are given the option of choosing their own method of learning, what do students prioritize, and more specifically, and how do students' own choices impact assessment outcomes?

Methodology/Results

To conduct the study, I created four warm-up assignments for students to complete over a period of four days. Each of the four assignments focused on a grammar-based lesson needed in my five PreAP English II classes. The warm-up options students chose from included: option "A," a tactile learning method, option "B," a worksheet—the control assignment, option "C," an audio learning method, and option "D," a visual learning method. Students were offered the choice to select which option of warm-up they wanted to complete at the beginning of each day. Students were limited to a maximum of ten minutes to complete their warm-up. Each option was printed on a sheet of paper with instructions, making each option appear similar. As I was concerned students might question why they got to select their warm-up, I advertised options A, B, C, and D as a "matching activity", a "worksheet", a "video", and "using markers." Out of my five PreAP English II classes, the student choice outcomes showed that students preferred every choice of assignment to option "C", the video. On the first day, option "A", the tactile learning method, was majority rule among student choices. On the second day, option "B", the control option, was majority rule among student choices. On the third day, option "D", the visual learning method, was majority rule among student choices. And on the fourth day, option "C", the audio learning method was majority rule among student choices.

Implications/Recommendations

Out of all of the options, option "C", the video, also required the least amount of written work for students. I would recommend implementing more tactile and visual assignments among PreAP English II students in an English II classroom. Although this study is limited to the age of students, school subject (English), and level of class (PreAP), I believe educators should implement tactile and visual methods of teaching material. At the same time, I believe teachers should not be hesitant to use videos. The better question to ask might be, "Is this video *actually* teaching my students?"

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Does Eating Lunch with Students Improve Student Engagement?

Primary Researchers
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Rationale/Introduction

I have always been interested in getting to know my students outside of the classroom and learning about what they like to do. Since not all students are involved in sports, I decided to eat lunch with them to learn more about them (Coniglio, 2018; Linsin, 2014). I think it's important to build relationships with your students. I truly feel that if you can build that trust, then it will improve student engagement in the classroom.

Question/Wondering

What effects will eating lunch with my students have on their classroom engagement?

Methodology/Results

To get my data, I first did an engagement survey where I picked six students in each of my class periods. I measured their engagement over a 10-minute span and found the percentage that they were engaged in the lesson in those ten minutes. I then used this data to pick with whom I went to eat lunch. I chose the students who weren't very engaged in the lesson. I then decided to go to the cafeteria to eat lunch with those students that I picked. I chose to eat with twelve students. These students came from different class periods and were both male and female. Another form of data that I used to choose my students was an interest survey. I looked at the surveys of the students who I was going to eat lunch with and what they answered. I paid close attention to their interests and what engaged them in the classroom. I used these as topics of discussion when eating lunch with those students. My students were very excited that I paid attention to their answers and cared about what they said.

After going to eat lunch with my students for a few weeks, I looked at their learning pathways to see if there were any improvements. One student went from not completing several assignments, to completing them and doing better on the assignments. She was also asking more questions in class and I think this benefited her in completing the tasks and getting better grades. After going to eat lunch with these students for a few weeks, I completed a second round of the engagement survey. I paid close attention to the twelve students with whom I went to eat lunch. I looked at the engagement data to see how much it improved. I found that a few of my students' engagement did improve, some of them stayed around the same, and a couple students' engagement decreased. The one student that I saw a major attitude change in, her engagement data increased greatly.

Implications/Recommendations

I found that there were improvements from my students with whom I ate lunch. I noticed that they were more excited to come to class each day. They also started to tell me more about their lives and things that they did outside of school. I found this very interesting and I was glad to see these changes. There was one student in particular that made significant improvements. Not only does she try harder in class, she is a more positive student and goes out of her way to stop by in the halls to say hello. Even though she is still a little behind in the math part, she has shown more interest in wanting to learn. If I can get a student to want to learn, then I can get them to do almost anything. It is amazing to see this change in her and she isn't a distraction in class anymore. She is also contributing to her classroom environment as a whole. I also found that the other students who I ate lunch with were more inclined to ask questions during class. Their engagement improved, as well as their attitudes about math.

There are a few things that I would like to change about my action research project. One thing is picking some more students who do well in my class. I chose students who weren't doing so well, or who weren't engaged in class. I would like to try to pick some students who are engaged and see if there are any effects at all. I wonder if it would change their attitude about learning. I would also like to measure my success in a way other than engagement. Engagement is something that I can see fairly easily, I would like to measure grades or data that would take more time to gather. Some other recommendations that I have and would like to change would be to schedule times with

my students. I didn't really schedule it ahead of time, and I would tell them what day I was coming. If I had a system for when I would eat with each student, it might have an effect on my data.

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Self-Monitoring and Mindfulness v. Impulsive Classroom Behaviors

Primary Researchers
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Rationale/Introduction
Research for this study was conducted in a self-contained, high-school-level academic development classroom for math and science. The student involved in the study demonstrated impulsive verbal and physical behaviors including calling out, mocking teachers and peers, and kicking desks at an average rate of 18 times per 45-minute class period. These behaviors were maintained by access to peer and adult attention and by escape from academic demands. An intervention was deemed necessary because the student's behaviors impeded his own learning and the learning of others by taking time and attention away from instruction. According to Singh et al. (2007), mindfulness-based interventions that incorporate self-monitoring strategies can be effective in reducing impulsive and aggressive behaviors in students in their early teens who require tier-three behavioral supports.

Question/Wondering
What effect will self-monitoring strategies paired with a mindfulness-based intervention (MBI) have on the rate of the student's impulsive verbal and physical behaviors in the classroom?

Methodology/Results
The participant in the study was a fifteen-year-old Hispanic male diagnosed with ADHD and mild intellectual disability (ID). His baseline data were collected using a frequency count/continuous time sampling during four 90-minute observations in our classroom. At this time, antecedent-behavior-consequence (ABC) data were also collected to determine the function of his behavior. Interviews regarding his behavior were conducted with the student, two academic development teachers, and a paraprofessional. The results support the hypothesis that the primary function of his behavior is access to attention and the secondary function of his behavior is escape from academic demands. Next, an intervention was developed in response to the baseline data. At the beginning of the school day, student and teacher work together to determine an appropriate behavioral goal and criterion, such as "12 comments or less," that will apply to the ninety minutes in class together. Then, with the teacher prompting as needed, the student will make one tally mark for each previously-defined impulsive behavior. At the end of the day, student and teacher will conference to determine if the goal was met; the teacher will deliver reinforcement, such as access to the student's phone, as appropriate. After five weeks, preliminary data showed that when used with verbal prompting, a simple self-monitoring system decreased the rate of impulsive behaviors during class. The data supported previous researchers' findings that self-monitoring interventions and MBIs can decrease rates of physical aggression and calling out during class in students with disabilities. After five weeks, the target student demonstrated an average of 2.5 impulsive behaviors per 45-minute class period—a drastic improvement from the baseline rate of 18 impulsive behaviors per class period.

Implications/Recommendations
The results of the study suggest that going forward with the intervention, gradually fading prompts to self-monitor, the student's behavior in class will continue to improve. A strength of the study was that many of the student's personal strengths, such as a desire to improve, a positive response to attention, and a basic self-awareness, promote effective self-monitoring. He was surprised and somewhat disappointed in himself when we discussed his baseline data, so he was interested in the intervention from the beginning and was consistently motivated by reaching his daily goals. A weakness of the study was the lack of implementation in the student's other classes. Despite its effectiveness, other professionals have chosen not to use this intervention, perhaps because of the number of interventions that are already in place with the student. I recommend that the intervention is extended to the student's other classes. This will help him generalize his ability to monitor his own behavior. I also recommend that implementers continue to deliver positive attention to the student when he meets his daily behavior goals.
An additional research question that this investigation has raised is whether the addition of a more intensive MBI would continue to decrease his impulsive behaviors or help him generalize this behavior to other settings.

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A Case Study on the Effect That Student-Teacher Relationships Have on Learning

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Rationale/Introduction

It is commonplace for teachers to manage a classroom and ensure student engagement and participation solely through the lens of an authority figure. This approach to classroom leadership often neglects the establishment of positive student-teacher relationships, which is a fundamental foundation for effective student-centered instruction. By studying the relationship between positive student-teacher relationships and relevance of content and student engagement, I will be able to discern how to more effectively lead an authentic student-centered classroom that makes the content meaningful and relevant to the students.

Question/Wondering

How does enhancing student-teacher relationships allow for content to be made relevant in students' lives and increase student engagement?

Methodology/Results

In this research study I used a multiple case study design, that took a qualitative approach to gathering data through interviews and observations. This method is the most effective way to accurately explore the relationship of student-teacher relationships on content relevance and student engagement due to the analyzation of interviews and observations as opposed to numbers and data. The study involved two participants, who were students in a Pre-AP World Geography course. Student A was a Hispanic male 9th grader, whose family lived in a lower-income bracket. Student B was a Hispanic male 10th grader, whose family lived in a middle-income bracket. The assessment methods used in this study were interviews and direct observations. The interviews involved a format of structured questions that allowed students to develop their thoughts and answer objectively. Questions were asked on a weekly basis throughout the unit being taught and focused on each aspect of the study from how students perceive their relationships with teachers, what effect that perception has on their learning, what do good teacher-student relationships look like and why they matter, to how those teacher-student relationships can allow for the exploration of content on a more authentic and relevant level to the students' lives. The observations were completed throughout instructional time as student engagement levels were measured, and notes were taken of moments when the students' relationship with the teacher allowed for opportunities to relate content back to the students' lives. The interviews and observations were then compiled and analyzed, using a systematic examination of the interviews to create a clarified understanding of the results. The results of the study reinforced my initial wondering, as the relationships that had been crafted and maintained between the students and teacher did allow multiple opportunities for learning to occur and for content knowledge to be made relevant, as well as increased student engagement and students viewing the course in a more positive manner.

Implications/Recommendations

This study will affect my instructional practice as it demonstrated the benefits that come from a teacher working to create positive relationships with their students allowing for more authentic content knowledge and increased student engagement as well as a more positive, student-centered classroom environment. This method opposes that of an authoritative classroom management style where respect is not mutually earned but demanded, which leads for the potential of a deleterious impact on achievement in addition to the relationship between student and teacher. The strengths of this study were the depth of the interview questions that were asked of the students, and the willingness of students to contribute objective feedback and information throughout the study. A weakness is the small sample size of two students, as this is not enough to show a consistent pattern among the overall number of students that I teach.

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Impact of Post-Test Small Group Intervention on Content Retention

Primary Researchers
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Gerald Brewer, M.Ed., Intern Supervisor, Baylor University

Rationale/Introduction

The purpose of this study is to measure the effectiveness of post-test small group intervention on content retention. Reflecting on post- test correction procedures that had been originally used and the lack of success that came from that procedure, an effective way of doing corrections was needed in order for the students to retain information and improve.

Question/Wondering

What is the effect of post-test small group intervention on content retention?

Methodology/Results

For my research, I tested 132 students divided into six class periods. All of my students were between the ages of 12 and 14 years old, and they are all in the 7th grade at Midway Middle School. For my research, the experiment was conducted over one-unit, Human Body Systems, broken up into two parts. Each part focused on five body systems. At the end of the unit, two tests were completed. My students completed part one of the unit on body systems and then tested over those five body systems. Once the tests were graded, the students were handed back their tests, along with an answer key, in which they were to determine which questions they answered incorrectly. They then were to find two body systems in which they had the most difficulty based on the number of questions they got wrong. This helped in determining which body system the student would focus on in post-test small groups. During post-test groups, students reviewed two particular body systems with my mentor or me. This included going over the functions, organs, and reviewing the questions from the test involving those body systems. The questions were corrected and they had to come up with a justification for their new answer. Once post-test small group intervention was completed, they then had to write an essay which targeted their two body systems. Five questions were selected, which covered all of the body systems from the first part of the unit, were included in the second test to measure their retention of content. Out of these questions, 4 out of 5 had an improvement in accuracy. Therefore, retention on 4 out of the 5 human body systems increased.

Implications/Recommendations

The data thus far seems to indicate that having post-test small group interventions will cause students to really retain content and to master the content. With an increase in accuracy, this will allow students to realize where they are struggling and where they need the most help and seek the help. Based on this data, I do recommend having small groups for post-test corrections in order to improve the students content retention and success.

Resource(s)

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Check for Success: Using Immediate Feedback to Promote Student Performance and Participation

Primary Researchers
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Rationale/Introduction

While teaching in a tenth-grade chemistry classroom at University High School, I noticed wavering levels of motivation to achieve, primarily in the morning classes. Several instances have arisen where students put themselves down by saying, "I don't know how to do it, "or, "This is too hard," removing themselves from the learning environment. As a result of these statements, students were reducing their class participation and did not score as well on assignments. To address this issue, I became interested in providing effective feedback to the students. I wanted to see if providing immediate feedback to coincide with student motivation would improve the performance and engagement of students. Goodwin and Miller (2012) offer three effective components of feedback: targeted, specific and timely. Feedback should be implemented in a manner that the students are able to propose a response (targeted), offers guidance on how to make improvements (specific), and is offered at appropriate times (timely). Their work is supported by the research of Hattie, who suggests that feedback is one of the most significant contributors to student achievement (2009). Based on these findings I would like to investigate the effect immediate, constructive feedback can provide to the students' learning.

Question/Wondering

How does the use of immediate, constructive feedback affect the performance and participation of students in a high school chemistry classroom?

Methodology/Results

The first three class periods of the day were targeted for this study. A total of 48 10th grade students (30 males, 18 females) were surveyed. Nearly 98 percent of the students in Periods 1-3 were Hispanic or African American. The students also displayed a broad spectrum of socioeconomic status. 1st Period is a Pre-AP chemistry class of 19 students, while 2nd and 3rd Periods are general chemistry classes with a student count of 14 and 15, respectively. Feedback was taken in two formats: the first was through Post-It notes. As students completed an assignment, I would ask them to rate from 1-3 (1=I am lost on the content; 2=I understand most of the content; 3=I fully understand the content) how they felt about the lesson. This data would be recorded on Post-It notes to be analyzed for data on an Excel worksheet. This data measured the performance of the students across six class sessions. During my instructional periods I would also regularly monitor the students, make brief comments on their work and reinforce constructive feedback. These interactions were recreated to the best of my ability in the form of field notes. The field notes were used to monitor the engagement of the students. All feedback data was collected soon after an assignment was completed in order to boost its effectiveness. Feedback data was collected for the first three class periods twice a week from February 4-February 20 for a total of six classes. Post-It feedback was collected in Excel, while the field notes were compiled in a Word document. When compared with the students' progress reports, it was determined that there was a slight increase in the academic performance and participation of students due to the implementation of immediate feedback. The data collected showed several trends. The number of students who fully understood the content went up for all classes, with 1st Period seeing an increase from 3 to 13, 2nd Period having an increase from 0 to 4, and 3rd Period increasing from 2 to 5 students. When conducting field notes, the percentage of students who were engaged increased from 72% to 86%. The increase in student engagement coincided with the use of providing immediate feedback on their assignments. Examples of feedback I provided included, "You completed more of the calculation without needing to ask for help. Good job!" (Feb. 19). Students would tell me how grateful they were of my feedback and used the inspiring comments to motivate themselves to try harder. The results of this study resemble the guidelines for targeted, specific and timely feedback proposed by Goodwin and Miller (2012).

Implications/Recommendations

The results indicate a possible solution for promoting student achievement through effective feedback. Along with Goodwin's and Miller's publication on effective feedback, the results of the study support Hattie's research on visible learning. Students were able to see some growth following the implementation of effective feedback. Future uses of this feedback strategy will be utilized to continue increased student participation and achievement. There were some components of the research study which could have been altered to strengthen its effectiveness. Only the morning classes were targeted for research. This study would have benefitted to see how feedback implementation compares across all class periods. Alternatively, a class period could be used as a control where no feedback was given to determine if feedback has a significant effect on the engagement and performance of students. Following this study, I shall continue to develop methods for providing immediate feedback. Through the modification of feedback type to match the characteristics of the students, I aim to instill inspiration to all learners so that they can pursue sustained success inside and outside the classroom.

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Connecting the Body and Mind to Learning

Primary Researchers
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Rationale/Introduction

For this study, I decided to focus on four students who struggle to concentrate and remain motivated during math time. These students are in Tier 2 or Tier 3 of Response to Intervention and I have noticed that they appear unmotivated and disengaged during math. My mentor teacher, Mrs. Sumpon, and I did some research and came up with the idea of trying yoga in the classroom. Butzer and Flynn (2016) mentions that yoga "may lead to improvements in students' behavior, mental state, health, and performance." With this information and my background knowledge about these four students, I wanted to see if yoga in the classroom would improve their math post-assessment grade from a matched assessment consisting of content from the Texas Essential Knowledge and Skills 3.6AB.

Question/Wondering

How will implementing yoga in the classroom for 5 minutes before math whole-group and small-group instruction affect student learning gains?

Methodology/Results

For this study, I worked with four third grade students. Students A and D are Hispanic females who qualify for free lunch. Students B and C are Asian females who qualify for reduced lunch. I used engagement data, pre and post-math assessments, and anecdotal notes about independent or small group work. Engagement data was collected in ten-minute samples during whole group or small group instruction. Next, I used a math pre-assessment that was paper and pencil to identify their knowledge about two-dimensional shapes, three-dimensional shapes, and their attributes. Finally, I recorded anecdotal notes about small group and independent work. These notes described how the students completed the assignments and if they understood the math concepts. On the seventh day, I administered a matched assessment to determine learning as well as their growth in knowledge over shapes. To begin this research, I collected baseline data for one day, which included a pre-assessment, anecdotal notes, and engagement data. From this data, I was able to see that Student A received a 62/100 on the pre-assessment and was on-task for 70% and off-task for 30%. Student B received a 69/100 on the pre-assessment and was on-task for 95% and off-task for 5%. Next, Student C received an 8/100 on the pre-assessment and was on-task for 100%. Finally, Student D received a 23/100 on the pre-assessment and was on-task for 90% and off-task for 10%. The next day, I began to implement yoga into the classroom. For this, students walked into the classroom after recess, they would move desks to create space and sit in a resting position until the yoga video began. Yoga included stretches, meditation, and breathing techniques. After 5 minutes of yoga, students were instructed to remain in their resting position until they were cued to stand up quietly and walk back to their individual desks to begin whole-group or small-group instruction. I conducted this study for a total of seven days in order to find if yoga would truly benefit student's math post-assessment scores and engagement during whole group and small group instruction. Overall, engagement for Student A increased and there were no significant changes for Students B, C, and D. Student A received a 79/100 on the post-assessment, which means the student's learning gains were 44.74%. Student B received an 86/100 on the post-assessment to give the student a 54.84% learning gains. Student C received an 86/100 on the post-assessment to give the student an 84.78% learning gains. Student D received a 79/100 on the post-assessment to give the student a 76.67% learning gains. These results show that implementing yoga into the classroom for 5 minutes every day might increase student learning gains in math.

Implications/Recommendations

The results of my study support previous research, which states that the use of yoga in the classroom may increase engagement and assessment scores (Butzer and Flynn, 2016). Based on these results, we are considering using yoga for other subject areas for when students are struggling to remain concentrated and seem unmotivated. Additional research may include determining if more brain breaks, stretching, breathing techniques, or meditation throughout the school day for individuals, small groups, or whole group might possibly increase learning gains in other subjects

as well as math. The weakness of this study is if a student has an emotional breakdown then they will not perform at the same level as the day before. A weakness of this study was that it was difficult to determine if the yoga truly impacted learning gains because there was no control group. Collecting engagement data samples before implementing yoga into the classroom would have been beneficial to the study. A strength is that yoga allowed students to get some movement when outdoor recess was not possible. From this study, further research could be conducted over yoga being implemented before school and during breaks to help students prepare for longer assessments, such as the State of Texas Assessments of Academic Readiness.

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Green Means Go, Red Means Stop!
Using a Non-Verbal Cue to Help with Engagement During Read Alouds

Primary Researchers
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Amanda Chancey, M.S. Ed., Intern Supervisor, Baylor University

Rationale/Introduction

In my first-grade class at Hillcrest PDS, my students struggle with knowing when they can share their thoughts and when they need to wait. This is particularly a challenge during read alouds in literacy time. During read alouds, I noticed that the students were not attentive to the story because they were too worried and distracted by what they wanted to say. Generally, their comments were on topic, but they were a great distraction to others, their teacher, and to themselves. As a result, the overall engagement was low. I wondered what would happen if I implemented a non-verbal cue during this read aloud time to provide a clear signal to the students of when it was appropriate to ask questions and share their thoughts, and when they need to focus only on the story, thus increasing the level of engagement.

Question/Wondering

In what ways can a non-verbal cue improve engagement in my classroom during read alouds in literacy?

Methodology/Results

For my research, I selected 6 students who had the greatest struggle staying engaged during read alouds. Five of the students are male and one is female. All of the 6 students frequently shout out their thoughts without being asked.

I decided to make a signal to use during read alouds to let the students know when it was a time to share and when it wasn't a time to share. I put a large red dot on one side of a piece of paper and a large green dot on the other side and laminated it. I used a magnetic clip to display it on the white board that is next to the teacher's chair during read alouds. This allowed the dot to be visible to all students and in their line of sight while listening and viewing the book.

Before I implemented my red and green dot non-verbal cue, I took two engagement samples during read alouds over a one-week period. I averaged the percentages from those two samples to get an overall number of each student's engagement level. Student 1 had an average engagement level of 70%, Student 2 had an average engagement level of 77.5%, Student 3 had an average engagement level of 82.5%, Student 4 had an average engagement level of 75%, Student 5 had an average engagement level of 77.5% and Student 6 had an average engagement level of 75%. I also took anecdotal notes of the student's engagement before I implemented the red and green dot and noticed that all 6 students were easily distracted by others in the class and/or would get frustrated that they couldn't share their thoughts immediately. Often times these students would shut down and be even less engaged.

Before I could use the red and green dot during read alouds with the students, I had to explain to the students how it was going to work. I told the students that when the dot is red that means there is no talking at all, their eyes need to be on me, and their minds need to be on the story. I told them when the dot is green then then may raise a quiet hand to share a comment or question.

I implemented the red dot/green dot non-verbal cue during eight read aloud sessions over a two-week period. When I was reading the red dot was posted and I would not take any questions or comments from the students. When a student shouted out or raised a hand during this time, I tapped the red dot to remind them that we were in a no sharing time. Every 4 to 6 pages I would turn the dot to green and then allowed the students to raise their hand and answer a question, share a thought, or ask questions of their own. At the beginning of this two-week period, the students struggled to abide by the expectations, but by the third read aloud session the students talking out decreased and engagement levels began to trend upward. Student engagement samples were taken during the 5th and 8th read aloud. Student 1 had an average engagement level of 87.5%, Student 2 had an average engagement level of

85%, Student 3 had an average engagement level of 92.5%, Student 4 had an average engagement level of 90%, Student 5 had an average engagement level of 85% and Student 6 had an average engagement level of 95%. In comparing student engagement before and during the implementation of the non-verbal cue, the average engagement rose from 76.2% to 89.15%. Anecdotal notes were also taken during the 5th and 8th read aloud and I noted that there was less shouting out of thoughts and students were more attentive to the teacher and the story.

Overall, the implementation of the dots increased the student's engagement during read alouds which made it a much smoother process than it had been in the past. This non-verbal cue helped increase engagement and made read alouds more enjoyable since I did not have to frequently stop and redirect students.

Implications/Recommendations

The results of this study support previous research findings that said non-verbal cues increase desired behaviors and engagement with students in the classroom. I definitely saw an improvement in not only engagement but overall classroom behavior. One thing I will do differently in the future is to make sure there is magnet on both sides of the dot to make the switch between colors faster and easier. In the future, I would like to see how the implementation of non-verbal cues could benefit student participation in math, science and social studies.

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Small Group Level Based Math Groups

Primary Researchers
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Cindy Barrier, M.Ed, Intern Supervisor, Baylor University

Rationale/Introduction

I am currently an Intern in a 1st grade classroom at Castleman Creek Elementary. My classroom consists of 10 boys and 9 girls who are on vastly different levels in math. Therefore, it has become difficult to differentiate enough during our whole group math lesson in order to keep our students engaged. According to Bender and Craft (2016), "Children may require different degrees and type of intervention at different times in their school career, or for different aspects of the mathematics curriculum" (p. 2). I have found this very true, which has in return affected student scores and engagement. It is very important that I have all students' attention and that students are active learners. However, since the lessons are either way too difficult or too simple due to the level differences, students become unengaged, which reflects directly in their work. Therefore, my mentor teacher and I began to brainstorm how we could solve the problem to mend the gap, and I wondered if creating level-based small groups would help. According to Volpe and Van Zant (2018), "Small group instruction allows teachers to work more closely with each student. This type of instruction provides the opportunity to evaluate students' learning strengths, locate gaps in the development of their reading or math skills and tailor lessons focused on specific learning objectives" (pg. 1). Due to research, I decided to take data from 4 of our students, over a span of 4 weeks. The first two weeks, I used a checklist to analyze their engagement and their grades with only whole group math teaching. The last two weeks, I took the same data, but with small, level-based group teaching. I pre-assessed my students weekly and then split them into small groups and taught the same concept on different levels to all of my students.

Question/Wondering

In what ways does small group flexible level-based math teaching aid engagement and student success?

Methodology/Results

I collected data over a span of four weeks. I have selected four of my students who struggle the most with staying engaged throughout math lessons due to their low levels. Two of those weeks, I simply taught whole group math lessons as normal. In those remaining two weeks, I split my students based on levels and taught in small groups. My mentor teacher collected the given data using a checklist. The checklist included engagement data and student's grades. At the end of the four weeks, I interviewed my students as well, asking what strategy they liked better and when they felt like they learned the most. Through my research, I found that all students benefitted from small level-based group instruction. I found the average level of engagement moved from 42% to 89 %. Engagement was not only increased dramatically, but student scores increased as well. At the end of my research, I also interviewed all four students and they each stated that they could focus more on their work and had more fun.

Implications/Recommendations

At the first-grade level, staying engaged is something that students struggle with. For certain students, something may be going on at home, the material is too hard, or it is simply boring. With this method of small level-based group learning, the students can improve their engagement and knowledge of the given math concepts.

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Will Writing Extension Improve Class Engagement?

Primary Researchers
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Rationale/Introduction

There are five students in our second-grade class, three girls and two boys, who are at a considerably higher level in English Language Arts than the rest of our class. When the class participates in whole group writing activities, these students finish their writing work in a fraction of the time than everyone else. Due to this, they would benefit more from being challenged on an individual basis. A study with Steve Graham and Karin Sandmel found "for students in general education classes, process writing instruction resulted in a statistically significant […] improvement in the overall quality of writing" (The Process Writing Approach, 2011). To test this in my own classroom, we will have individual conferences time to adhere to this writing process allowing each student to set independent goals. In a study evaluating differentiating instruction, "questions and tasks that are interesting to students are more likely to lead to enhanced student engagement with the task, […] increased student productivity, a higher degree of student autonomy, and a higher level of intrinsic motivation;" therefore, I believe this method of independent conferences and goal setting will improve their writing engagement (Amabile, 1983; Brunner, 1961; Collins & Amabile, 1999; Sharan & Sharan, 1992). Since writing practices are included in all subjects and they will soon be tested in writing on the fourth grade STAAR, I will center our challenge/goal-setting minigroup on writing.

Question/Wondering

How might designing more challenging work at our writing station for five high achieving students' impact performance and engagement during the writing period?

Methodology/Results

Our class was broken into stations throughout the day- reading, writing, spelling, and daily work. When we were in the writing station, I took time to individually conference with each of them about their goal and determined ways we could achieve this goal. The goals were not specific to a topic but, aimed toward advancing their writing skills as a whole. To start, I gave a writing survey to assess what they felt they needed to work on. If I agreed, we then focused on how to improve that skill. A key element to this conference time was goal setting. They created goals for themselves in writing practices, then they assessed his or her own achievement in these areas at the end of the study.

Implications/Recommendations

I found this study to be beneficial to the five students. From their own assessment and my knowledge of their writing capabilities, we decided where they needed improvement. Since the students read at such high levels and could quickly finish classwork, challenging them with individual goal setting in writing and conducting one-on-one conferencing showed positive results in their writing. The majority of my small group improved on a self-identified writing skill they struggled with the first half of the year. We identified vocabulary, handwriting, or overall organization of a story. The individualized conferences and challenges I gave them encouraged them to be more efficient writers and overcome those challenges. With four of the five students, I found that having them identify what they needed the most help with and having multiple conferences a week during writing time was incredibly rewarding and improved their overall writing skills, I highly recommend this procedure for other classes.

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Go Get Your Goal!

Primary Researchers
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Jennifer Robins, Ph.D., Clinical Assistant Professor, Baylor University

Rationale/Introduction

Goal setting is nothing new to the classroom, and Mayse (2016) found that "students scored statistically higher on the final assessment after setting their goal" in a high school English class (p. 66). This idea really resonated with me when observing some students in my classroom this year. Not only did I begin thinking about goals students might make for a grade, but also work ethic. I think if a student fails to make any goals, they are less likely to be motivated to work in class, resulting in low achievement. One of my students displayed multiple characteristics of a gifted student, yet he was still not succeeding in class, especially in math. After observing the student's work in math for a week, it was easy to see that the student did not try in school and that he tended to rush through his work just to get it done, making many careless errors. This student was not working to his full potential because he did not seem motivated to try to achieve more. Moeller (2012) noted that "research has linked mastery and performance achievement goals to very distinct ways of thinking about oneself and learning activities" (p. 153). I felt that this student may be able to do better in his schoolwork if he was aware of this lack of motivation and set goals for himself. I was hoping that this would allow me to see if setting goals was indeed linked to achievement. The student and I met together to discuss the fact that he was not trying his hardest, that he was making a lot of unnecessary mistakes, and ultimately not achieving to his greatest potential. We decided that he needed to make a goal regarding the number of careless mistakes that he would make in math, and that for each day he met his goal he would receive an award. In the end, I wanted his goal to prove that he would achieve more, with more motivation, when he was conscious of his work and goals.

Question/Wondering

Can setting goals in academic subject areas increase student achievement?

Methodology/Results

After observing this student for a week, noting habits about his motivation, achievement, and work in math, I developed a plan that was twofold. For two weeks, the student would work on being more aware of his math work. For the first week, I asked the student to decide the maximum amount of careless errors he wanted to make in math, while being conscious of mistakes and rushing when actually doing math activities. He chose three mistakes, and to document this, we filled out a form with his goal, the date to achieve it by, how he would work on his goal, how I could help him, and how a friend could help him. In the end, we decided that he would help himself by slowing down, that I could help him by answering academic questions, and that his friend could help him by modeling his neat and diligent work. After completing this worksheet, I explained to the student that for each day he met this goal in math, he would earn a piece of candy. The student was extrinsically motivated, and candy was something he valued. Before going to work on Day 1, I explained to the student that there was a clear difference in academic mistakes and careless errors. I was concerned not for his academic achievement, but for him achieving as best he could by being less careless. With that in mind, the student and I together defined careless errors as any error in math that is due to messy work and handwriting, not lining up place values in numerical operations, and carrying in multiplication incorrectly. I knew what my student's strengths showed when he slowed down to truly try, so that was a large part in how we defined careless errors together. I also made sure that he understood that candy could be earned once a day after math, if we determined that he met his goal in our daily meetings after math.

At the end of Week 1, the student had a district checkpoint to complete. He went above and beyond meeting his goal, so we decided together that Week 2 would have a goal with even fewer careless mistakes. Week 2 went even better than Week 1. By the end of the two weeks, this student was rarely making careless, unnecessary mistakes. Not only were there fewer mistakes, the student seemed to be more excited and engaged in his work.

One thing that I found to be interesting was that the goal was actually met from the first day. This verified my belief that the student was fully capable of achieving more than he had been. The data showed that as time went on, he was

able to become not only more careful, but more focused, in his math work. The increased focus, carefulness, and success in turn resulted in the student being conscious of his goals. By the end of Week 2, the student was asking me if he met his goal before I even had a chance to discuss them with him daily. This showed me that he was beginning to be intrinsically motivated by his hard work and higher achievement, and not so much by the candy. There was a very apparent desire to perform better, and this showed through the questions that were asked, the increased discussion of goals, and overall higher grades along with greater achievement.

Implications/Recommendations

I believe that the results of this study can apply to many students. Although there will always be students who are naturally academically motivated, there will also always be a handful of students with low motivation and low work ethic, but high abilities. Goal setting is something that any student can do to perform better in any given subject area. Although my study was applied specifically to rushing through work and making careless mistakes, the use of goal setting can be used in many areas of the classroom. What I took away the most, and think is the most beneficial for many types of students, teaching styles, and classrooms, is the fact that students may work harder and become more intentional learners when they set goals, plan ways to meet their goals, and are reminded of their goals daily. A student may come into the classroom at the start of a school year and seem as if they are achieving little, but that does not mean he or she has to stay that way. Based off of my findings, I believe every teacher should set goals with their students to help increase achievement and overall work quality.

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Spellabrate Learning

Primary Researchers

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Rationale/Introduction

In my first-grade classroom, I have a student who struggles remembering how to apply the weekly phonic/spelling pattern. Many times, we will go over the words and he will know how to spell them but only in the moment. When you ask him to spell them again, after erasing the word he just spelled correctly, he struggles to remember how to spell it. Every day we go over our spelling rule for the week. We give big hints such as, visuals or gross motor skills, and he still struggles to remember. I wanted to encourage this student by giving him one-to-one time that he needs to succeed in spelling. In one-to-one time we focused on learning and applying spelling patterns in various ways. Research shows that if students have letter-sound correspondence and know the common spelling patterns of words they can correctly spell most words in the English language. "According to Hanna, Hanna, Hodges, and Rudorf (1966), half of all English words can be spelled accurately on the basis of sound-symbol correspondences alone, meaning that the letters used to spell these words predictably represent their sound patterns (e.g., back, clay, baby)" (Moats, 2005). The purpose of my study was to see if having one-to-one time and manipulating letters/sounds in various ways would help improve his spelling grades.

Question/Wondering

I wonder how 10 minutes of one-to-one (1:1) time a day working with the weekly phonics/spelling pattern, will affect one of my student's spelling accuracy?

Methodology/Results

In this study, one first grade Hispanic male student, who qualifies for free and reduced lunch, consistently performed poorly on test that consistent of spelling patterns and spelling words was chosen. Before I began working with him, I took some of his previous spelling tests to use as pre-assessments. These quizzes consisted of fifteen spelling words and two dictation sentences. These quizzes showed him getting spelling grades as low as 5/15 to 8/15. Before we began working together, I also had my student answer four self-evaluation questions. These questions asked how he felt about spelling and if he thought he was a good speller. The quiz showed that he thought he was a great speller, but he did not specifically like it. I had him complete the self-evaluation questions again after working together. He had all the exact same answers as he did the first time except the question "How do you feel about spelling?". After working with me he answered that he felt good about spelling whereas before he answered he felt bad about spelling. While I was working with this student, I took some anecdotal notes about some of the errors he was making. Everyday varied on what we would do. Some days I would show him two different spelling patterns such as /ow/ and /ou/ with this, I would say a word and he would point to which one he thought matched the pattern. While other days I would say the word and he would write the word on a dry erase board, create with magnetic letters, or write on an app. While he was doing this, I would take anecdotal notes. He would continuously leave out the spelling pattern of the week that we had just talked about and would add the letter /e/ to whatever word he was spelling. I would stop and reteach/remind him that every word we spell has the spelling pattern for the week. I noticed that if he would slow down and think about our spelling pattern, he would get it right. When he would quickly answer he would frequently get it wrong. After working with him continuously each day for five weeks, he showed progress on his weekly spelling test. He began consistently scoring between 12/15 to 13/15 on a regular basis. As we worked more and more together, I could see how his spelling ability increased. Just like Moats study found, once he learned and worked with the spelling pattern and learned it, he could spell more accurately. Once he got more confident with the spelling pattern, he would do a lot better. I knew he was becoming more confident because on the post self-evaluation questions he indicated he liked spelling more after he noticed his grade improving.

Implications/Recommendations

The purpose of this research was to see how one-to-one time can affect a student's spelling ability. After this study I will spend more time doing one-to-one time with a student of need or in small groups so that I can see this kind of

growth in all of my students. Whether that be once a week or once every two weeks, I think that it is important that I plan time for one-to-one time. So far, I have found that with one-to-one time the student has been able to improve his spelling grades tremendously. In the future, it would be beneficial to all students to have one-to-one time whether that is with parents or the teacher. This study could have been more beneficial if we had more time together and were on a more consistent schedule.

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Color Me Successful

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Rationale/Introduction

In my 3rd grade class I have 2 students identified as dyslexic. They go to a dyslexia class every day, but I still see them struggle consistently with reading fluency. I talked to a colleague who is majoring in Special Education. She suggested that I use colored trackers with them while they read. I gathered information, and the research behind it shows great success. I will be having these 2 students use colored trackers as they read to see if it increases reading fluency.

Question/Wondering

I wonder to what extent colored trackers would affect reading fluency for 2 dyslexic students in my 3rd grade class.

Methodology/Results

I chose to do running records on the two male students, one of which is Caucasian and the other Hispanic, with a dyslexia diagnosis in my 3rd grade class. Neither student qualifies for free and reduced lunch. For their running records, I did cold and hot reads, with and without the colored trackers. I tracked their number of words correct per minute, the number of mistakes they were making per minute, and their prosody score out of 4 using a rubric. I did two cold reads and two hot reads with and without the colored trackers.

My data showed that Student A read, on his cold reads without a colored tracker, an average of 38 words per minute, missed an average of 4 words per minute, and read at an average of 1.5 on the prosody scale. Student A read, on his hot reads without a colored tracker, an average of 48 words per minute, missed an average of 6 words per minute, and read at an average of 2.5 on the prosody scale.

Student B read, on his cold reads without a colored tracker, an average of 41 words per minute, missed an average of 5 words per minute, and read at an average of 1.5 on the prosody scale. Student B read, on his hot reads without a colored tracker, an average of 46 words per minute, missed an average of 5 words per minute, and read at an average of 2.5 on the prosody scale.

Student A read, on his cold reads with the colored tracker, an average of 52 words per minute, missed an average of 4 words per minute, and read at an average of 2.5 on the prosody scale. Student A read, on his hot reads with a colored tracker, an average of 68 words per minute, missed an average of 2 words per minute, and read at an average of 3 on the prosody scale.

Student B read, on his cold reads with a colored tracker, an average of 51 words per minute, missed an average of 3 words per minute, and read at an average of 2 on the prosody scale. Student B read, on his hot reads with a colored tracker, an average of 65 words per minute, missed an average of 2 words per minute, and read at an average of 4 on the prosody scale.

This data confirmed the findings in previous research articles I read, such as the "study [which was] described in an article by Brazilian and French research [that] reports increased reading speeds for nine- and ten-year-old volunteers with dyslexia who used green filters" (Juliao 2018). Although I did not use a green filter with both students, the research and data confirmed that reading speeds increased with the use of a filter.

Implications/Recommendations

Based on the results, I am allowing these two students to continue using these trackers each day during all of their school work. I have discussed these results with my mentor teacher, as well as the Reading Specialist at my school. We have adjusted their 504 accommodations, and they will be allowed to use these colored trackers on their STAAR

test. In the future, I will be using these trackers with any dyslexic students I have, because the data shows that it makes a positive effect. If I redid the research, I would hope to have more time in order to test the different color trackers. For example, I used a green tracker with Student A (this color was used during throughout the research project I read about) and an orange tracker with Student B (the first time I had him read with the tracker he told me that he uses them at home, and that the orange one helps the most). This time I did not have enough time to test whether one color helped more than they others. I simply tested to see if the proven colors would work with them.

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An Effort to Diminish Students' Test Anxiety

Primary Researchers
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Rationale/Introduction

From elementary to post-secondary education, a student faces numerous tests, although test anxiety is a contributing factor to student performance on high stakes tests (Barterian 2013). Specifically, test anxiety and performance are significantly related to grade 3 and above (Hembree 1988). Although some students eventually learn how to thrive under testing conditions, others subdue themselves to the pressure of the tests. As a result, those students never receive the grade that they deserve and eventually doubt their ability as students. Even though there lie different ways to assess students, a majority of current education systems prefers a paper-based test, in which the students feel anxious. Therefore, not addressing such problems can possibly cause decreased motivation and lack of confidence of the students which can precipitate lasting pessimistic impact on the students' academic career.

In order to minimize such negative impact, I decided to construct research, in which I sought to find and evaluate a way to remediate test anxiety for all students. Within Integrated Physics and Chemistry course (IPC), which Ms. Garrett and I teach for four different periods, we had decided to provide students three minutes before the test in which students can freely discuss over the test booklet. To assess the results, I used surveys and test results of individual students. The survey asked each student about its confidence level before the student started the test.

Question/Wondering

How will providing short group-discussion time (three minutes) with the test booklets affect students' confidence in the test and their grades?

Methodology/Results

In order to discern the effectivity of the short discussion time before letting students take their test, I conducted surveys before three different unit tests within one nine-week period. Just before taking the test, students were asked to fill in the survey question, which was provided on the front of the test booklets. The question asked students "On a scale of 1 to 5, how confident are you that you will do well on this Exam?" Number 5 represented "very confident" or "able to receive 100," while number 1 represented "not confident" or "I know nothing." For the first two tests, I did not allow students to discuss before the test. Meanwhile, before the third test, I allowed students to freely discuss the test with the booklet with their table group partners for three minutes in order to research the effectivity of the remedial method.

Overall, 46 students participated in the research from four different class periods. The majority of the students were in 10th grade, while several students belonged to 9th and 11th grade. Most of the students fall under backgrounds with middle socioeconomic classes. All the students within the population completed the survey for the entire three tests. The ones who did not participate in more than one survey were ruled out from the research. Due to ISS, absence, and other reasons, some students could not or did not participate in the survey.

After each test, I collected the test booklet, in which students' surveys were done, and grades from the grade book and recorded in an Excel file. By doing so, I was able to organize the data by averaging the data collected within different conditions (with and without discussion) and aligning the data through a specific category (grades). Moreover, through creating the graph of the paper within the Excel file, I was able to visually present the trend that I recognized. Through the trend, I was able to answer the question that I initially proposed.

Within the study, it was evident that the confidence level rose when students were allowed to discuss the test before starting it. Specifically, the confidence level of the entire population rose by approximately 10% (from 2.88413 to 3.184783). Specifically, such a trend was more evident amongst students, who had high grades or relatively lower grades. For example, students who received A in average (students with 90 or above average test grades) exhibited an increased confidence level of approximately 12% from the original value (3.166666667 to 3.555555556), while

students who received a C or lower average (students with an average score of 79 or less) presented an increased confidence level of approximately 34% (2.465 to 3.305555556).

Nevertheless, the grades of the students experienced a slight fall, as the average dropped by approximately 2% after letting students discuss the test. During the first two tests, in which students were not allowed to discuss over the test, the average was 81.91304348. On the other hand, the average of the entire population's third test was 80.54347826.

Overall, it is evident that students were more confident after allowing pre-discussion before the students started the tests, as the students experienced a 10% rise in the confidence level as a group. However, the increased confidence level did not have an observable positive relationship with the test grades.

Implications/Recommendations

Through the research, I was able to reveal the optimistic effect of the small group discussion administered before the test, as students' surveys exhibited an increased confidence level after shortly providing students opportunities to discuss the test before taking the test. In fact, some students verbally commented on the positive effects on their confidence level when the discussion was allowed.

Nevertheless, the study had some weaknesses. First, the difference in confidence level and the change in average grade did not have positive relationships. Such discrepancy can be credited towards the uneven difficulty of each test and unit, varied quality of the lessons from each different unit, etc. Meanwhile, one can argue the lack of authority of the data, as I only could accumulate data from three different tests.

In conclusion, the study affirmed effectivity of a method that can alleviate students' test anxiety as a group through providing differentiation for the students with test anxiety as an entire group. In order to strengthen the authority of the research, I suggest others to administer similar research in the classroom in different socioeconomic class. However, especially, the research will have greater worth when tested within AP, Pre-AP, and even college level courses, in which students tend to experience greater test anxiety due to greater internal and external pressures and interests for higher academic achievements.

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Do Our Objectives Make a Difference?

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Rationale/Introduction

The purpose of this research is to test the effectiveness of classroom objectives and its role in student engagement. In order to do so we will have three different trials: The first trial will involve including our objective as we have done in the past, in the form of a daily agenda. The second trial will involve writing an explicit objective on the board, along with the daily agenda, and have it titled objective. The last trial will have the objective explicitly written on the board and it will be discussed at the beginning of class each day. Class averages will be tracked during all three trials and exit tickets will be utilized to determine student understanding and engagement with material.

In Faulconer's (2017) article *Increasing Student Interactions With Learning Objectives,* she discusses the importance of students actually working with the objectives as a part of the learning process. She explains that we, as educators, know students benefit from being informed of expectations and then she asks her readers if we are doing enough with our objectives. Throughout the article she explains different strategies used to increase student interactions with the learning objectives. The strategies consist of many different formative assessments. Throughout my research time I incorporated other forms of formative and summative assessment in order to further her research.

Question/Wondering

How does the presentation of an objective change the effectiveness of the objective?

Methodology/Results

This research was conducted on 162 Pre-AP Biology students between the ages of 14 and 15 years old. Of the 162 students, 72 are males and 90 students are females. The majority of these students are high achieving and motivated to do well in school on their own. While conducting my research, I set up three different trials. In my first trial I wrote my objective in the form of our daily agenda. In the second trial, I wrote the agenda and the objective word for word from my lesson plan. In the last trial I wrote the agenda and the objective on the board and discussed the objective with my students explicitly. These trials relate to one other in that they build on each other. Trial one is very basic, and students are provided very limited information about the direction of class, while trial three provides students with a true learning objective, as well as, the activities to be completed in class.

Throughout the trials, I tracked student engagement and student understanding of the objective. In order to monitor student engagement, I used student engagement forms. I utilized exit tickets and other forms of formative assessment to assess student understanding. I used summative assessment scores from the end of each unit to determine which presentation of objectives was the most effective. After looking at trends in corresponding summative assessment grades, I determined that trial three was the most effective way of presenting the learning objective. The more the students understand the teacher's expectations of them and the way the class is going to flow, the more engaged they are in the class activities. The more engaged students are, the more successful they are in class. These findings support previous research findings.

Implications/Recommendations

This research has influenced how I will structure my classes in the future. Since it is more beneficial for students to know the direction of class, I will make sure my students know their daily learning objective for each class. This will promote engagement for the future. One thing that I would change in the future is the length of time that I conduct research. I would conduct research for longer than a few weeks in the future in order to back my findings with more data. An additional wondering, I would like to research more is what particular strategies are most effective in accomplishing the daily objective.

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Staying Current With Current Events

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Rationale/Introduction

Through the study of current events in our classroom, students are learning to have a broader view of the world. Teaching students to frequently engage in questioning and thinking critically about their environment, beliefs, and who they are teaches them to become citizens who are more aware and inclusive (Galczynski, Tsagkaraki, & Ghosh, 2011). Christine Pescatore (2007) stated that incorporating current events in the classroom builds reflection skills, critical thinking/literacy, the ability to analyze readings, questioning, language, and vocabulary. Higbee (2002) discussed how her classroom changed in the days after 9/11. Classrooms that are viewed as safe spaces that students are able to design for their own learning are vital for students to be able to participate in discussions about these topics (Higbee, 2002). Current events do more than simply give students something else to read and write about. Pescatore called this "empowering literacy" because students can take their new knowledge and do something with it. I was interested in seeing how the addition of current events in Mrs. Simpson's third-grade classroom would impact how aware our students would become of these events.

Question/Wondering

In what ways does discussing current events in the classroom affect students' global awareness?

Methodology/Results

In January 2019, I began sharing current events with our class once a week. We typically used the website Newslea.com for articles. I would select an article for the whole class to read and choose the reading level I thought was appropriate. The articles focused on various topics such as politics, money, culture, and others. I would Airdrop the article to the students and we would do a read-aloud. After reading the article, we discussed what we read, made connections to other news stories the students knew about, and asked questions. I also sent Google Sheets to the students before reading the weekly article and asked them to count the number of days in the last 7 they watched, listened to, or read the news. Overall, the number of times students watched the news each week stayed relatively consistent. In Week 1, the students answered in only four categories of the eight. As the weeks went on, the data showed more variability as students watched the news more or fewer days. During Week 1, only 39% of our students said they had not watched the news at all over the last 7 days. Since that week, that number has been at 43% or more each week. That means that more students in our class are not watching, reading, or listening to the news than when we started. Although that is true, during Week 1, only 5% of the class that day (one person) said they watched the news at least four times over 7 days. Since implementing the reading of current events in our classroom, that number has always been at least 6% and as high as 16%. The students had also been making connections to the current events we read each week. When we discussed each article, I asked the students if they could make any connections to other stories they had heard about from the news recently. Whenever this happened, the class would receive a tally and I counted our total. The number of connections has ranged from zero to four.

Implications/Recommendations

I believe that this action research project was successful in growing the students' global awareness, but not as effective in regard to the students watching the news at home more. Global awareness can benefit students, and it can be integrated into classrooms as seen in this study. Although older students are learning about the world around them in their curriculums, younger students are often missing this. In the future, I think I would suggest a more individualized approach. Most of the students enjoyed reading our current events, but I think they would be even more excited to choose their own topics to read. The website I used to access articles has topics such as politics, money, kids, environment, and more. If we had set aside more time for current events each week, I would have liked for the students to have time to browse for an article of their choice and then possibly discuss it with a partner. I did enjoy this new practice overall and my students seemed to as well.

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Logically Speaking

Primary Researchers
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Rationale/Introduction

The ability to make predictions and inferences about texts requires logical thinking. According to student STAAR results from 2018, the category in inferencing and reasoning was one of the lowest scoring areas, consequently, the English department at Robinson High School has been specifically targeting inferencing in every grade. According to a study conducted in 2015, Catts and other researchers found evidence showing early reading comprehension skills being stronger in young learners that were exposed to logical reasoning skills. In 2016, Ludo Verhoeven and Elaine Segars took the idea of logical brain processing increasing comprehension from an early reading developmental level to a high school level. They specifically tested students' improvement of inferencing skills with increased logical thinking exercises. I took this to my own classroom to examine whether or not logic puzzles would help students' inferencing and reading skills within the classroom.

Question/Wondering

Does implementing logic puzzles in the classroom increase student inferencing skills?

Methodology/Results

For this project, I chose to study two Freshman classes over a period of two observation weeks (Mon-Thursday). One of my classes was evenly split with 9 girls and 9 boys; 2 were Hispanic, and the remainder were Caucasian. The second class I chose had 12 boys and 5 girls; 6 were Hispanic and 11 were Caucasian. In each class, I gave my students a simple 8th grade level inferencing worksheet. The worksheet gave mini-stories and asked the students to make basic observations about the characters' and other details within the passages. I asked them to complete the worksheet in 10 minutes and rate the difficulty at the top, from a scale of 1-10 (10 being most difficult). The students' ratings ranged everywhere from 1-8. Most of them did fairly well with the short answer observation questions; however, they all had room for improvement. For the next three days, I assigned one logic puzzle a day. On the first day, I let the students struggle for about 10 minutes, then I helped them walk through the process. Most agreed that it was difficult, but fun to be challenged. The following day, I had the students work alone on the puzzles for 5 minutes, then I allowed group work for another five. After that, I went over the answers. A few students in each class answered them correctly. The third day, we followed the same process. 75% of the first class was able to come up with the correct answers in their groups, and about 50% of the second class was able to solve it. The students steadily improved in their abilities to solve logic puzzles, and nearly all of them were solving them alone by Wednesday of the second week. On Thursday of the second week, I gave the students another inferencing assessment similar to the first. I combined the data for both classes. Eighty percent (28 students) made more clear and notable observations about the text. Sixty percent (21 students) wrote twice as much (or more) information about their observations on the post-assessment as they did on the pre-assessment.

Implications/Recommendations

While the above results answered my wondering question, affirmatively, in the future I would extend this study throughout a semester. The students' struggle to comprehend logic puzzles was greater than I anticipated. By the end of the study, I heard the students discussing about how they assumed the post-assessment would be taken for a grade, which could have increased their motivation to complete the answers more fully. Logic puzzles can greatly benefit student comprehension and inferencing skills as they require students to read the text carefully, look for context, and draw conclusions. However, the implementation of logic puzzles in the high school English classroom should be gradual and supplementary.

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How Question Stems Impact Understanding in a Pre-AP Geometry Classroom

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Rationale/Introduction

Students often ask "questions" in class that are, in fact, simply declarative statements of confusion. When students pose their frustration in this way, a teacher may not understand the cause of the frustration and, in turn, may not readily have the specific information needed to respond accordingly. Through the use of question stems in the classroom, students will be able to pinpoint what information they need to know and formulate a meaningful question related to their confusion. Much like teachers need to be able to "pose purposeful questions" (NCTM, 2014), it would benefit students to pose purposeful questions of the teacher and their peers as well. This seems to align with a research study conducted by Hu and Chiou (2012), who found that fifth-grade students had an increased level of understanding when they were given higher-order question stems to prompt their question formation. Based on this study and on observations of frustrated students who were unable to pose questions in my classroom, my hope was that providing my students with question stems would positively impact my students' ability to pose questions and subsequently increase their ability to perform well on class assignments and activities.

Question/Wondering

Will teaching students how to use question stems and requiring their use impact their ability to ask meaningful questions, and will this subsequently impact their overall understanding and performance in the classroom?

Methodology/Results

My research was conducted with ninth-and-tenth-grade students who were in Pre-AP Geometry at Midway High School in Waco, Texas. Across four class periods, 99 students ages fourteen to sixteen participated in the study. To start my research project, I recorded the questions my students were asking. For the first 20 minutes of instruction for all four class periods on March 18, I recorded students' questions. I took note of both the frequency and type of question. I sorted the questions into the levels based on Bloom's taxonomy of questioning (Bloom, 1956). On March 20, students were given a quiz over the content taught on March 18 and March 19. I recorded the quiz grades. On March 25, I distributed question stems to each of my students and modeled how to use them. The question stems are in Table 1.

Table 1	
Question Stems	
Question	Bloom's Taxonomy Level
What is…?	Knowledge
What is the difference between…?	Comprehension
How is… the same of different as…?	Analysis
Why is … important?	Application
How do you do…?	Comprehension
What is the main purpose of…?	Evaluation
When is … useful?	Application
Why do you do…?	Comprehension
How can I use this for a problem like…?	Evaluation

Note: Questions are listed in the order that they were presented to students. They were given in this mixed up order to ensure students did not have a perception of "easy" or "hard" questions.

When modeling how to use the question stems, I showed students an example of a question to ask, and what my thought process was. Then, I recorded the questions that students asked during notes. I reminded students to use the question stems when they asked questions. At the end of the day, I once again noted the frequency and type of questions asked by students. The students were given another quiz on March 27, which covered the information given on days when students had the question stems to use during notes and work time. I compared student grades on both quizzes to examine the impact of using the question stems. I also compared the question type and frequency before and after the question stems were distributed to see if the question stems impacted the number and level of the students' questions, and in turn to see if an increase correlated with an increase in understanding, shown by the quiz scores. Results can be found in Table 2.

Table 2

Results from Data Collection

Before Question Stems		After Question Stems	
Number of Questions Asked	16	Number of Questions Asked	25
Knowledge	43%	Knowledge	15%
Comprehension	36%	Comprehension	40%
Application	7%	Application	8%
Analysis	12%	Analysis	20%
Synthesis	2%	Synthesis	7%
Evaluation	0%	Evaluation	10%
Quiz Average	78.25	Quiz Average	95.29

Note: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation values are given as percentages of the total number of questions asked. The Number of Questions Asked and Quiz Average values are given as the average across four class periods.

The number of questions asked increased, on average, by 9 questions per period. Additionally, the students scored more than 17% higher on the quiz administered after the use of the question stems. Although students continued to ask knowledge and compression questions, the higher order thinking percentages increased in all categories.

Implications/Recommendations

This study supports the notion that providing question stems to students increases the quantity and quality of questions, and the use of the question stems possibly leads to an increase in comprehension as shown by the increase in quiz scores. This study was conducted half way through the spring semester. I would suggest that in the future, the question stems are distributed and modeled in the beginning of the school year. Students were apprehensive of the question stems at first and thought it was odd to utilize them late in the year. Additionally, students seemed to struggle with inserting their content-specific question into the question stems, so I would recommend giving students a content-specific list of question examples in addition to the blank question stems.

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The Effects of a Token Economy on Improving Student Behavior

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Rationale/Introduction

In my third-grade classroom, I have a group of students who have trouble following classroom procedures and behavior expectations. Their off-task behavior is often a distraction to other students and continually affects their ability to complete class assignments properly. Due to this issue, I decided to implement a token economy to encourage desired student behavior in my classroom. According to Universal Class (2019), "Tokens are merely a 'marker' or reminder of success, and the more you collect, the greater or more desirable are the choices." Research has shown that token economies have been effective in reducing multiple problem behaviors (Kazdin 1982; O'Leary, & Drabman, 1971; Fiksdal 2014). My goal is to successfully decrease undesired student behaviors, while using tokens as positive reinforcement.

Question/Wondering

How does the establishment of a token economy system impact third grade students' desired classroom behaviors?

Methodology/Results

In this study, my participants were three third graders. I chose this small group of students due to their difficulty to follow directions and classroom expectations, remain focused on assignments, and have positive behavior. Before beginning the token economy with these students, I collected the total amount of praises and corrections I gave to each of my three students throughout one week. My three students had more behavioral corrections than praises without the token economy system in place. When I implemented the token economy with my students, I would give them a token for each praise and I would take a token away for each correction. Over a four-week period, I would count up the total number of praises and corrections for each of my students at the end of every week. This allowed me to see if my students' praises were increasing each week and if their corrections were decreasing. Overall, my students' praises outweighed their corrections from earning tokens; however, I did have two students whose corrections surpassed their praises one out of the four weeks. After having my students complete a self-reflection, I found that they felt the token economy helped them to improve their behavior in the classroom.

Implications/Recommendations

My research has shown me that a token economy system can increase desired student behavior in the classroom. At the beginning of this study, I was very hopeful that the implementation of a token economy would help my three students improve their undesired behavior. I have found that receiving tokens only helped my students improve their positive behavior temporarily. I was able to see significant improvement in one of the three of my students' behavior. By using a token economy, I was able to see that this behavior modification system works for some students and does not consistently work for others. If I were to repeat this study, I would like to see how a token economy affects the behavior of my whole class, rather than a small group. I believe a token economy can increase positive student behavior, however, it was not beneficial for all of the three students I had chosen as my participants.

Reference(s)

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Beat the Time to Save the Time

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Rationale/Introduction

My students have a difficult time transitioning from one subject onto the next. This transition time takes away from the time that they can be learning and practicing. According to Todd Finley, "If you save 15 minutes a day through more effective transitions, that will result in 45 extra hours of instructional time per year" (2017). Therefore, if we can make transitions into a game with a reward at the end then third graders would be more motivated and would receive a plethora of additional instruction time.

Question/Wondering

How could the implementation of a game improve transition time from subject to subject for my third-grade students?

Methodology/Results

To gather data, I kept anecdotal notes, and I recorded their transition time each day. I completed the research project based on my pre-assessment. I conducted the study on 21 third graders at Mountainview Elementary. The students would receive 5 minutes from the time they cross the gate from laps to walk into the classroom, collect their materials, and meet in their assigned spot on the carpet. The students must complete each step in a safe manner. If they beat the time on the timer than they would receive a letter in the word P-O-P-C-O-R-N. Once, the students spelt out popcorn. They receive a popcorn party. To begin the research, I started by explaining the research to my students. I informed them on the goal, my expectations, how to achieve the goal, and the reward. I gathered assessment data by pressing the stopwatch right when the first student crossed the gate outside and stopped the stopwatch when they were in their spot, with their voices off, with all of their materials, and their eyes on the speaker. Each day, I would record their time by screen shooting their stopwatch and recording it together on a bar graph. I noticed that it took the students 8 days to spell the word POPCORN. The student's transition time decreased when we implemented the game. I observed that the majority of the students were successful with this game. I noticed their transition time decreased as the days passed. There were 4 students that still had a difficult time transitioning quickly. My results supported my previous research findings. By improving the transition time, it allowed additional instructional times to our writer's workshop.

Implications/Recommendations

Teachers could implement a reward system/game to encourage students to transition quicker. The project was successful and the students were engaged. A weakness to the project is that it would be difficult to maintain the popcorn party, so maybe you could implement a different reward. I do wonder if you changed the reward if it would affect the engagement.

Reference(s)

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Approaching Sight Words According to Learning Styles

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Rationale/Introduction

I have some students who are still struggling with some of the sight words we have been teaching since the first week of school. I noticed this happening during a sight word activity where the students had to work in partners. I began to see huge gaps among the students' ability to read and produce previously taught sight words. The students falling behind the gap were three boys and one girl. The goal of my research is to determine if practicing sight words in an individualized way can impact sight word recognition. We spend so much time in school learning about different learning styles that I believe we should individualize instruction in an area where students typically struggle. According to Lynott & Connell (2013) "modality-specific norms of perceptual strength are useful for exploring not just the nature of grounded concepts, but also the nature of form." When this is applied to sight word recognition, the student can fully understand the concept and nature of the specific words and are no longer forced to use rote memorization.

Question/Wondering

In what ways might sight word intervention based on each student's specific learning modality affect achievement in sight word recognition?

Methodology/Results

The study was conducted in a general education kindergarten classroom in an average socioeconomic district. During our daily reading and writing practices I pulled each student and administered a multiple-modalities test to identify the learning style best suited to the individual. I developed sight word activities based on the students' modalities and practiced sight word recognition each day. The goal is to help each student meet the kindergarten standards and determine if sight words are better learned based on each student's learning styles. I noticed in my multiple modalities assessment results that none of my students were visual learners. I believe this could have contributed to why these students struggled specifically with sight words. For my auditory learners, I implemented many activities where the students could record themselves speaking and spelling the words and then listen to themselves reading the words while building them. For my tactile learners, we would spend a lot of time building the words out of various objects such as play-do, magnetic letters, and even use their bodies to spell. We would build the words and then read them aloud. I conducted a pre-test and a post-test to see if my efforts were having an impact on student sight word recognition. Each student was able to recognize significantly more sight words than before the study began.

Implications/Recommendations

Overall, this study has shown me clearly that when we pay attention to our students' strengths, we can impact their ability to learn. Over a short period of time, I was able to increase each student's sight word recognition by an average of eight more words than before the study. I think it is crucial to pay attention to how students learn and use it to improve areas where students struggle. If I were to change anything about my study, I would have liked to gather data from a larger group of students to gain a broader understanding of the impact of approaching sight words based on learning styles. Going forward, I will most definitely implement sight word activities based on students' learning modality because it is crucial to developing meaningful connections to the words.

Reference(s)

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A Token Economy and the Completion of Requests

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Rationale/Introduction

A student in a 5th grade inclusion setting engaged in not completing requests that were verbally presented to him. Requests were considered to be incomplete if the student did not engage in the behavior that he was asked to do or if one or more individual reminders were provided prior to the completion of the request. Baseline data were collected in the student's math, English language arts and reading, and intervention classes to determine the percentage of requests that the student did not complete during a class period. Of the requests verbally presented to him in math class, the student did not complete an average of 42% of the requests. The student did not complete an average of 31% of the requests presented to him in English language arts and reading class. In intervention class, the student did not complete an average of 25% of the requests presented to him. Bellipani, Tingstrom, Olmi, and Roberts (2013) note that issues can arise in contexts that are academic and outside of school when noncompliance is high. From interviews and observations, I concluded that the validity for teachers addressing this behavior is evident as the incompletion of requests can influence the productivity of a classroom and may affect the learning of content (J. Lund, personal communication, January 30, 2019; M. Lutz, personal communication, January 31, 2019; K. Grissom, personal communication, February 4, 2019).

Question/Wondering

How does a token economy affect a student's completion of requests that are presented verbally?

Methodology/Results

The student is a 10-year-old male in the 5th grade. A behavior intervention plan aimed at decreasing the student's behavior of not completing requests was implemented over 8 weeks. First, I used direct and indirect observation methods in order to determine the frequency and function of the behavior. In English language arts and reading, I completed seven observations that were each 90 minutes long. In math, I completed four observations that were each 90 minutes long. In intervention, I completed four observations that were each 45 minutes long. During these observations, I collected frequency data on the number of requests that the student did and did not complete. From this information, I developed a percentage that expressed the percentage of requests that were not completed out of the total number of requests. I also conducted three observations that focused on the behavior of not completing requests, as well as the behavior's antecedents and consequences. The purpose of these observations was to determine the function of the behavior. In order to determine the function of the behavior, I also completed four interviews. I found that the functions of the behavior were escape and attention. Second, I developed a function-based behavior intervention plan with the goal of decreasing the frequency of not completing requests. The primary method that I used in the behavior intervention plan was a token economy. In this system, the student received a card with stars on one side and a reward menu on the other side. The student received stars for completing requests. The student could use those stars to access secondary reinforcers. On one day each week, I collected data on the frequency with which the student completed and did not complete requests. By incorporating secondary reinforcers that included opportunities for escape that were contingent upon the student completing requests, the behavior intervention plan was function-based. This behavior intervention plan was implemented in the student's math, English language arts and reading, and intervention classes. In the preliminary results, some progress was demonstrated. During the intervention phase, the student did not complete an average of 17% of the requests that were presented in math class. The student did not complete an average of 12% of the requests that were presented in English language arts and reading class. Only one data point was obtained in the student's intervention class. This is due, in part, to the fact that intervention class was not held on some of the days that data was collected. On the day that data were collected, the student did not complete 0% of the requests that were presented in intervention class. In the student's math, English language arts and reading, and intervention classes, the average percentage of requests that were not completed decreased by 25%, 19%, and 25%, respectively. It is important to note that the data collected were strongly influenced by the total number of requests that were recorded in a class period. Furthermore, the total number of requests that were recorded in a class period varied from week to week and from class to class.

Because of this, some of the percentages that were recorded may overrepresent or underrepresent the behavior of not completing requests.

Implications/Recommendations

This intervention could be implemented by classroom teachers. One of the strengths of this study is the way that data were collected in three classes. One of the needs of this study is to adjust the intervention procedures in order to make them more discrete. While the card with the stars and the reward menu is small, there were times in which I questioned whether it may single a student out. In order to prepare for this possibility, I would recommend that a class wide system be put in place that includes a token economy. While the system would be class wide, the teacher could establish a different reinforcement schedule for the student with whom they are working with. In addition, the rewards that are available to this student may be personalized in order to encourage the student to engage in the behavior of completing requests. Because it may be challenging for a teacher to be able to walk over to the student and provide them with a star, a system could be established that involves the teacher giving a signal to the student that informs them that they earned a star.

Reference(s)

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Approaching Letter-Sound Recognition in a Kindergarten Classroom Through Multisensory Learning

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Rationale/Introduction

In my classroom, there are three students who have shown a substantial need for learning letter-sound recognition. According to *Early Childhood Research Quarterly,* "Letter-sound knowledge is necessary for children to begin reading and writing, and kindergarteners who know only a few letter sounds are at risk for later reading difficulties." I will be focusing on three multisensory learning styles: visual, auditory, and tactile, to determine how these students learn best. Each week I will perform a pre-test, focus on just one learning style throughout the week, and perform a post-test. The goal of the research is to increase these four students' letter-sound recognition as well as learn each students' multisensory learning style.

Question/Wondering

In what ways does the implementation of a multisensory approach affect students' letter-sound recognition?

Methodology/Results

This study was conducted with three kindergarten students, two boys and one girl, in a mixed ability classroom over a three-week period. Data was collected by observations, pre-assessments, and post-assessments. I worked with these students in a small group setting during reading station time for 15 minutes each morning Monday through Thursday. My goal was to not only increase each students' letter-sound recognition ability but also determine the multisensory learning style in which each student had the most learning success. Multisensory learning is learning that happens through the senses, which act as pathways to the brain (Child1st). For this research study, I focused on three multisensory learning styles: auditory, visual, and tactile. I began each week, on Monday, by conducting a pre-assessment and introducing the new multisensory learning style we would be focusing on that week. On Tuesday, Wednesday, and the first five minutes of Thursday, I would guide students through practicing letter-sound recognition with activities specific to the multisensory learning style for that week. At the end of the week, on Thursday, I conducted an identical post-assessment that matched the multisensory learning style practiced. I discovered from their weekly pre- and post-assessments that this intervention was highly successful. The data, along with my observations, also confirmed the success of this intervention, as each students' letter-sound recognition highly increased by the end of the three-week period. I was also able to determine from which multisensory learning style each student learned best.

Implications/Recommendations

Based on my results, I highly recommend incorporating multisensory learning styles when teaching letter-sound recognition. When finding the proper support to give the students, it is important to discover which strategies will benefit the students most (Reeb). Therefore, I not only was able to use my data in implementing a routine of practicing letter-sound recognition, but also transferred the students' multisensory learning style to other content areas within the classroom. I believe that having the students placed in a homogenous small group positively impacted the nature of this study. The students could hear and see their peers practice letter-sounds alongside them, leading to more repetition. If I were to repeat this study, I would have liked more days in between the pre-assessment and post-assessment so students had more time to practice their letter-sounds with the specific multisensory learning style.

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Transition to Sitting Independently

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Rationale/Introduction

For my Action Research project, I worked with a student on independently sitting in a chair during instruction times. The student that I chose is a male who is five years old. He has been diagnosed with both Autism and ADHD. He is easily distracted when working, which encourages him to get out of his seat. Because of this, teachers seat the student in a Rifton chair. A Rifton chair has a seat belt buckle, arm rests, and a platform for students to comfortably put their feet on. My goal was to get the student out of the Rifton, into a classic four-legged chair, and engaged while in this chair during instruction time.

Question/Wondering

What is the most effective way to teach my student how to sit independently?

Methodology/Results

When starting my project, I questioned how I should go about transitioning the student. First, I wanted to see initially how the student would do in a classic school chair. I sat him in it for fourteen minutes during our circle time. I sat right behind him to go get him whenever he got up. He got up 32 times. I knew after that that this would have to be a slow and encouraging process. I thought to do it in stages of switching up the chairs. In my PPCD classroom, we have many options for student supportive seating, such as the rifton and cube chair. I thought I would have my student sit in a more independent chair in each phase of this goal. I would start with taking the foot rest from the rifton and then taking the buckle off the rifton. After he got up ten or less times, I would move my student to the cube chair. Once he got up ten or less times in the cube chair, I would move him to the classic school chair. Based off research, I knew my student would need motivators and constant reminders to remain in his chair. This would give him a sense of responsibility to stay in his chair (Meyer, 2017). I used an "First, Then" chart with him during this. It says, "First work, then Thomas." Thomas the Train toy was my student's motivator. After staying in his seat for three minutes, he would get Thomas for a minute. He enjoyed just holding him, so it did not take his engagement away.

My first idea was to take out the footrest under my student's feet. This did not faze him and he only tried to get up once during our fifteen minutes of observation. After this observation, I knew we had to unbuckle the buckle and see how often he would get up. Sadly, after the observation with no footrest, my student was out for two weeks with the flu and the chicken pox, so no data could be taken. When he came back, I unbuckled the buckle of Rifton and he got up thirty-one times in our twelve-minute observation. Unfortunately, no data could be gathered after due to unforeseen circumstances.

Implications/Recommendations

I will continue to work on this goal with my student. Although I have yet to see progress, I know that using the phases of chairs is a good idea. This helps the student slowly but surely ease into sitting independently. Having these transition chairs is strength. With how easily he gets distracted, I believe that in order for this to be a success, time and practice would be key.

For the future, I would research more specifically what chairs to use in the transition process. If there was a better transition chair besides the cube chair, I would use that if funds allowed. Also, I would try to find a better way to reward my student rather than waiting the three minutes.

Reference(s)

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The Impact of Interactive Videos on Classroom Engagement in First Grade Math

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Linda Cox, M.S. Ed., Intern Supervisor, Baylor University

Rationale/Introduction

In my first-grade math class at Robinson Primary, students are required to sit still, listen actively, and engage in eighty-five minutes of math each morning. Several of the students in my first-grade class have short attention spans and frequently become disengaged in content and distract the other students. This results in the rest of the class becoming off task. Stauth states that "Physical activity can increase academic performance, student focus and classroom behavior" (2014). Trambley also mentions "In order for students to be engaged and focused in class, they need to be active in class and not be sitting for a long period of time" (2017).

Question/Wondering

What effect will interactive videos have on overall classroom engagement and on-task behavior in a first-grade math class?

Methodology/Results

This study was made up of six first grade students, two male students and four female students at Robinson Primary. Robinson Primary is a suburban middle SES school. The students observed in this study ranged from all different ages and ethnicities. Student A is seven years and three months old and is Caucasian male. Student B is six years and eight months old and is Caucasian female. Student C is seven years and one month old and is Caucasian female. Student D is six years and four months old and is Hispanic male. Student E is six years and three months old and is Hispanic female. Student F is six years and five months old and is Caucasian female. This study took place over a three-week period in my first-grade math class. During this study, first-grade students participated in interactive math videos ranging in times from two to five minutes long. These interactive videos incorporated total body movement by having the students use different forms of physical activity. The first week of data was collected without a disruption in the students' schedule. The second and third week of data collected by having the students participate in the interactive math videos daily. The students participated in the interactive videos before the math mini-lesson was conducted. Data was collected through the use of engagement forms, student surveys, authentic videos of the students participating in interactive videos, and anecdotal notes. From the student surveys, my students communicated that they work better when watching interactive math videos. The data collected shows that with the use of interactive math videos in a first-grade classroom, the student engagement increased throughout the lesson and the off-task behavior decreased.

Implications/Recommendations

The results of this study confirmed what both, Stauth (2014) and Trambley (2017), suggested. The more physically active students were in the math classroom, the more engagement and academic success the students experienced. I would suggest doing an interactive video daily to increase classroom engagement. My research and findings indicate that students, in this age range, learn better after watching interactive math videos and are more engaged in math. In a future study, a greater sampler of data could be taken. Additional inquiries include: How can similar interactive videos be used in other subject areas to increase classroom engagement?

Reference(s)

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A Culture of Kindness

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Rationale/Introduction

"The way that we begin each day in our classroom sets the tone for learning and speaks volumes about what and whom we value, about our expectations for the way we treat each other, and about the way we believe learning occurs" (Kriete, p. 12) Since the school year started in August, I have noticed many negative interactions among my second-grade students. These negative interactions have included the students stating that they do not want to work with other students when placed in partner groups, tattling on others during class, and calling each other unkind names. The students in my class have shown that they only like to work with their friends in our class. When forced to go out of their comfort zones and work with different students than they normally would, most of my students shut down and refuse to work with those other students. Through this action research, I hope to see a shift in the culture of my classroom and a change in the way that my students treat each other through their words and actions.

The participants in this study were all twenty of my second-grade students. In my class, there are thirteen boys and eight girls. There is a wide range of achievement and socio-economic levels present. There are two Asian, eight African American, three Hispanic, and eight White students in my classroom. Seventeen of my students are English proficient and three are English learners.

Question/Wondering

In what ways does implementing morning meetings impact second-grade students' peer interactions?

Methodology/Results

The first step that I took in this action research process is to have my students complete a pre-action research survey where they were asked to identify which students that they feel they do and do not work best with and their reasoning for both. After I collected and evaluated all of the students' surveys, I began implementing fifteen-minute morning meetings three times a week on Tuesday, Wednesday, and Thursday mornings. During these meetings, the students worked on social skills such as looking at their classmates directly in the eye when greeting them, actively and respectfully listening when someone was talking, and offering thoughtful questions and comments on information that their classmates shared. On the days that my students and I met together, I created quantitative and qualitative anecdotal notes on which I recorded the number and types of positive and negative interactions that I observed between my students throughout the day. The last method of data collection that I utilized was videos and pictures of my students and me engaged in morning meetings. This data was collected over the span of four weeks. Once the four weeks concluded, I had the students complete a post action research survey on which the students were required to identify whom they then felt they could effectively work with that they believed they couldn't work with before. The students also provided feedback on the effectiveness of morning meetings and stated whether or not they would like to continue to meet and the reasoning behind their opinions.

Through the exploration of my wondering, I was able to observe a change in the behavior and interactions among my students. They began to use respectful manners and voice tones when having conversations with each other and showed care and consideration for one another. Taking time out of our daily schedule to intentionally promote kindness and create a safe and welcoming environment, where all of the students had the freedom to be honest and open with their fellow classmates, resulted in a noticeable difference in the climate of our classroom.

Implications/Recommendations

This study that I completed had many strengths and a small number of weaknesses. The strengths were that my students showed more respect and kindness to each other and intentionally took the time to ask questions to get to know one another on a deeper personal level. The weakness that my study displayed was the difficulty in recording all of the positive and negative interaction data. In the future, I would change this by observing and recording these interactions over a smaller number of hours in the day instead of the whole day. I would also make changes to this

study by introducing morning meetings to my students starting on the first week of school. Now that I have explored the power of morning meetings and their effects on the relationships among my students, I believe that it would greatly benefit my future students to participate in these meetings throughout the entire school year.

Reference(s)
Kriete, R., & Bechtel, L. (2002). *The Morning Meeting Book* (2nd ed.). Greenfield, MA: Northeast Foundation for
    Children.

Student-Teacher Cooperation to Promote Accountability in the Classroom

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Rationale/Introduction

My students have one week to complete daily assignments so that they have ample time to ask questions and understand the material. However, some students do not keep track of their work and fall behind quickly, allowing missing daily assignments to accrue. I examined if a visual tracking system in the classroom would impact students' completion of their daily assignments. Each class period had a poster on the wall identifying students only by ID number to maintain privacy with columns to mark completion of each daily assignment. This seems to fall in line with research related to trickle-down accountability in four school districts that monitored and reviewed the effects of including students in the data-collecting process to promote student motivation (Marsh, Farrell, & Bertrand, 2016). By examining if a daily record-keeping system of assignments on display in the classroom would impact students' daily grade average, I hoped to promote accountability.

Question/Wondering

Will a record-keeping system of assignments on display in the classroom impact students' daily grade average?

Methodology/Results

Seven different class periods of Pre-AP students totaling 121 students participated in the study. Each class period was comprised of freshmen and sophomores, and class size ranged from 10 to 23. Prior to implementing any changes, I recorded the number of daily assignments that were not turned in on the day they were due for three consecutive assignments in the fourth-six weeks grading period. At the end of the fourth-six weeks, I recorded each daily assignment average per class period. At the beginning of the grading period, the students were introduced to the new record-keeping system, and their poster was displayed on the wall (see Figure 1). Expectations and goals were set to use the posters to track individual progress on assignments. The student ID numbers were listed on one side along with a column for the daily assignments in the grading period. Once a student completed a daily assignment and turned it in, the student received a sticker to place in the corresponding column of the assignment.

Figure 1. Record-keeping system of assignments for 4th Period.

On the due date for the first two assignments, I recorded the number of missing daily assignments. After an extended period to allow late work to be turned in, I recorded the daily grade average per class period. As more assignments were distributed, students could use the posters to track their own progress related to assignment completion.

Table 1

Missing Assignments

Period	Without Visual Record-Keeping System				With Visual Record-Keeping System			
	HW 4	HW 5	HW 6	**Total**	HW 1	HW 2	HW 3	**Total**
1st	8	10	11	**29**	9	7	9	**25**
2nd	6	13	9	**28**	4	7	9	**20**
3rd	4	9	8	**21**	3	1	3	**7**
4th	4	9	8	**21**	1	2	7	**10**
5th	8	14	9	**31**	6	8	10	**24**
6th	12	13	13	**38**	8	12	10	**30**
8th	8	19	10	**37**	5	7	10	**22**

Table 2

Daily Average Grades

Period	Without Visual Record-Keeping System				With Visual Record-Keeping System			
	HW 4	HW 5	HW 6	**Avg**	HW 1	HW 2	HW 3	**Avg**
1st	59.2	55.6	58.6	**57.8**	80.3	70	54.3	**68.2**
2nd	83.8	74.7	77.7	**78.7**	92.1	81.6	79	**84.2**
3rd	70.6	60.2	50.4	**60.4**	82.5	96.5	91.5	**90.2**
4th	77.3	76.2	68.5	**74**	95.4	96.7	88.5	**93.5**
5th	71.5	63.2	86.7	**73.8**	85.2	85.2	70.5	**80.3**
6th	60.5	62	45.6	**56**	74.7	71.4	71.4	**72.5**
8th	82.5	73.6	74.4	**76.8**	90.8	92.1	78.2	**87**

Overall, the data showed a consistent decrease in the total number of late assignments per class period when the record-keeping system was utilized (see Table 1). Also, daily assignment averages were consistently higher when utilizing the record-keeping system, as more students were turning in assignments (see Table 2). The record-keeping system provided additional accountability to ensure that assignments were completed.

Implications/Recommendations

The goal of implementing the record-keeping system was to provide students with a visual reminder of missing assignments. This benefited students as evidenced by an overall increase in assignment completion rate and a higher daily assignment average. Further, it seemed to simplify communication between the teacher and each individual student about when work was missing and following up with the student after the due date passed. Providing additional opportunities such as a visual tracking system to promote accountability in the classroom should be supported by teacher and student conversations related to the record-keeping system. Specifically, the teacher should follow up with the student and reference the record keeping system on display as part of his or her routine practices.

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Growth Impact of Blended Learning and Co-Teaching

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Rationale/Introduction

Co-teaching has been shown to be effective at increasing learning and engagement in the classroom because it gives the students a smaller group environment, encourages asking questions, and allows them to apply what they are learning in a differently paced environment (Collopy, 2009; Murawski, 2009). I wanted to study this impact in relation to the growth that the students experience on the District Benchmark Assessment in February. My research was based on working in small group environments with my mentor or me at least twice a week or doing blended learning via Hyperdocs, Learning Farm, or a flipped classroom type approach where they watch the videos in class. With watching the videos, the students will be able to playback if they miss something. They will also be able to take notes in the ways that they prefer if the standard note-taking structure is not as useful for them.

Question/Wondering

What effect does co-teaching and blended learning have on student growth?

Methodology/Results

Since the return from Winter Break, there have been up to three main groups in the classroom based on the needs of each period as well as the individual students. The three groups consisted of the students who were doing Hyperdocs, the students who were doing Learning Farm, and the students who were in the standard classroom setting. Hyperdocs are PDFs that are created for the students to teach them lessons by allowing them to be self-paced as well as allowing for them to approach topics that the whole group was not learning yet. These students were generally those who understood what was happening in lessons after the first day or two and would feel bored when doing work for the rest of the time before the test because they already seemed to have mastered the content and needed an extra challenge.

Learning Farm is a website that the students had their own accounts which allowed them to again pace themselves through the lessons that the rest of the students were working on. This allowed for the students to also take their own notes instead of just taking the notes that were assigned to them in class. These lessons were done typically by students who generally did better in a smaller group environment, either deterring them from distraction, giving them a chance to pace themselves, or allowing them the chance to decide the notes that were best for them individually.

The last main group of students were those who would learn in the standard classroom environment in addition to being part of a co-teach environment between my mentor and myself. Depending on the day, these students would be in a whole-group setting, two small group settings, or three small group settings. When they were divided into two groups, my mentor and I would both be in charge of one of the groups with all of those students being divided between the two of us. When they were split into three groups, however, they would be with either of us or working independently.

Out of the of the 12 students who participated in the Hyperdocs, 11 of their scores were tracked with them showing an average growth of 20.72%, with each of their scores increasing. The 12th student was not included because I could not gain access to his 7th grade STAAR test score. Out of the 12 students who regularly participated in Learning Farm, 11 of their scores were tracked, showing an average growth of 4.09%. The 12th student did not show up for the District Benchmark Assessment and has since been left out of the data. Of the students who were in the Learning Farm group, their scores showed a very strong link between their scores and the effort that they put in to learning the material and completing the lessons, which included two students who had not passed the STAAR test in 7th grade passing their February District Benchmark Assessment.

With an average of 4 students per period being part of those two groups (Hyperdocs and Learning Farm), it allowed for a smaller feeling classroom environment which caused the students in the standard smaller feeling classroom to also improve, averaging approximately a 12% growth from their 7th grade STAAR tests. Among these students was one student who had not previously passed a unit test for the entire school year who, after a unit with multiple days per week spent in small group co-teach lessons, not only passed the test, but also only missed one of the questions.

Implications/Recommendations

In general, I can definitely say that the students who were willing to put in the effort to make their self-paced Hyperdocs and Learning Farm experiences work definitely made the experience worthwhile and a meaningful use of class time. However, some of the students who would not put in the effort required of them to make the lessons meaningful were pulled back into the whole-group setting after the results of their District Benchmark Assessments were scored. These students were unable to be independent in managing their time and doing the lessons.

If a teacher finds that he/she has students who are ready to move on to different or more advanced content and the teacher believes that he/she can trust these students to do as they are instructed and pace themselves properly, it is definitely worth it for the teacher to look into creating Hyperdocs and implementing them into the classroom. However, the results for the students in the Learning Farm group were not conclusive enough to be recommended for or against.

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Effect of Technology and Small-Group Instruction

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Rationale/Introduction

When envisioning the typical classroom, one would usually imagine a chalk board with desks in rows and an apple on the teacher's desk. The teacher is standing at the front of the room lecturing while the students are taking notes and copying diagrams. This design has remained the norm and as the times change and advancements in technology show their faces in the classroom, it seems the way we are teaching is not getting the message. What I wanted to see, for my Action Research Project, is just how effective the old ways of teaching are in the context and abilities of today's classrooms and students. In Midway Middle School each student and teacher are given an iPad and thus each lesson taught incorporates, in some way, a use of that invaluable resource. For my research I divided my six 8th grade PreAP science classes into two groups, morning and afternoon, which ensured academic and individual diversity as to not bias the results and targeted two applications: one that had a role in how the information was delivered and one in how the students could practice with the material. For a whole unit, I held my morning classes as a control, keeping their routine with small-group instruction and use of iPads the same, highly student-centered, and my afternoon classes as the test group, employing whole group instruction and practice through stations, highly teacher-centered. As written by Chin Lay Gan and Vimala Balakrishan (2018), "Online learning when combined with mobile technology transforms the traditional classrooms from teacher-centered to student-centered classrooms." To determine the results, student grades, pre- and post- student surveys, and field notes were recorded.

Question/Wondering

What is the effect of technology and small group-instruction upon student learning?

Methodology/Results

The 79 8th grade PreAP students in the test group ranged from 13-14 years of age; 31 males and 48 females; 3 Asian, 3 African American, 23 Hispanic, 49 White, 1 two or more races. For the technology, I targeted the applications of Edpuzzle, and Schoology in my research. In the control classes I used Edpuzzle with embedded formative questions and fill in the blank notes to deliver the lecture through video that could be paused, rewound, and watched as many times as the student needed and Schoology for practice with the material with multiple attempts available. I also continued to employ our usual use of small-group instruction, in addition to the iPad applications. This provided the students with additional practice as well as an opportunity to ask questions and clarify misunderstandings in a more 1:1 setting, something that has seen to be difficult for students in a whole group setting. This arrangement also allows students to be in control of their learning. At the beginning of each week, the students get a learning log, of my mentor's design, that lays out everything to be done throughout the week and serves as a to-do list as well as a schedule that they use. The students like using it because they have the freedom to choose what from the list they do when and with what pace they want to go at. Rather than being stuck to the rigid plan of today is only (x) and you need to complete it, with one attempt, in (x) time, the whole week is theirs. This also helps them develop their skills in time management and planning.

In the test classes, students took fill-in-the-blank notes during my whole-group lecture and had single attempts with the practice materials. This was difficult at first to orchestrate because with the grouped seating arrangement, not all students could see the TV and thus had to move, which created disruption. Students were getting lost on the notes due to "zoning out" and overall did not feel connected to the material at all. Despite how exciting I tried to make the information, and despite my students sharing their appreciation with me, they were lost in being talked to for 40 minutes. Also, with the station design for practice, the one attempt arrangement prevented students from learning from their mistakes and trying again: taking them that much farther away from understanding and higher order thinking. It also did not provide me with any kind of numerical grade to show for their comprehension.

The results, provided by the grades of what the two groups had in common (2 quizzes and a unit exam), in addition to the replies to the pre- and post- surveys, showed in the grades for the first quiz an increase of 1.31% in the

afternoon classes compared to the morning, in the second quiz a decrease of 7.38% in the afternoon class, and in the unit exam a decrease of 3.54% in the afternoon. In the pre survey I asked if the students would like to see less technology in their classes during school and most said, in so many words, yes: we are with it every day otherwise so it would be interesting. However, in the post survey, a healthy majority did not enjoy the two-week period and preferred the abilities that came with the technology that they felt helped their learning and ability to understand. Some appreciated seeing from the other side and in turn learned something new about their learning style but overall, they knew that technology ran smoother and worked better and they wanted it back.

These results supported my previous research findings: technology centers the learning and class time on the student, putting them in control and small groups assists with conceptual learning. With a content of science, practice with models is necessary as was discussed by DePree (1998).

Implications/Recommendations

This study will affect my instructional practices going forward. Knowing definitively that technology is more beneficial to students will completely shape how I move forward into the professional sector. For other instructors and for schools who are unsure about where technology can take them or are under pressure from their district to implement small group instruction but are unsure how: this study and its data will fill those gaps. I will fight for technology to be a part of my classroom.

The strengths of this study were that each student had their own personal iPad, which made the student- centered independent ideal very accessible to me. If this were one step down: if we had a class chrome cart or a set of laptops, that resource would be better than nothing hands down, but it does limit learning to the classroom which is not as beneficial.

The weaknesses of this study I found were not using the same exact students for both groups: the academic abilities were varied over both groups, but I think having the same student's data side-by-side for both setups would be more telling. I also think that having more time to try the teacher lecture method would prove more drastic. Over the course of a whole school year, the students would be able to build a routine with this style of material delivery and not go from one to the other too quickly to find a rhythm like I saw with this. If given the time and the resources, I would like to see this study again over the course of a year for both methods. It wouldn't be the same students, but it would be random from year to year and each method would have more time to develop and show their true colors.

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Gan, C. L., & Balakrishnan, V. (2018). Mobile technology in the classroom: What drives student-lecturer interactions? *International Journal of Human-Computer Interaction, 34*(7), 666-679. doi:10.1080/10447318.2017.1380970

It's Focus Time

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Rationale/Introduction

I have three 2nd grade boys who always rush through their independent shared reading work so they can move on and work on their reading menu. Since they do this, their work is many times incorrect. This continually happens toward the end of shared reading time. My goal is to get them to slow down and remain engaged throughout the duration of their work. When students are constantly engaged on the task at hand, not only does their engagement level increase, but their achievement grows commensurate with their engagement (Florida Education Association, 2019). Because it is important for students to remain engaged while they work, I will play acoustic music during the period of the time they are spending on their work. True learning begins to occur when students remain actively engaged on the work at hand and any time that they are not engaged, it is not considered true learning (Carroll, 1963). During this research process, my goal is to increase my students' learning through placing time requirements on their work. In the end, I hope to see a growth in achievement and engagement.

Question/Wondering

In what ways will placing time requirements on independent assignments impact three 2nd grade students' work?

Methodology/Results

Research was conducted on three of my 2nd grade students. These students are Hispanic, male English Language Learners. One boy is tier 3 and the other two boys are GT. I collected my data on Monday, Wednesday, and Thursday during shared reading time which was between 9:30 am and 10:30 am. I began my research by conducting a student survey. These surveys gave me information on how long these students thought they worked on their independent reading assignments, how they viewed how their independent reading assignments should be completed, and how long they need to spend on their independent reading assignment that day. For my first week, I collected baseline data by pulling the three students and having them complete their independent reading assignment while I took engagement data and kid-watching notes. During this time, I had acoustic music playing in the background as they completed their work. The following three weeks, for each independent reading assignment, I played acoustic music and had a timer readily available for the students to see how much longer they needed to work. During week two, students had to work for at least 10 minutes, for week three, students had to work for at least 12 minutes, and for week four, students had to work for at least 15 minutes. While students worked the next three weeks, I continued to take engagement data and kid-watching notes. I was looking to see if they spent more time on their work, if their engagement would increase as well. While the students worked, I closely monitored their work for accuracy and had them correct errors before the time elapsed. At first, my students rushed through their work, but as the week went on, I saw them take more and more time to finish their work. The more time they spent on their work, the higher their engagement percentage was, and the higher their average weekly reading grades were. I did have one student who dipped down in grades on the second week; however, his growth the following two weeks was exponential.

Implications/Recommendations

Based on these results, the time requirements did exponentially increase my students overall independent reading grades, and I will continue to use these time requirements with their independent reading work in the future. On average, their grades increased by 21% and their engagement increased by 50%. I was very pleased with the results and my goal is to now see if this can be achieved with my whole classroom.

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Making Transitions an Easy Game!

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Rationale/Introduction

In my 1st grade classroom, I noticed that instructional time was wasted during transitions because of students not following directions, students slowly getting materials ready, and students talking. I wanted the students to be able to transition between each activity/subject with ease through following directions, being prepared for the next activity, and with minimal distractions from talking. I thought this would best support this class by increasing engagement, supporting students to follow directions, and minimizing student distractions.

Question/Wondering

How might the use of table groups working to earn points help with smoother transitions by minimizing lost time, increasing student focus and engagement, and decreasing the amount of talking?

Methodology/Results

I decided to try the strategy of gamifying transitions because of Tim Walker and his research on gamifying the classroom as a way to motivate students (Walker, n.d.). At the beginning of this action research process, I spent 1 week collecting data by timing transitions and recording anecdotal notes including the amount of repetitions and reinforcements of directions, materials, and behavior along with the talking/noise level of the students. Starting the 2nd week of action research, I implemented the system of table groups working together to earn points by following directions, having materials ready, and being quiet with hands on top of head. The tables collaborated to create team names that were written on the corner of the whiteboard for tracking points earned. During transitions between subjects, activities, and locations within the classroom, the students worked to move as efficiently and quietly as possible. The first table group ready received 10 points and the second table group ready received 5 points. Students were responsible for adding their scores, which supported the skill of adding 5 and 10 in 1st grade. To continue monitoring the effectiveness of gamifying transitions, I timed the transitions and recorded notes of the amount of repetitions and reinforcements of directions, materials, and behavior along with the talking and noise level of the students. At the end of the week, the top 3 tables with the most points earned Warm Fuzzies (classroom behavior management system used year-long). I continued this system for 2 weeks. Overall, from data of timing transitions and noting the noise level of the classroom, gamifying the transitions minimize the amount of time taken, decreased the amount of repetitions and reinforcements, and lowered the noise level of students during transitions.

Implications/Recommendations

This system was very effective for the students to be able to transition between each activity and subject with ease through following directions, being prepared for the next activity, and minimizing distractions from talking. When rewarding points to tables, there were some unnecessary conversations and responses by students which steered attention and focus away from beginning a lesson. A solution to this would be setting more direct, clear expectations and practicing this routine for weeks so that it would be effective throughout the entire year.

Reference(s)

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Implementing Hands-On Instruction to Improve Phonemic Segmentation

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Rationale/Introduction

Over winter break, our kindergarten classroom community lost one learner and gained two more. I was completely intrigued by one of the students because of his behavior as well as his academic ability. While he could read ten to fifteen sight words, he could not produce spellings for words as simple as rug, cut, or dog as I watched him complete a consonant-vowel-consonant writing activity. I immediately sensed this could be evidence of a gap in his phonological awareness, so I decided to administer a DIBELS Phoneme Segmentation Assessment with this student. As I had guessed, he only identified about half of the phonemes on the assessment and was not able to articulate the middle or ending sounds unless it was a schwa sound; I was especially intrigued by this because it is likely that this gap would make later reading and writing a struggle for this student. The authors of *Strategies and Lessons for Improving Basic Early Literacy Skills* (2008) advocate that a students' ideal phonological learning is sequenced from a student moving from a physical object, to counting phonemes on fingers, to Elkonin boxes, and eventually identifying each of the individual sounds in the word orally (Algozzine, et al). Inspired by these highly researched methods, I decided that I wanted to implement hands-on, kinesthetic phonological activities with a few students of the lowest ability-level group. Once I started investigating and assessing a few of the other students, I discovered that another student had begun to read sight words but could not sound words out without much scaffolding. In January, a student that left the school in November came back with obvious deficits in her reading and writing abilities and could only identify beginning sounds. At that time, I decided to integrate her into my research along with the two other students to see if I could positively impact their phonological awareness with the individualized instruction.

Question/Wondering

In what ways does individualized instruction in phonological segmentation using hands-on and kinesthetic activities impact three kindergarten students' phoneme segmentation?

Methodology/Results

Before I began working with the three kindergarten students, I individually administered the DIBELS Phoneme Segmentation Assessment with each of the students. I used this data as a pre-assessment and used it to guide my instruction. One of the students needed help with middle sounds, while another was mostly struggling with ending sounds, and the third needed work on segmenting the whole word. Using various hands-on and kinesthetic activities, I facilitated segmentation practice with the students for ten days of individualized instruction. My time with the individual students lasted about ten minutes each day and consisted of pulling phonemes apart in various ways, including holding a physical object, Elkonin boxes, matching games, read-to-self phones, play-doh, and body movement. I kept the students on the same timeline of activities so that they all received the same instruction, even though one of the students progressed faster; then I began working with her on multisyllabic words. After a week of instruction, I recorded the students moving emojis on their iPads as they segmented the word to show how the movement of objects improves their phonemic segmentation. After the ten days of instruction were over, I administered the DIBELS Phoneme Segmentation Assessment again as a post-assessment and I was pleased to see that all of the students had made great progress in their phonemic segmentation. Two of the students had learning gains of 75 percent and the third student improved by 53 percent. I also gave the students an informal survey to gauge how they were feeling about their knowledge. Each of the students said that they felt better about breaking up the sounds of words and that they would use these strategies when they are trying to sound out words. One of the students in particular has asked multiple times during writer's workshop if he could have a rubber band in order to sound out a word. In addition to their work with me, the students all employed these segmenting strategies during a benchmark assessment with my mentor.

Implications/Recommendations

Due to the positive results of my hands-on, kinesthetic instruction, I would recommend that all students as they are learning to read and write in the primary grades have direct instruction using physical objects to segment phonemes. Even though I may not have as much opportunity to do this individualized instruction in future years, I plan to integrate these hands-on phonological awareness activities into guided reading lessons. These activities are especially beneficial for Pre-K to kindergarten students but, could be applied to higher grades for those that are struggling to decode and encode unfamiliar words. In this circumstance, I identified that a student was not able to segment sounds, but I believe it is also important for students to have hands-on experiences with phonemic blending and manipulation. When I have my own classroom, I plan to foster each of these skills using hands-on activities throughout the year in various contexts. A strength of my research is that I fostered a safe space with the students; the students were always excited to come spend time working on these activities, because they were engaging and felt safe to make mistakes. A weakness of this study was that the students were not doing the activities at the same speed. While the timeline and activities were similar, sometimes students were absent, or I would not have time to work with one of the students during the day.

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The Impact of American Sign Language on Class Disruptions

Primary Researchers
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Rationale/Introduction

In many of my classrooms, disruptions were a frequent occurrence that interrupted the learning experience. Most students simply talked out or distracted other students instead of asking a question. This disturbed the learning process for not only the struggling student, but also many students around them. To remedy this, I introduced American Sign Language (ASL) in order to decrease class disruptions in two of my 8th grade pre-algebra classes. The students ranged in age from 12 years old to 14 years old. I defined a class disruption as any vocalization above a conversational level directed at a teacher or redirected by a teacher. I believed this would help decrease large amounts of classroom disruptions based on Brereton's article that found that teaching an alternative way of communicating helped a disruptive and destructive child increase class participation and decrease disruptive behaviors through ASL (Brereton, 2008). Both classes had a few students who were more disruptive than the others and I wondered if teaching them ASL could decrease their behaviors along with the rest of the class as a whole. In order to help the students, remember the signs I taught them, I created a poster for each classroom that shows a visual representation of each sign and the English translation.

Question/Wondering

How would providing an alternative form of communication through American Sign Language impact the frequency of classroom disruptions?

Methodology/Results

In order to remedy vocal classroom behaviors, I introduced American Sign Language to my students to offer an alternative form of communication. This allowed my students between the ages of 12 and 14 to choose how to communicate in the classroom for the remainder of the semester. My participants included two double blocks 8th grade math classes, class A with 15 students consisting of 8 females and 7 males. Class B includes 16 students, of which 6 are female and 10 are male. The students varied in academic achievement, socio-economic status and ethnicity, and none were classified as Deaf or hard of hearing. Before introducing ASL, I interviewed the co-teachers in the classes where the ASL was implemented to discuss the impact of disruptions and took baseline data to get an idea for the number of disruptions occurring regularly. When I began taking data, a counting clicker was with me throughout the class. When there was a disruption, I added one and continued teaching. Through this method the students and instruction continued uninterrupted and data was quick and consistent. At the end of each class, I documented the number of disruptions on a spreadsheet before resetting my clicker for the next class and provided reinforcement in the form of candy for every student who used 3 or more signs. The first step in my intervention was to decide which signs to teach the students, I picked a field of 15 signs to start with including words such as help, question, need and restroom. Then a poster was created to be hung on the walls in each classroom. Once the posters were made, I spent one part of class teaching all the students in both classes the sign language to be used as needed. Once the students showed understanding of the new signs, we resumed normal class activities. Then I began taking data using the clicker described previously. After taking data four days a week in each class, I compared the baseline to the week and compare each week to the one before. After taking into consideration the data, recommendations, implications and qualitative notes were taken so that external factors would be considered. Anything over a 25% decrease in behavior from the baseline data taken before the intervention to the end of the semester indicated mastery of this intervention since the whole goal was to decrease disruptions. After taking data four days a week for 8 weeks, the results showed that class disruptions decreased overall. There was a 60% decrease in class A and 44.2% decrease in class B. After introducing ASL, students were less talkative. They were also asking for help more frequently when taught the sign. Based on my findings teaching a vocally disruptive class ASL can decrease those negative behaviors. This is supported by previous studies where behaviors decreased when teaching a disruptive student ASL (Brereton 2008). The overall decrease across classes was 52%.

Implications/Recommendations

This research demonstrated that there are ways to help students communicate without being disruptive. I plan to use this method in my future classrooms from the very beginning of the year so that students always feel that they can effectively and appropriately get attention, help or materials without disrupting the learning experience. One of the weaknesses in this study was the number of variables present in the average classroom. Each day will be different and sometimes students will have good or bad days. One strength of the study was the data collection method of a counting clicker that allowed for quick, consistent data without further disrupting the learning environment. If I were to do this kind of study again, I would change my reinforcement from being edible or free time to a token economy to ensure that students would stay consistently motivated throughout the year to use the sign language and communicate effectively. Throughout this study I also wondered how it might look differently with various ages of students or in different subject areas and believe that either of those options would make for good future research questions. Overall, even considering the limitations of this study, teaching an alternative form of communication in the form of ASL can help decrease disruptions in the classroom.

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Token Economies for Staying On-Task

Primary Researchers
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Rationale/Introduction

My placement is in the resource classroom at South Bosque Elementary. I am working with a student whose off-task behavior has increased significantly this semester. Off-task behavior is defined as engagement in any tasks other than the assigned task or ongoing activity (e.g., looking around the room, playing with items, talking, head on the desk). When my student becomes off-task then he is missing out on the lesson and valuable learning time. He also becomes a distraction to other students which makes them miss out on the lesson. The purpose of my research is to decrease off-task behavior. This is important because it will increase on-task behavior and this will allow my students to receive more valuable instruction. According to Romani et al., (2017), implementing a token economy and allowing students to choose from a prepared items list will increase students on-task behavior.

Question/Wondering

How will token economies affect my students off task behavior? How will it help increase my student's on-task behavior?

Methodology/Results

I have a 10-year-old, white, male student. He is currently receiving time in the resource classroom for an hour and 15 minutes a day for reading, writing, and math. I worked with this student for eight weeks on his off-task behaviors. First, I took baseline for two 30-minute observation sessions. This allowed me to see when the behavior occurred the most or if the behavior only occurred at a certain time of day or during a specific subject. Second, I interviewed with my students' teachers and the student. This allowed me to understand what his other teachers were seeing in their class and what they were doing to decrease his off-task behaviors. It also allowed me to talk to my student and see if anything has changed at home and I was able to find out what will be the most motivating reinforcer for him. The baseline data showed that the student is on task for an average of 65% of the time. It is important to address this because he is losing 35% of valuable learning time. It is also a distraction to other students around him. In Romani et al.'s research about token economies, they discuss that they "hope that these data will assist practitioners developing token economies in their classrooms…"(Romani, 236). They understood the importance of implementing a token economy to decrease off-task behavior. My plan for this intervention is to start implementing a token economy. My student received a token for every five minutes he is on task. He will be allowed to choose from five different rewards. He was be able to pick from iPad, talking, music, walking, or drawing time. He was able to receive one of these rewards for five minutes once he receives all five of his tokens. This decreased my student's off-task behavior and increase his on-task behavior by 25%.

Implications/Recommendations

In the preliminary stage of my research, it shows that token economies increase on-task behavior. In my research so far, I have found that my student responds well to the structure and consistency of the token economy. I believe that the token economy gave structure to my student. He knew what to expect. He knew the expectations, when he was going to receive a token, and when he would be given his reinforcement. My recommendations for this student are to continue with a less invasive token economy. I would decrease the amount or the amount of time of the reinforcement. This will allow him to generalize his on-task behavior into a less reinforcing environment. If his off-task behavior starts to increase, then I would suggest increase the reinforcement.

Reference(s)

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Worthy Writing From Motivated Minds

Primary Researchers
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Rationale/Introduction
Students in my Guided Writing small group lack motivation to complete writing that includes correct capitalization, punctuation, spacing, length and understanding.

Question/Wondering
Will students' Guided Writing in a group improve based on capitalization, punctuation, appearance, length and understanding with motivation from a group sticker chart, which leads to a desired reward?

Methodology/Results
To begin my research, I explained to the 4-5 students in each small group that I had a very important paper to show them that they would be using each day during their Guided Writing. I displayed a checklist for the students to view that had bullets emphasizing the words capitalization, punctuation, finger spacing, two sentences and the question, "Does it make sense?" I invited the students to read each bullet with me and then reminded them that these are elements that they check their writing for every day. I kept the chart on the table in front of the students so that it was easily observable for them during writing time. In his *What Works Clearinghouse* article titled Teaching Elementary Students to Be Effective Writers, Steve Graham supports this strategy through previous research findings and states that, "to help students select the appropriate writing strategy, teachers might consider posting strategies on a wall chart in the classroom" (Graham, 2012). Next, I pulled out a small, blank sticker chart with their names on them and elaborated that once they have completed their journal writing each day, they will look over our checklist to self-assess themselves and their ability to monitor their individual use of the displayed elements. I told the students that if every member of the group completed each part of the checklist in their writing, then the group as a whole would earn a sticker on their chart. Then after several meeting times, once the student accumulated ten stickers on their chart, it would lead to a larger desired reward.
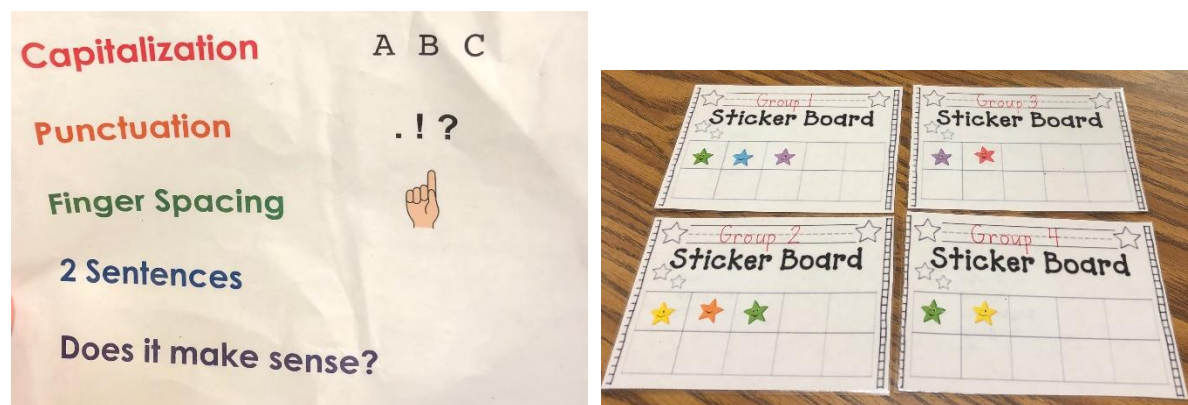
The students became extremely eager to make sure that they included every element from the checklist into their writing. I realized that this checklist was a positive motivator for the students to self-assess themselves after writing time. Steve Graham also explains, "when basic writing skills become relatively effortless for students, they can focus less on these basic writing skills and more on developing and communicating their ideas. However, younger writers must typically devote considerable attention to acquiring and polishing these skills before they become proficient" (Graham, 2012). Immediately after I introduced the checklist, I observed that the students began developing wonderful stories of two or more sentences. After practice and focusing their attention on the attributes of the checklist, they developed sentences that made sense on their own, and that they were proud to share. Students who once added in random capital letters amongst words in their writing now monitored themselves or adjusted their

mistakes during revising. Students who used to flow their words in a sentence together like one long word began physically placing their finger on their page to make sure that they included finger spacing in their journal. I informally assessed their work through my noticing's and observations.

I tracked the students' improvements through a list of my own and after each day of writing. I went down the list to see if every student had met the expectation for capitalization, punctuation, finger spacing, appearance and if it made sense. I began this process before the checklist was introduced, so that I could get a basis for which groups had students that did not include every element from the checklist in their writing to begin with. I analyzed my data through comparisons of each small group across observations. When conducting my research, I noticed that not only did students' writing improve based on the checklist, but they verbally encouraged one another to do their best writing every single day, so that they could leave with an additional sticker on their group's chart. I compared students' writing from late February to their writing in early March and could visibly see their growth based on the overall appearance of their writing.

Implications/Recommendations

I believe that the method of inspiring students to improve their writing skills based on a small reward can only strengthen their motivation to write their very best. By using the checklist that I created for Guided Writing small groups, I was able to explicitly show the students what I expected of them each time they opened up their journals to write. In her article 6 Ways to Improve Students' Academic Writing Skills, Lee Watanabe-Crockett enforced that "if [teachers] want performance, you must ask for it. Some teachers expect good results, but they never do anything in order to motivate their students. Stress the fact that good, thoughtful, and clear writing will be greatly rewarded" (Watanabe-Crockett, 2019). My recommendation for continuing this study of research would be to make sure that the teacher follows up with a reward for the students so that they are constantly driven. Even further in the future, once the students have reached a goal of ten stickers, they should be challenged even more to see if they are able to increase their sticker count by continuing to implement the elements of the checklist in their writing. I would be interested in including this challenge in future research to see if it increases the students' motivation to write. I would also suggest including visual models of what is being asked of the students, like pictures or captions explaining all elements of the checklist. For example, I included a picture of a finger next to the words "finger spacing" so that all children could understand the meaning of the bulleted phrase no matter their reading level. I plan on elaborating on my research and moving forward with this reward system to enhance my students' writing even more.

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Blurts Hurt

Primary Researchers
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Rationale/Introduction

In our third-grade classroom, constant blurting out during daily whole group instruction has become a problem. It interrupts the instruction and distracts all students from learning. Shore elaborates on this problem and the implications it has by stating that "a student's classroom interruptions may take different forms -- from blurting out an answer without raising his hand to making an unsolicited comment in the middle of a lesson or discussion. Whatever form the interruption takes, students who call out can get you and the class off track, as well as prevent other students from participating fully in class activities" (1996, p.1). This issue not only affects the students who struggle the most with blurting out but also the whole class because of the distraction it provides. The small group of students who blurt the most will be the participants in the study. These students include two boys and two girls ranging in achievement levels with varying accommodations based on their characteristics.

Question/Wondering

In what ways does using individualized blurt charts impact the engagement of third-grade students during whole group instruction?

Methodology/Results

The new behavior management strategy implemented will be blurt charts. The four students will have personal charts with five circles on the chart corresponding to each of the letters in the word "blurt." At the beginning of the new day, students will determine a goal for the number of blurts they will stay under and choose a reward they will receive if they meet that goal. Every time they blurt, one circle will be colored in. The next morning, I will review the charts with each individual student to discuss the previous day and set new goals. The purpose of this study is to determine if the number of blurts has an impact on the students' engagement. I began my research by collecting preliminary data to get a baseline of the frequency and impact of blurting. I took record of the average number of times each student blurted in a day as well as their average percent of engagement using a chart and engagement samples during a single whole-group lesson. After the first week of gathering this information, I spent three weeks implementing the individualized blurt charts with my students and collecting qualitative data along the way. The final week that I used the blurt charts, I once again collected data in the form of total blurts and engagement data.

When analyzing my data, I noticed that the individualized blurt charts significantly reduced the total number of blurts that each identified student had in a day. The number of blurts from this small group of students before implementing the charts was 62 blurts in a day. This number decreased to 22 blurts each day after utilizing the blurt charts for three weeks, which proved to be a 65% decrease in the total amount of blurts. With this positive impact in mind, I analyzed the engagement data. From my preliminary data to the end of my study, my students' engagement went up slightly – anywhere from 5 to 20 percent depending on the student. By the end of the research, my qualitative data supported the idea that all of my students were more motivated to control their blurting, but that their overall engagement was similar to before I implemented the behavior management.

Implications/Recommendations

The individualized blurt charts significantly decreased the number of blurts that students had during whole group instruction, but they did not have a worthwhile impact on students' engagement. The blurt charts brought awareness to the escalating problem of blurting out and gave students a concrete tool to assist them in taking responsibility for their behavior. The rewards motivated them to raise their hand rather than blurting out impulsively. Although the extreme blurting decreased, the engagement only increased slightly. This proved to me that the individualized blurt chart did not have a strong impact on the engagement of students because often times the blurts were on task, but still out of turn. This behavior management tool did control the disruption that was caused due to blurts, which in turn had a great impact on the class as a whole. Charles identifies two of the core values of school as being "a place where we protect and look out for one another and a place where we learn we are responsible for what we do"

(Charles, 2014, p. 138) The individualized blurt charts allowed students to look out for their and their classmates' learning by taking responsibility for their actions. Our class will continue to use blurt charts for the purpose of minimizing distraction through incentives and awareness.

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Digital Manipulatives vs. Physical Manipulatives

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Rationale/Introduction

Since technology has become an essential part of many classrooms, I started to wonder whether digital manipulatives, on an iPad or computer, keep students engaged and help them build conceptual understanding as well as physical manipulatives (Wang, 2018; Zacharia, 2011). Therefore, the purpose of this research is to compare students' comprehension and engagement when using digital manipulatives versus using physical manipulatives. The reason for my curiosity stemmed from some of my students' having lower engagement when working with digital manipulatives during a lesson. I then became curious about whether their engagement would improve by having them use physical manipulatives to aid their comprehension of mathematics. My goal is to utilize my findings to effectively adapt my lessons to accommodate my students' style of learning better.

Question/Wondering

What effect does the usage of digital manipulatives have on student engagement and learning compared to the usage of physical manipulatives?

Methodology/Results

When starting my research, I first picked two contents to teach that students benefited from the use of manipulatives. I chose how to solve for the volume of rectangular prisms and plotting points on a coordinate grid. For finding the volume of rectangular prisms, I only planned to use physical manipulatives with my students. For plotting points on a coordinate grid, I planned to introduce the topic with the use of physical manipulatives and digital manipulatives, but the other lessons only utilized digital manipulatives. I observed six students and filled out student engagement forms (10 minutes of each activity) for each lesson the included manipulatives. I also used the grades they received on daily grades at the end of both units to measure their comprehension of the concepts.

For the volume unit, I introduced the concept by having my students work in partners to build rectangular prisms using unit cubes. I gave the students a page that had the specifications for how to construct each rectangular prism, and then they were asked to answer questions about the dimensions, area of the base, layers, and volume of each rectangular prism. Overall, the six students that I was observing were engaged throughout the activity; however, there were a couple of times in which they would become distracted, but they were very quick to turn their attention back to the task at hand.

The next activity for the volume of a rectangular prism, I gave my students the task of creating rectangular prisms using sugar cubes. They determined the dimensions and volume of their prisms, filled out a half-sheet about the perimeter, area, and volume of their shape, and then they were allowed to glue their sugar cubes together to create their prisms. All six of my students were engaged the entire time in which they were building their rectangular prisms. At the end of this unit, my students completed a daily grade over the volume of rectangular prisms. Five of my students passed (70% or above) the daily grade on their first try, but one student failed (who is ESL) the first time and had to retake it and passed the second time.

For the coordinate planes units, the day I introduced the topic, I created a coordinate plane on the floor using the tiles and tape and my students each had the opportunity to plot themselves as points on the plane. After that activity, we used interactive coordinate grids on their chrome books to plot points. For the rest of the lessons planned for the unit, we had our students use the interactive coordinate grid on their chrome books when they needed to plot points for an activity.

When monitoring my student's engagement for the physical manipulatives with coordinate grids, my six students were engaged the majority of the time, but when they were not the ones who were plotting themselves, they would lose focus. But just like during the volume activities, they were quick to turn their attention back to the task at hand.

However, I noticed something very different when they were working with the interactive coordinate grid. When my six students were using the interactive coordinate grid on their chrome books, it took them a minute or two to begin and engage in the task they were given. Once they began, their engagement was very off and on. They would be engaged for around two to three minutes before they became distracted again. This became a pattern that I observed when students were using the interactive coordinate grids. There was one day in which my students were engaged with their coordinate grades for an average of five minutes before losing focus and becoming distracted for the remaining five minutes.

Like before, my students had to complete a daily grade over plotting points on a coordinate grid at the end of the unit. And like before, five students passed (70% or above) the daily grade the first time, and the same ESL student failed the first time attempting the daily grade but passed the second attempt.

Since the daily grade results ended up being the same for both units, I decided to look at the data from a benchmark that my students took a week after the two units. The benchmark contained two questions about volume and four questions on coordinate planes. For the questions involving volume, one student missed one of the volume questions (and missed 17 out of the 36 questions), and one student missed both volume questions (and missed 19 out of the 36 questions). For the questions involving coordinate grids, three students missed one of the coordinate grid problems, and one student missed two of the coordinate grid problems (and missed 17 out of the 36 questions). Two students got both the volume and coordinate grid questions correct.

Implications/Recommendations

Based on what I observed and the research that I conducted, I think that the consistent use of digital manipulatives can lead to students becoming uninterested and bored with their use. I also believe that students are more engaged and are more willing to stay engaged when they are using physical manipulatives. However, if I were to continue my research, I would be interested to see how the use of different digital manipulatives and the use of different physical manipulatives compare because I think the use of the same digital manipulative may have been the reason students became bored with it. I would also like to compare a unit that consistently blended the use of both digital and physical manipulatives to see if students' engagement and comprehension are improved.

As for student comprehension, I believe that the use of physical manipulatives resulted in a long-term comprehension of the concept, whereas the use of digital manipulatives resulted in a shorter-term comprehension based on the results from my students' daily grades and benchmarks. I came to this conclusion by comparing how well students performed on the daily grades the weeks of the volume and coordinate plane units with how many students missed those types of questions on the benchmark. The daily grades were about the same for both units; however, more students missed coordinate planes questions than volume questions on the benchmark a week after both units were taught.

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The Impact of Reading Level on Standard Assessment Performance

Primary Researchers
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Rationale/Introduction

When students continuously struggle on standard assessments, teachers are determined to discover the reasons behind the low performance. At Woodgate Intermediate, my mentor teacher, Jennifer Wyble, and I encourage our 6th grade students to read by requiring 20 minutes of reading every night for homework and rewarding students with promised incentives for making goals and showing growth. At the beginning of the year, students took a STAAR Reading Screener test, which determined their beginning of the year reading level. They took another screener in the middle of the year and will take one at the end of the year as well. They are expected to be reading on a 6th grade reading level, so students who are below that bar focus on mastering lower reading levels and then moving up throughout the year. After the beginning of the year screener, we had students reading on a 3rd grade reading level to students who were reading on a post-high school reading level. We use Accelerated Reader to track the average amount students are reading each night, and then we hold them accountable every week by discussing their current minutes with them, recommending books and requiring students below the 20-minute expectation to come before or after school to make up their minutes. When students reach goals and milestones in their reading, they are rewarded with prizes, iPad time, treats and grade-wide growth goal parties. Students who have higher reading levels tend to score better on standard assessments, but what really is the impact that student's reading levels have on their growth on standard assessments?

Question/Wondering

What impact will the improvement of student's reading levels have on their growth on standard assessments?

This study took place at Woodgate Intermediate School in Mrs. Jennifer Wyble's 6th grade Reading classroom. I am Mrs. Wyble's Baylor Intern, graduating with my 4-8 ELAR certification in May. All of the students in the study are students that we teach this year. This study took place over the course of the year, with the first data being collected in August, and the most recent data collected in March.

Methodology/Results

The data used in this study comes from the 2018 STAAR test results from last May, and the 2019 STAAR Simulation test results that students took this March. Students also take a beginning of the year, middle of the year, and end of the year STAAR Reading Screener test that we use to determine their current reading level. There were 79 6th grade students who participated in this study. These 79 students are students who either improved their reading level or stayed at their current reading level that was at least a 6.5 (sixth grade, fifth month). There were 5 students who were taken out of the study because they did not take the STAAR test in 2018. At this point in the year, students are expected to be at a 6.5 reading level. After comparing the 2018 STAAR test results to the 2019 STAAR Simulation test results, I found that 49% of students who increased their reading level also increased their test score, and 51% of students who increased their reading level either decreased their score or remained the same. For about half of the students, improving their reading level did help them raise their STAAR Simulation score. For the other half, their lack of increased score has a few different possible explanations. First, some students did not take the Simulation seriously. They knew that the test was not the real STAAR test and that the score "doesn't count." Unfortunately, some students have this mindset and they will not give full effort unless they know that there is something serious at stake. We try to encourage students to do their best on the Simulation by offering no homework for students who make their score goal, and this does motivate some students to give their best effort. When it comes to the actual STAAR test, students are reminded that their test score directly determines how many electives they will have in 7th grade and whether or not they will have to take multiple reading classes. Another explanation for no score increase is that some students did increase their reading level, but they are still not reading on a 6th grade reading level. It is very difficult to succeed on a 6th grade level standard assessment when a student is only reading on a 4th grade reading level. It is great when students show growth and move up reading levels, but it is very difficult to comprehend passages and questions on a 6th grade and higher reading level when a student is not at

that level yet. Overall, it was very interesting to discover that there was not a guarantee of raised test scores when reading levels were raised. Half of the students did see a raise in their test score, but most of them are already reading on a 6th grade or higher reading level, which made succeeding at the STAAR Simulation much easier. .

Implications/Recommendations

In order for students to improve their reading levels, they must constantly be reading and exposed to different vocabulary, genres and storylines. In our classroom, we make reading exciting by encouraging students to "Bee a Reader." They receive bees, which we post on a bulletin board in our room with their name on it, for every 100,000 words read, and they collect points for every book read (as long as they pass the Accelerated Reader test) which they can redeem for candy, free iPad time, lunch with the teacher, ice cream passes, or various treasure box prizes. They also have Accelerated Reader point charts out in the hallway where they get to add stickers by their name for every point earned. The students are always excited about redeeming their points, adding their bees and stickers to the wall, and celebrating reaching their Accelerated Reader goals. Keeping students incentivized gets them excited about reading and making their goals. On the other hand, calling parents and keeping students before and after school motivates students to meet the requirements and bring up their average minutes. Each student is different, so using individual student's likes and dislikes to encourage them to read is effective. Julie Alley of Northwest Missouri State University concludes that, "Teachers can use each individual student's reading data to help predict their standardized test scores and even the amount of success throughout their academic career. They can use this data to help students improve specific areas of reading" (The Impact of Reading Achievement, 5).

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Historical Relevance: How Students Interact with and Value their Lessons.

Primary Researchers
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Rationale/Introduction

History is the study of the past, which means teachers are tasked with a great challenge to make dates, wars, and important people meaningful when students struggle to make connections with events that happened hundreds of years ago. Research and National Standards suggest that the goal for social studies students is to take the historical knowledge learned and apply that to better understand the past as well as address societal and global issues in the present and future (Van Straaten, 2016). In order to teach state mandated material with the expectation that students will retain the information, the past needs to become relevant, applicable, or at the very least presented in a way where students can make connections to their personal lives. In an effort to increase the effectiveness of the way I teach, I aim is to construct lesson plans that will effectively use the duration of the class period to maintain attention on content that is pertinent and meaningful to my students' lives. Students will, in turn, gain a stronger understanding of the material because of the personal connections they construct with the content. Learning will no longer entail having students memorize information for an upcoming test but, will focus on the process of constructing authentic real-world knowledge that will be maintained and remembered.

Question/Wondering

To what degree do students find relevance in the way the Social Studies curriculum is taught?

Methodology/Results

The study was conducted in an 8th grade Pre-AP U.S. History classroom. In order for the study to be reflective of a diverse student population, 5 students were picked at random each day during my second period class over the span of two weeks. The 5 randomly chosen students' engagement was recorded without their knowledge at 3 checkpoints throughout the class period- the first 10 minutes, the middle of class, and the last 10 minutes of class. Students were made aware of who was chosen for that day at the end of the class period and each student selected used their iPad to scan a specialized QR code. The QR code led to a google form which asked students to rate on a scale from 1-10 the following categories: overall enjoyment, personal relevance, and real-world application. After the responses were recorded for each student participating in the study, I took the responses and compared the level of student enjoyment and relevance gleaned from the lessons' content with the presentation of content taught that day. The resulting trends showed that students were not only more consistently engaged throughout the entirety of the class period, but also rated their overall enjoyment higher on the scale from 1-10 when two circumstances occurred. One, the lesson explicitly tied the content to relevant subject matter concerning the students; or two, students were given the opportunity in class to engage in discussion where they had to tie the content to something relatable to their own personal lives.

Implications/Recommendations

The results of my research show that relevant content and the opportunity to make authentic connections with historical information results in increased student engagement and enjoyment. The Pre-AP environment however results in more consistent engagement, so regardless of the presentation of relevant examples there are some students who would press 10 for enjoyment, relevance, and be fully engaged the full time. Students were also aware that their names were tied to the survey filled out, which resulted in students feeling pressure to make it appear they gleaned the correct information from the lesson and wanted to make sure the results of my action research looked positive. We as educators cannot expect students to glean meaning and relevance unless we explicitly build it in to the curriculum, which presents an issue because students at this grade level will not automatically make authentic connections on their own. Prompting is key to help students see how history mimics life events today and how these events and thought processes look different. I believe the experiment would be able to produce more accurate results if students were anonymous and a larger focus group of students were analyzed.

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Let's Write! Using Self Regulated Stategy Development to Improve Writing

Primary Researchers
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Rationale/Introduction

I have a 2nd grade student who struggles to complete his writing tasks. He struggles to write a sentence with proper capitalization, punctuation, spelling, and organization. He struggles thinking of a topic to write about for a personal narrative. He can orally re-tell details about the topic yet couldn't write any sentences for it. This has affected his on-task behavior: the less he writes the more off-task he is.

This should be addressed because he needs decent writing skills to write well-organized writing pieces. He needs these writing skills when he takes the STAAR assessments in 4th grade. Lienemann, Graham, Leader-Janssen and Reid noted, "Only one in one hundred students attains "advanced" writing skills. Difficulties mastering the writing process are even more prevalent for students with special needs or disabilities." (2006, p.1) This student has a visual impairment and receives 504 accommodations, which qualifies him as a student with disabilities. It's crucial to get him to a level of independence where he can write and express himself properly.

Question/Wondering

What effect do interventions on proper sentence writing have on a struggling writer?

Methodology/Results

My struggling student is a male, Caucasian, 2nd grader with writing struggles. His goal is that after 8 weeks of academic interventions in writing, he would write a narrative with 5 sentences.

I took data over two 12-minute observations of my student as he worked on a writing assignment. He was given 12 minutes to brainstorm and start a draft. He struggled the entire time to find a topic, and only wrote 2.5 sentences that were given to him. During the second observation he had the same struggles. He could verbally tell me details about the topic but struggled to write about it. I also interviewed people that work with my student; including the student himself. Monday through Thursday I worked with my student for ten minutes on sentence writing. We reviewed the five components of a proper sentence and worked on writing about his narrative. Knowledge from these interventions were taught and reviewed using Self-Regulated Strategy Development, where my struggling writer learned the components of a proper sentence, reviewed its importance, and demonstrate his knowledge by using these skills to write. Progress data on his writing was taken every Thursday. I asked him to repeat the five components of a proper sentence and write sentences with the components. To reward him for his work, I gave him a piece of candy for every sentence component he met.

Implications/Recommendations

Frequently review sentence parts with five-finger check. Aid when necessary but build independence with writing assignments. Have the student practice writing on a specific topic every week.

Reference(s)

Lienemann, T.O., Graham, S., Leader-Janssen, B., Reid, R. (2006, Summer) Improving the writing performance of struggling writers in second grade, Retrieved from *The Journal of Special Education Vol. 40*

The Daily Kindergartener:
Frequent Publishing as a Motivation for Quality Writing

Primary Researchers
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Rationale/Introduction

Students in my kindergarten class were disengaged and unmotivated to write for Journal Time. They struggled to write sentences and spent fifteen or more minutes writing five words. I wanted to increase the sentence length, quality of content, and overall engagement of our kindergarten students in writing. In effort to affect these elements, I wanted students to frequently publish their works. Student work would be published by either making a Bookcreator presentation as a class or reading aloud their journals. I would only put books in Bookcreator that met certain qualities: sentences with words, and words relevant to pictures. The same qualities would apply to my reading their journals aloud. These qualities are meant to incentive requiring students to write more detailed sentences. I planned to do Bookcreator presentations every Thursday and reading aloud the journals every day.

Question/Wondering

How do frequent publishing practices affect the quality of kindergarten writing?

Methodology/Results

Of the 22 kindergarten students who participated in this study, 13 identified as male and 9 as female. Of the students, two were of Hispanic/Latinx ethnic origin, one was of African-American origin, and nineteen were Caucasian.

The methodology of this project was two-fold: publishing daily and publishing in visual ways. Students were led through various writing activities through the course of five weeks. Every day, their work would be published either through it being read aloud orally or through being presented via the application, Bookcreator.

Reading Graves (1983), Calkins (2016) and Ackerman (2016), I was inspired to attack reading as a daily moment to improve. From Ackerman (2016) specifically, I decided I wouldn't limit our writing to a specific genre. Cahill (2016) wrote about the experience of her kindergarten class sharing their writing together as a class. Her writing inspired me to focus on publishing for this project.

Journal time began with one of four options: mentor text, sight word study, a topic of interest, or a story I created on BookCreator. We read the following mentor texts and added our own endings or wrote entries inspired by them: I Just Forgot by Mercer Mayer, Rainbow Fish to the Rescue by Marcus Pfitzer, If Dinosaurs Came Back by Bernard Most, and Count the Monkeys by Mac Burnett. We studied the following sight words and wrote sentences using them: he, she, look, little, and was. We made 6 original stories on BookCreator together: *Out on the Plains*, *The Best Story Ever*, *The Best Movie Ever*, *Happy Valentine's Day!*, *What the Dinosaur Ate for Lunch*, and *Friends*. Once the set-up for journal time was complete, students independently wrote in their journal. There were three rules for journal time: voice level zero, sound out the words you don't know how to spell, and draw a picture relevant to your writing.

Publishing their work came at the end of our journal time once most everyone has finished his/her story. Students put their journals back on the shelf where they belong and sat on the carpet at the front of the room. From there I read aloud their journals and showed the class the pictures. Every day we've been able to have publishing time, even if it was just one or two students. I collected data by analyzing student work and writing qualitative notes about student behavior. Analyzing student work included comparing sentence length and detail in the work from before the study began and during the study. My qualitative notes detailed the experiences of students from week to week with special attention towards continuous time writing and displayed attitudes.

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Before this study began, students were either apathetic, neutral, or obstinate about participating in journal time. As the weeks went on a clear attitude change emerged. All students became more interested in spending time writing. All students displayed greater focus in independent writing. There was significant improvement in sentence structure, attempts at spelling words students didn't know, and the usage of sight words in writing. Students also had an increased interest in publishing their work. Students adamantly requested their work be read and, on some occasions, cried when their work wasn't read.

Implications/Recommendations

The results of this study are very encouraging to my future practice. The enthusiasm our students display about writing encourages me to believe their future relationship with writing will be positive. As I continue to teach writing, I will be sure - regardless of the grade - to include the opportunity for publishing.

Concerning strengths and weaknesses of this study, there are a few of both. The strength of this study is how publishing became a procedure for journal time. Students adapted to the expectation for publishing and met a new standard set before them. Our writing activities also paralleled instruction in phonics and reading. This allowed students to reinforce their writing with previous learning.

This study could be improved by surveying more than one kindergarten class and experimenting with more varieties of publishing. Extending this study, in vein of my own interests, would include the observation of specific writing content in regard to publishing (i.e. non-fiction, poems, narratives, etc.).

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Are You Flipping Engaged?

Primary Researchers
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Rationale/Introduction

This assessment of mastery and engagement took place in an on-grade level biology class at Midway High School. This research took place throughout the entirety of the unit on plants. All material covered aligned with both TEKS and NGSS to ensure the material was regulated, and is what students are tested over on their end of course exam, as Biology is a tested subject. At the very end of this unit a summative assessment was given in the form of a unit test. Throughout the unit students completed different forms of formative assessments which included Quizizz, warm up activities, check in questions, closure questions, no hands questioning, and more. In order to manage students, we utilize many tools to keep our classes on task and engaged. Since all students have an iPad, because Midway is a one-to-one district, apple classroom was a great tool used in order to check students' screens and keep watch on what they are working on. Along with digitally monitoring our classes, we also constantly circulate through the room, encourage students to keep working verbally, redirect behavior when necessary, and check in with the students to make sure they are paying attention and gaining as much knowledge as possible while in the classroom.

Our students over the past semester and a half tended to struggle with staying on task and focused leaving me to wonder if they were getting as much out of their education as possible. This question led me to come up with a new approach to our classroom in which students would take charge of their own learning and together, we would explore and elaborate those ideas with fun and exciting in class activities. Roux and Nagel's article, *Seeking the Best Blend for Deep Learning in a Flipped Classroom – Viewing Student Perceptions Through the Community of Inquiry Lens,* described the pros and cons to technology especially as it pertains to the flipped classroom (2018). The use of technology for lecture delivery leads to multiple exposures of the content by the students as well as the benefit of self-paced learning (Roux & Nagel, 2018). Alternatively, this method of delivery may become monotonous and ineffective after a long time of use, ensuring there is a variety of activities and high-quality videos is important to keep students engaged (Roux & Nagel, 2018). In order for technology to promote and not inhibit learning it needs explicit detail on what is expected of both behavior, and work ethic. Due to the one-to-one device policy in Midway ISD the transition into using it for a flipped classroom seemed less drastic than had we not had technology use already.

Question/Wondering

How does teaching using a modified flipped classroom impact student mastery of content (shown with test scores), engagement, and work completion throughout a unit?

Methodology/Results

This research took place over two classes, third and fifth period, third served as the control group and fifth was the experimental group. The demographics of third period were as follows: there were a total of 24 students in the class, 23 of which were ninth graders and one a tenth grader. There were seven males and seventeen females, two students who were classified as ESL, four special education, and one who qualified for 504 accommodations and the average reading level was 6.9. In fifth period there was a total of 23 students 22 of whom were ninth graders and one who was in tenth grade. Thirteen students were male and ten were female, no students were classified as ESL, no students were special education, and five had 504 accommodations, the average reading level was 8.9. Taking into account the base level differences I looked to past data to see the normal average passing rate and test score differences and found that throughout the year third period tended to have on average 2.4 person fail (receive a score of less than 70%) each unit test while fifth period had on average 1.6 people not meet passing. In addition, the average test grade in third period was 80.7, while fifth periods average was 85.2 on a scale of 100. Knowing this I will consider the 5-point difference and almost full extra person when looking at data.

In order to test if using a modified flipped class was more effective than a standard lecture class, I prerecorded the two lectures students would need for the unit to their school page that each student in the class has access to. For the

modified flipped classroom, we spent the first day for each half of the unit listening to the lectures. We then further explored through a variety of labs in class including dissecting a flower, examining different seeds, and looking at plants vascular tissue and pollen under a microscope. Students were given a checklist at the beginning of the week of all they would be required to do and were given free reign of the order. The classroom had all activities set up and as teachers we roamed about checking in on students and assisting when necessary. At the end of the unit we had a day of overall review using review games and resources like Kahoot and the following class periods students took a test to demonstrate mastery.

After students completed the test, their scores were broken down and analyzed. I looked for any trends over gender, ethnicity, reading level, etc. This was a difficult unit for many students the content contained new vocabulary and concepts students do not think about in their day to day life. This unit was brand new material, they had never covered any of the topics in previous years, allowing it to set an even field for all students, and no trends were seen within the classes individually. However, when comparing the two groups of students there was a major difference. In the control group, third period, students average test score was a 77.5 with 6 students failing to meet satisfactory; while fifth period scored an average 90.1 and no students failed. After considering the base line differences fifth period clearly benefitted from learning the material via a flipped classroom. If third is given the base line difference of 5 points that still brings their average to only an 82, which is still eight points below fifth period. In addition to improved mastery the engagement level of fifth period was much higher as well as the work completion level. Fifth period had four non excused late assignments turned in while third period had over ten assignments that were taken late. Students in fifth period had between a 90-100% engagement rate all throughout the unit where third periods ranged from 67-80%. All of these results were further supported by previous research on the engagement of flipped classrooms for example, in the journal article, *Enhancing Student Engagement Using the Flipped Classroom*, the authors Gilboy Heinerichs and Pazzaglia (2015), emphasized that there lies a huge void between students expected knowledge gain and the delivery of materials to assist that retention and that moving towards flipped learning can aid in filling the gap while keeping students engaged. In conclusion, a modified flipped classroom does increase engagement, mastery, and work completion.

Implications/Recommendations

The findings of this research supported my teaching philosophy and backed it even further. Students enjoy discovery on their own and are more likely to be motivated, engaged, and succeed at mastery, when the responsibility of learning is put on themselves. By having data to support me as I continue my teaching career, I will implement flipped teaching and modified flipped teaching in my future classroom. This study was well planned and encompassed a variety of activities, when looking at the data the baselines were adjusted based on previous results for accuracy. For better understanding and to ensure the results were not a one-time result this study should be further tested over different units and demographics utilizing the same procedures. I would be interested in seeing if used over a long period of time if the effects of a flipped classroom would begin to decline or if they would continue to raise engagement and mastery.

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Blurt Beans: Will They Stop the Chatter?

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Rationale/Introduction

In my second-grade classroom, my students have a hard time remaining quiet throughout whole group instruction. Even with the use of positive praise and correction, my students still have a tendency to blurt out. My students receive numerous reminders and warnings however, the blurting still continues. I wanted to research the impact blurt beans would have on my students in whole group math and reading instruction. If a student blurts out during instruction, a bean is placed in the blurt bean jar. I wanted to know if this classroom management strategy would help my students refrain from blurting out.

Question/Wondering

How does the use of blurt beans affect the amount of talking out of turn in my classroom during whole group reading and math instruction?

Methodology/Results

This study was conducted in a second-grade classroom that consisted of twenty students, twelve boys and eight girls. My class has a variety of ethnicities and income levels. Eighty percent of my students are white, 5% are Asian, 5% are African American, and 10% are Hispanic. I collected interaction data for one week before I implemented my research. The first week I gathered data, my students averaged 17 blurts each day during whole group math and reading instruction. The interruptions disrupted my instruction and decreased the engagement of my students. Over the duration of four weeks, I incorporated blurt beans into my classroom during whole group math and reading instruction. Each day, every child received three beans and their goal was to keep all three beans until the end of the day. At the end of the day, the students would place their beans into the community reward jar. If a student did blurt out during whole group math or reading instruction, then the student would have to place a bean into the blurt jar. After gathering data throughout the first week, I noticed the same students were losing all three of their beans. I decided to modify my research to see if I could prevent the same students from losing all three beans continually. I decided to add in an extra reward for my students who kept all three beans until the end of the day. The extra reward included different items such as a pencil or lunch in the classroom in hopes of motivating my students to keep all three beans. The interaction data I collected throughout the second week showed me my students averaged five blurts each day with an extra incentive. Without an extra incentive, my students had an average of eight blurts each day. The extra reward helped motivate those students who were continually losing all three of their beans. The interruption samples I collected throughout the four weeks revealed that my students were less likely to blurt out when the beans were put into place. Overall, the blurt beans were successful in reducing the amount of blurting out during whole group math and reading instruction, and I will continue to use this classroom management strategy to reduce the amount of talking out of turn.

Implications/Recommendations

The use of blurt beans supports the work of Charles and Senter by demonstrating that a motivator can improve classroom management (Charles & Senter, 2012). One of the weaknesses throughout the study was my tendency to give my students a friendly reminder to stop talking instead of taking away a bean immediately. I believe the amount of blurting would have been reduced even more if I would have taken away a bean at that moment instead of giving my students another chance to correct themselves from blurting out. With that said, one thing that went well during the study was the extra prize I gave to my students who still had all three beans at the end of the day. My students never knew what day I would give the extra prizes away so it helped motivate my students to really think about their blurting.

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Classroom Community and Student Engagement

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Rationale/Introduction

The characteristics of middle school students often include a negative mindset and disrespect towards their peers. It was challenging to implement collaboration within the classroom when the majority of my students barely knew each other's names. I also found that many of my students would refuse to participate in class discussions because they feared they might be judged or ridiculed. In order to participate in class, students needed to be in an equitable, student-centered classroom, that revolved around integrity and honesty (Mitchell, 2017). I wanted to create this environment for my students and determine how implementing various community building activities might help develop students who are kind, good teammates, and encouraging friends; furthermore, discovering how these attributes could impact their performance in the math classroom.

Question/Wondering

How does implementing practices to ensure a safe, supporting, and positive learning environment through community effect student participation, engagement, understanding, and overall rapport of eighth grade students in the classroom?

Methodology/Results

Our methodology to create this positive learning environment through community was to implement the encouragement board, class all-stars, teacher thank you notes, and class jobs. For the encouragement board, students were each assigned a random classmate on Monday and had until Friday to observe and find something kind to encourage them with. On Friday, they posted a sticky note on our class bulletin. This was done anonymously each week. For the class all-stars, each student was chosen at least once throughout the study as an All-Star. Their picture was posted at the front of the room under the title they received. In class jobs, students rotated throughout the class jobs during the study. Some students were purposely assigned depending on observations made; for example, who did not know many names was assigned as attendance keeper. Finally, my mentor teacher, Mrs. Glisson, and I wrote thank you notes to excelling students based on their performance on assignments, participation in class, or how they treat those around them. The notes were given to each student discreetly during class.

Twenty-five percent of students who had an increased attitude towards math class credited it to one of our implementations. We saw a positive increase in student engagement, participation, and overall rapport of the classroom. The only result that had a negative effect were student grades.

Implications/Recommendations

I would recommend implementing additional practices to promote positive classroom culture. Although student grades did not increase, it was easier to relate to students and be productive throughout our class time.
I would be interested in doing the same type of study but focusing more specifically on the effects of pre-AP vs. regular 8th grade math. I was able to see that engagement had more of an increase for students who were on track, but participation had more of an impact on pre-AP students. Survey results contributed to further questions as a majority of my on-track students related their attitude and success in math class towards their friends in some way; compared to pre-AP students who related a lot of their success and attitude towards the math content.

I would also be intrigued to see the difference specifically on various ethnicities and cultural backgrounds of students. Since I chose my specific students to track randomly, I did not have a good sample of race from my students.

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Say What? ELLs and Vocabulary Acquisition

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Rationale/Introduction

During my internship at Mountainview Elementary, I worked in a fifth-grade classroom. My classroom was an English as a Second Language (ESL) classroom and we had eight English Language Learners (ELLs). I noticed that the ELLs in my classroom consistently scored lower on science assignments and assessments than most of the other students in my class. According to Sibold (2011), "It is important to explicitly teach vocabulary using effective strategies that will engage students in learning new words—for example, association strategies, imagery, and graphic organizers." I hypothesized that if I spent approximately 10 minutes each day with the ELLs introducing, teaching, reviewing, and practicing specific science vocabulary, my students' science assessment scores would improve. My goal was for my students' learning to increase and for them to be able to apply what they know about vocabulary to their science unit assessments.

Question/Wondering

How does specific and targeted science vocabulary intervention affect the science unit test scores of my students who are English Language Learners?

Methodology/Results

This study involved eight students in a general education, low socioeconomic fifth-grade classroom. The group comprised two Hispanic males, four Hispanic females, one Vietnamese female, and one Filipino female. All of the students that participated in this study were English Language Learners (ELLs). I collected baseline data by analyzing the science unit test scores of my ELL students from two previous science units taught during the spring semester. At the beginning of the next science unit, I implemented specific and targeted science vocabulary intervention for my ELL students. I met with this group of students each day at the beginning of our science lesson. During our group meetings, my students received vocabulary intervention relevant to the current unit of study. The students played vocabulary games, discussed cognates, and practiced using vocabulary words in sentences. My goal was to determine if this intervention would affect their science unit test score in a positive way. Before this targeted intervention, my ELL students scored an average of 63% on their science unit tests. After receiving targeted intervention and regular classroom instruction for 15 days, my students completed the unit assessment. They scored an average of 54% after receiving intervention.

Implications/Recommendations

The results of this study revealed that specific and targeted vocabulary intervention alone did not help the ELL students' assessment scores. Even though Sibold (2011) states that vocabulary is an essential part of ESL education, there are other components as well. The strengths of this study were that I clearly stated my expectations to my group of students and that they were motivated to learn and participate. This allowed our group meetings to be productive because my students were engaged; however, there were a few confounding variables that could also have played a part in the results of this study. One of the students that participated in this study receives Special Education services. His assessment data may have affected the averages of the group because his scores were outliers. Another factor to consider is that my students completed the 2017 Released STAAR tests for math and reading during the data-collection time period. This meant we did not have group meetings for two days in a row. My students' assessment score average dropped after receiving vocabulary intervention, but I do not think this was a direct result of the intervention itself. It is possible that the content of this unit was more difficult for the students as a whole compared to the content from the previous two units. If I were replicating this study in the future, I would try to eliminate other variables that could affect the results of the study. I would also conduct the study over a longer period of time and with multiple science units.

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The Elimination of Blurting Out

Primary Researchers
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Rationale/Introduction

As an intern in an elementary resource room working with students ages 6-10, I started noticing distractible tendencies, specifically, blurting out. I began to wonder how teachers could get this behavior under control and ultimately eliminate the behavior in a classroom. Based on these observations, I focused on one student who showed a very high rate of blurting out in my classroom. In order to eliminate this behavior, I chose to implement a token economy system paired with a tally system to track both positive and negative behaviors, Maggin, D. M. (2011). I targeted this behavior because it caused disruption within the classroom and took away valuable teaching time from the teacher. I hoped that this behavior implementation would ultimately eliminate the problem behavior of blurting out.

Question/Wondering

What will be the effects of the implementation of a token economy system paired with a behavior tracking system on blurting out? I believe that the function of this behavior is both access to attention and task avoidance.

Methodology/Results

Research was conducted on an African American, male, 6-year-old, first grader in various settings including his general education class, his reading resource class, and his science class. This student struggled with disrupting his classes by blurting out. I was able to interview the other classroom teachers of this student so that I could gather information on the behavior and its frequency. I was able to observe this student in 15-minute increments in each of the settings listed above for baseline data. The baseline data that I collected showed me that on average, this student blurted out 20 times per 15 minutes. The qualifications that I used to define blurting out was any verbalization made by the student that was not initiated by the teacher and/or distracted others from the assigned tasks in the classroom. I used this behavioral definition so that I could remain consistent in my data assessment. In order to decrease this behavior, I implemented a token economy system to reinforce raising his hand by adding a star. I also decreased this behavior by taking away a star when he blurted out. The preliminary results showed that the implementation of a token economy system decreased the behavior of blurting out.

Implications/ Recommendations

The implications of this study showed that the implementation of a token economy system paired with a behavior tracking system was effective to decrease the behavior of blurting out. This student went from a maximum blurt out rate of 25 times in the span of 15 minutes before intervention and after intervention was able to decrease his rate of blurting out to be a minimum of 6 blurt outs in 15 minutes. I recommend that the teacher continue using the token economy board as well as the behavior tracking system during his resource time as well as implementing these strategies in his general education classroom. I also recommend that his other classroom teachers implement this similar token economy system so that he has consistency throughout his day.

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Respond, Reward, Results?

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Rationale/Introduction

Throughout the day my classes range greatly from small to large and from quiet to incredibly loud. The exact same lesson will go smoothly in some classes but will be unsuccessful in others. I also noticed there was a lower overall average for almost every evaluation in my two boisterous classes. As a result, I focused specifically on my two less efficient classes and their three main concerns of their classroom behavior. I then chose a specific reward related to each and observed their contingent engagement. I wanted to see if extrinsic motivators would be able to control their various problems of full class length engagement and therefore increase their understanding and performance. of the material. Some of the main sources I have been using as reference points for reward methods is the Center for Teaching, Vanderbilt University. Their articles "Motivating Students" and "Classroom Assessment Techniques" were helpful in giving perspectives on differentiated motivation techniques and how to then assess the student comprehension.

Question/Wondering

How can I incorporate extrinsic motivators to increase the engagement of the students and therefore increase overall student comprehension?

Methodology/Results

Three of the biggest problems in I face in my less focused class periods are distractive talking to friends, excessive phone use, and lack of participation. I chose three different rewards, each specifically related to a certain problem to try to incentivize the new guidelines. I was checking to see if the rewards were relevant enough for the students to incentivize my targeted behavior, and if the hypothetical increased engagement would be enough to then raise the assessment scores and overall understanding.

My research was focused on ten different students in my Period 3 and Period 5 classes. The whole class was addressed but only ten students in each class period were monitored and recorded. The students I focused on in my Period 3 Entrepreneurship class were 7 boys and 3 girls. They consisted of 3 juniors and 7 seniors, ranging from very low to high income levels and diverse ethnicities; 3 White students, 2 Hispanic students, 2 Asian students, and 2 Non-White students, one of which is an ESL student. The Period 5 Principles of Business, Marketing and Finance class focused on 9 boys and 1 girl. There were 4 freshman, 3 sophomores, 2 juniors and 1 senior. The range of income for these students is middle to low with varied ethnicities. Specifically, 2 White students, 5 Hispanic students, 2 African American students and one Asian student in Period 5's focus group.

To be able to properly analyze the differences in engagement and comprehension, I used an engagement form and an interaction form. These helped me specifically analyze how well the students were following the new guidelines and also identify how on task they were. To analyze their comprehension in the information during the 3 weeks, the students completed a background knowledge informal assessment every Monday, a "Minute Paper" on either Tuesday or Wednesday, and then a "Muddiest Point" exit ticket on Thursday.

To collect my data, I first told the classes the structure for the next three weeks. The first change we made in the classroom was implementing a new seating chart. Four of them were observed and monitored in the new seats for excessive and unproductive conversations. We then discussed the second new guideline; absolutely no phone use. Three of them would be monitored to make sure phones were completely put away and out of sight during the entirety of the lesson. The last guideline was required participation throughout each class period. Each student will be responsible for participating each day of class, whether it be asking or answering a question, contributing to class discussion or actively asking for assistance. Once the students were made aware of the rewards, we continued on with the class as planned. I filled out one interaction form and one engagement form at some point throughout the class period and kept the students aware how they were doing as a class towards their rewards, and each week I

compared the informal assessments of their week and observed the progression with their attitudes and work products.

To analyze the data of my findings I compared an engagement form and interaction form from early on in the school year to the ones from week one, two and three. I learned that for both of my class periods, out of my ten students I focused on, the second week was the most successful. The phone use was the least successful implementation and out of the 3 students every week, 0/3 were able to go the whole class period without their phones being used or checked. But, the students in both class periods increased the amount of productive conversations with their neighbors and decreased the number of irrelevant outbursts.

Implications/Recommendations

This study helped me determine that the seating chart was one of the most effective methods for increasing student engagement. Putting space physically in between the students made it much harder for the side conversations which did help them produce better work. The reward for no phone use, watching an episode of Shark Tank, was not completely effective, but did seem to raise overall engagement of the students. The students all loved the idea of the mini party and said that it was the main reason people did try for the participation. Switching up the rewards and having the party for the no phone policy might be more successful in reducing all phone use.

One part of the study that I wish was different was the selection of students. Since the classes are business and male dominated, I did not have many girls being used for data collection and overall, I think they would have responded better than some of the boys with similar personalities did. I was able to gather many types of data and it has helped me properly analyze what rules were not perceived well, which rewards truly motivate students, and how the increased engagement during class did result in a stronger sense of student understanding and a higher quality of student work.

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        pages/motivating-students/

A New Way of Thinking for Communication

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Rationale/Introduction

Each student has his/her own way of expressing that he/she doesn't know how to complete a task. This could be through words, avoidance, behaviors and more. Task completion consists of a student finishing a given task within an appropriate amount of time. The task does not need to be completely correct, but all of the answers should be completed. Especially in younger grades, it is difficult to find words or expressions to indicate that a student does not understand the given task. Boyle and Lauchlan (2010) did a study that expressed that students who receive written instruction paired with oral instruction from a teacher will complete a task with more success. My subject was off task 82% of the time in his general ed and resource classroom. This alarming amount of time off task was the reason why my mentor and I needed to intervene and help this student find a better way to stay on task and ask for help.

Question/Wondering

I researched different options for getting students to complete tasks. My big question was, "How can first graders who cannot read or communicate verbally, get the teachers help to complete a task?" Can augmented and alternative communication help a child to reach out to their teacher and help them achieve task completion. This alternative communication strategy hopefully gives the student who is not able to ask for help him/herself the self-confidence to display his/her lack of understanding the task at hand.

Methodology/Results

My subject was a seven-year-old Mexican American student in first grade. I saw him in my resource room for reading and math, each for thirty minutes. Using augmented and alternative communication through the use of communication cards, the student focused on telling the teacher if: he needed help, had a problem, or understood the question and if he was thinking. I gathered baseline data to see when he was completing tasks and how much of the task completion was done. After introducing the pictures and showing him how to use them, I took data to see if augmented and alternative communication helped aide task completion for this student. This was used in the resource room for both his math and reading times (thirty minutes each) to increase task completion and communication with teacher. This was important for the subject because he needed to be able to complete tasks to continue progressing in school.

Results showed that verbal communication did increase a small amount. The student was able to ask for a little bit of assistance but still shut down and would not complete tasks in a consistent manner. He often forgot about the pictures and ignored them completely as he shut down and cried.

Implications/Recommendations

Even though the alternative communication did not have much effect on the student, I would still continue to use this strategy for the student. I think with more training and time, he would be able to use this effectively. With some social stories and learning how to deal with his emotional problems, I believe this augmented and alternative communication would be extremely beneficial to him in his future classrooms. The resource teachers are also recommending that this student be moved to a self-contained classroom for the next school year for a more stable routine, extra help and time for breaks in between task completion.

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Do Error Analysis Videos Increase Student Understanding?

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Rationale/Introduction

Many of my students do not participate in error analysis activities because they do not like to record themselves in videos or they think it takes too much work. This led me to wonder if these students were missing out on grasping a better understanding of content (Findley, 2018; Russell, 2017). I decided to look at the effects of student participation in this activity.

Question/Wondering

What are the effects of having students do error analysis problems in the form of videos on Flip Grid?

Methodology/Results

To see the effects that completing the Flip Grid Flub (FGF), an error analysis video problem, had on my students, I looked at quiz scores from 4 different units. For each unit that had a Flip Grid Flub, I compared the average quiz score for students who completed the activity with the average quiz score for the students who did not complete it. In order to get a feel of which types of students (low-level, mid-level, or high-level) were in each group, I found the average student grade from their second progress report. In each unit, different students decided to complete the FGF, so the average Progress Report Two grade helped identify which type of students completed each Flip Grid Flub. For three out of the four units observed, the quiz average was high for the students who did the activity, but these students typically had a higher Progress Report Two average. On the last unit I observed, many students received zeroes, which I think affected the outcome because, on average, the students who did not make a video response received higher quiz grades than those who did. In Unit 3A, students who completed the Flip Grid Flub had an average quiz score of 95.00% and had an average Progress Report Two grade of 80.75%, compared with the students who did not complete the FGF who had an average quiz score of 90.18% and an average Progress Report Two grade of 84.49%. This unit's data showed that completing the Flip Grid Flub helped students improve their grade tremendously. In Unit 3B, students who completed the video scored, on average, an 88.00% on the quiz and had an average Progress Report Two grade of 86.30%. Those who did not complete the FGF received, on average, 80.68% and had an average Progress Report Two grade of 83.42%. In Unit 7B, students who complete it scored, on average, 76.67% on the quiz and had an average Progress Report Two grade of 86.47%. Students who did not do make the video scored an average of 69.85% on the quiz and had an average of 83.11% on their Progress Report Two. In Unit 8A, students who completed the Flip Grid Flub scored an average of 43.93% on the quiz and had an average Progress Report Two grade of 84.93%. Students who did not do the Flip Grid Flub had a quiz average of 60.18% and a Progress Report Two average grade of 83.56%.

Implications/Recommendations

From my research, I concluded that doing the Flip Grid Flub might improve understanding, but I do not feel confident that I have enough evidence or trials for my conclusion to be conclusive. Because my students were not absolutely made to complete the activity, and, therefore self-selected themselves for each unit, it was hard to get a good picture of whether or not students were more successful or if it was just my typically more successful, over-achieving students who completed each FGF. Looking at the Progress report grades and comparing them with student quiz scores was beneficial because it allowed me to see what the typical student scores were for each group of students. While this gave me insight, it did not give a clear picture on the effects of analyzing errors. I think, in order for this study to be more successful, it needs to be conducted on a larger scale, with random students, and there needs to be more control over requiring students to complete the FGF. Initially, I was going to look at eighteen random students and look at their data but that did not work. I required one of my periods to complete the Flip Grid Flub, in two periods I gave them an incentive to complete it, and in another period, there was no incentive or requirement to complete it, but it was still an option. I thought this would be a way to get students to complete the activity and track whether or not the incentives or requirement helped but I realized that even though I was requiring students to complete the activity and make a video, I only had about 50% of my students in that period actually

complete it. The problem was that even though I was telling students to complete the activity, many of my students chose to take the zero instead of complete it.

Reference(s)

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Menus: Choice, Structure, and A Bite of Work

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Rationale/Introduction

In Ms. Harmond's Biology classroom at Robinson High School, the students participated in a study that was focused on how student's reacted to open inquiry. The students participated in gamified units where they were given multitudes of options for assignments to complete for points. Their total number of points at the end of the unit determined their grade for the unit. There was little to no teacher guidance in these units; it was all student centered and directed learning.

Many of the students confided in me that they did not enjoy these units. They felt like there was not enough guidance or direction. They felt unsure of what assignments would be best to choose in order to help them learn the material because they did not understand the learning objectives.

My goal was to create something that was a little bit more structured but that still provided students with the freedom to choose certain assignments.

Question/Wondering

How does structured student choice impact student achievement?

Methodology/Results

In Ms. Harmond's and my Biology classes, we have a variety of students from different backgrounds and different grade levels with different academic needs. We teach six class periods throughout the day; one of which is an honors class. We have 98 students: 40 of them are female and 58 of them are male. Of those 98 students, 8 of them are sophomores, 2 of them are juniors, and the other 88 are classified as freshman.

To initiate both units, Taxonomy and Organisms of the World, the students took a pretest that was made up of released STAAR questions from years 2015-2018. This is the basis for gathering data. Then they would begin working on their menu. Their menu was split into several sections. There was a section for required activities which were things that were teacher led (notes), a section for assignments where the students could choose what they would do, and a section for exit tickets where the students would have to choose something at least every other day. The assignment options were limited, and the students were directed with how many they had to choose in order to earn their grade for that section. There were also specific due dates in place, so the students were not able to procrastinate until the very end and then try to do large amounts of the choice activities in order to compensate to make their grade. At the end of the unit, the students had to take a posttest identical to the pretest in order to see what they had learned from the unit.

Based on the comparison of the pretest and post test results, there was an overall increase in student achievement throughout both units. I also compared the data to the data from the first gamified unit (Cell Processes) and the next gamified unit (Photosynthesis and Cellular Respiration), and the data showed that the students were able to grasp the learning objectives when there was more structure and teacher guidance with greater efficiency.

Implications/Recommendations

In the future, I will make sure to try out both styles, open and guided inquiry, in my classroom. There were students that flourished in each one. I will also continue to work to improve using the menus in my classroom. I like providing students with choices, but by having the structure, I was able to monitor what the students knew and where the holes in their learning were. However, there were many errors and adjustments that had to be worked out and made as we went along. I believe that some of that probably impacted the students' ability to learn the content. I would like to continue doing this study for a longer period of time and see those results after I have fine-tuned the method.

Reference(s)

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Win by Tens

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Rationale/Introduction

In my Kindergarten class, I have a group of three students who were not progressing in their ability to count to 100 by ones, despite explicit weekly practice. As I monitored the progress of these three particular students, I noticed a common problem that occurred frequently when students were counting to 100 by ones. Each of these three students would struggle to count to the next number after reciting a number with a "nine" in the ones place, such as 29, 39, 49, etc. I noticed that the students struggled because they did not know which set of ten came next. This prompted the idea that explicit practice counting by tens, instead of ones, to 100 with these students might improve the students' ability to count to 100 by ones.

Question/Wondering

In what ways will concentrated practice in counting to 100 by tens affect a student's ability to count to 100 by ones?

Methodology/Results

This study included three kindergarten students who were struggling to count to 100 by ones. Baseline data was taken over the course of the semester on ability to count to 100 by ones. Weekly, I would have students count orally to 100 for me. Then, I would record the number that the students counted to and have students fill in a hundred's chart to that particular number to track their progress. Before beginning research, Student A could count to 59 by ones, Student B could count to 79 by ones, and Student C could count to 59 by ones. These students' counting ability was never consistent and progress and results would vary greatly from week to week. To begin my research, I pulled the small group of students to the hallway for ten minutes to work on counting by tens twice a week. During this time, I would help students practice counting to 100 by tens in a variety of different ways. One way that I had student's practice was by moving and counting out loud to a YouTube video that helped students practice counting by tens. I also practiced counting by tens with students by having them count orally to 100 by tens, cross-body clapping with a partner with each number they counted. One activity that the students particularly enjoyed, and that I found very helpful, was practicing counting by tens by jumping on paper "lily pads" that I had cut out and placed on the floor. Students would jump from lily pad to lily pad, counting a set of ten each time until they reached 100. Students also worked with base ten blocks by building with sets of ten and counting by tens until they reached 100. During each day of practice, I would choose two of these different activities to use to help these students practice counting to 100 by tens. At the end of each week of research, I would have each student orally count to 100 by ones to me to track student progress. Over the course of my research, I noticed impressive improvement in the counting ability of each one of the three students. After four weeks of practice counting by tens to 100, Student A, Student B, and Student C were all able to count to 100 by ones consistently.

Implications/Recommendations

Based on my research, I am confident that focused practice in counting by tens increases a student's ability to count to 100 by ones successfully. By counting by tens, the students were able to conceptualize the concept of one hundred being made up by sets of tens and were more familiar with the order of the numbers. By the end of my research, all three students were able to count to 100 by ones successfully. Their ability to count to 100 by tens not only increased their conceptual understanding of the number 100, but also increased their confidence in counting in general. I think that this study could have been more effective if results were taken over a longer period of time, but I was very pleased with my findings and the notable progress that was made by all three of the students in my research group. I plan to integrate more opportunities for all of my students to practice counting to 100 by tens in order to solidify their understanding of the order of numbers. In my future classroom, especially if I am working with younger elementary-aged students, I plan to incorporate explicit weekly practice in counting to 100s by tens. I would recommend that teachers who teach in Early Childhood grades through second grade integrate the practice of skip counting by 10s into their math curriculum. In these foundational years, it is important that students have this

conceptual understanding of the number 100 so that they will be able to count to 100 by ones effectively and have greater confidence in their overall math ability.

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D.R.A.? More like D.R.-YAY!

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Rationale/Introduction

In my first-grade general education classroom, there was a student that engaged in off-task behavior during instructional and independent work times in the morning that impeded his and his peers' learning. His off-task behavior was defined as not participating in activities, engaging in disruptive behaviors (calling out and leaving his seat), as well as not following directions. Based on assessment, his behavior was maintained by escape and access to tangibles. It's paramount to know the function of behavior, or why the behavior occurs, so that interventions are based on what's maintaining the behavior rather than reinforcing the problem behavior (Shumate & Wills, 2010). Because it is important for the student to be engaged in instruction and remain on-task in order to learn the content, I incorporated a positive reinforcement system that allowed the student to choose his rewards if he stayed on-task. The positive reinforcement system was a differential reinforcement of alternative behavior (DRA), in which the student would be given a reinforcement when he engaged in appropriate behaviors.

Question/Wondering

How would a positive reinforcement system incorporating student choice impact off-task behavior for a student in a first-grade general education classroom, whose behavior was maintained by escape and access to tangibles?

Methodology/Results

Research was conducted on a male, 6-year old, Caucasian, first grade student. I began my research by interviewing and collecting information from various teachers who have contact with the student. These teachers included homeroom, art, P.E., computer lab, and music. The interviews gave information about the student's problem behavior and how often the behavior occurred within their settings. I also conducted a student interview that highlighted the student's interests and his awareness of the problem behavior. I collected baseline data over multiple days and times during the week in order to see when the behavior occurred most often. The assessment used was a partial-interval recording, in which an X or O was recorded to show whether the behavior occurred at any point during each interval. If the behavior occurred, an X was written, and if not, an O was written. The data showed the behavior occurred most often in the morning and the function of behavior was escape and access to tangibles. Over the next eight-week period, data was collected during 20-minute observations in the morning, between arrival and lunch, to record the percentages the student was on-task during morning activities. The intervention implemented was a DRA, and I began by modeling and explaining the alternative (appropriate and on-task) behaviors to the student and classroom teacher. Whenever the student engaged in the alternative behaviors, he would receive a star on his token board and a Panther Pride pass. When he filled his token board, he was given the opportunity to shop for coupons and use the Panther Pride passes to buy access to different activities and/or items. Next, I removed the immediate access the student had to desired activities so he would not be able to engage in them without earning time for the activity as a reward. On various days throughout the week, I observed the student in the morning and collected data on his on-task behavior.

Preliminary results showed his on-task behavior had increased after implementation of the DRA. Baseline data showed that the student was on-task an average of 60%. Week one displayed a decrease of on-task behavior (35%), because the student was adjusting to not having access to preferred items and instead working to earn them. After the third week, the student's on-task behavior increased to 65% with the use of the token economy. Based on these results, the intervention was successful and will continue. I anticipate the student's on-task behavior will continue to increase. Further results will be shared at the symposium.

Implications/Recommendations

The preliminary results supported the predicted effect of a positive reinforcement system and use of student choice to increase on-task behavior. The use of the DRA and student choice increased a first-grade student's on-task behavior and was targeted to the function of behavior of escape and access to tangible items. The teacher's use of a

positive reinforcement system with this student should continue as he responds well to working for desired activities and items. Further research should be conducted to determine if a response cost, or taking away stars on the token board, would be effective in further increasing his on-task behavior in both his general education classroom and in settings outside the classroom.

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A is for Attitude

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Rationale/Introduction

The majority of my first-grade students became frustrated when they had work they believed was too hard or that they could not finish. Often, when they fell into these mindsets, they completely gave up on what they were doing. This led to their academic performance falling with them not completing assignments. This also caused the students to become more disruptive, and it negatively impacted their behavior in the classroom. This consistently happened during any independent work. There were a handful of students that did not want to do their work because they said it was too hard. To address the negative student mindset, I decided to try daily positive affirmations. My idea was to promote a positive growth mindset, one that would positively impact both their behavioral and academic performance.

I decided to try positive self-affirmations because of two former teachers desire to answer the question of wheatear or not positive affirmations could minimize the effects of stereotype threat and create an optimistic classroom environment. (Robinson, 2014). I also found an article that emphasized the importance of differentiating for effective learning and thought to apply this to the use of incorporating different positive affirmations daily (Hall, 2002).

Question/Wondering

In what ways does the use of positive affirmations impact a student's academic performance throughout the course of a day?

Methodology/Results

I first introduced the idea of different positive affirmations to the students the Monday I began my action research. I had them all sit around in a circle so they could see one another, and I had them discuss what it meant to have and think positive thoughts. One of my students talked about growth mindset and how it helped your brain grow. I explained that we would be doing something similar by introducing a new 'positive affirmation' sentence daily. The first one I introduced was 'I am in control of my attitude' and I had the kids all say it together. We discussed what it meant to control our attitudes, what it looked like to control our attitudes, and agreed to that being our goal for the day. I placed the sentence on a little piece of paper on the corner of each of their desks that could serve as their reminder of the goal for the day. We continued this for two weeks with a grand total of eight positive and each day we would discuss the new positive affirmation, explain how we could show and use it, and finally agree to follow it. Every day I would place the new one on the corner of their desks to remind them of how we were going to view the day and ourselves.

When I first thought of this idea, I wanted to focus primarily on self-esteem. The majority of my class suffers from a low self-esteem which is something that I felt explained a portion of behavioral problems I was constantly facing in my classroom. My thought was that if we changed our self-perception, the students' behavior would not only be positively impacted, but their academic achievement would also be impacted. Along with my students' low self-esteem came lack of progress on work and a need for extended time on simple assignments. Because of these, I focused my action research on self-perception, timing, and progress of student work. For data collection, I monitored a select group of five students to determine the time it took them to complete assignments and how much of an assignment they completed when given an allotted time. To monitor self-perception, I created 'How I feel about…' forms that had them fill out before we packed up to go home both before I began action research and once it was completed. This form had the three statements (how I feel about my work, how I feel about my attitude, and how I feel about my day) and required the students to color in either a sad face, straight face, or sad face.

Once my action research was completed, I found that there was improvement in all three of these areas. I saw students that had struggled to complete assignments begin to manage their time more efficiently and those that had

lower self-esteem begin to open up more. I was able to watch confidence grow in my students and saw an improvement in the time it took them to complete both morning work and writing assignments. I progressively monitored these throughout the process and saw that the affirmations positively impacted them academically.

Implications/Recommendations

One of my favorite parts of my action research was watching my kids get excited about the new positive affirmation. They were excited to get one on their desk and were excited to discuss what each meant. I also especially enjoyed walking around throughout the day and seeing all of them refer back to the sentence. They would say it to themselves or just point to it, and I knew that it was resonating with them. I knew that they were trying the best that they could to follow it which made me happy.

I think that I would do something like this in the future, but I would start it at the beginning of the year, so it is an expectation. I think starting this at the beginning of the year could be beneficial for all students because it allows them to become more aware of their self-perception. I think it would positively impact their self-esteem which would then positively impact their academic performance.

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Solving the Student Engagement Puzzle with EdPuzzle

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Rationale/Introduction

Alternative methods have potential to increase engagement during whole group mathematics lessons in a third-grade classroom. A group of select students continually exhibit undesired behaviors and a lack of engagement during this time. According to Joseph (2017), a digital learning, technology, and innovation specialist, "the more engaged students are, and the more active a part they take in their own learning, the more likely they are to earn higher grades and test scores." Duqedtech (2017) states, "The use of a variety of learning tools and activities in any course forms interesting student learning experiences that holds students' attention and helps them to think and demonstrate comprehension in a variety of ways." This drove the purpose of the research to target these students with a goal of increasing their engagement. This select group of students viewed their math lessons and completed practice questions on their Chrome books using EdPuzzle simultaneously while the remainder of the class received the same instruction and questions during a whole group session. Through pre-recorded lessons that mirror the whole group, it is my goal to increase this groups' engagement and, at the same time, alleviate the distractions for other students in the classroom.

Question/Wondering

How can using a specialized computer program, EdPuzzle, in place of whole group math instruction, improve the engagement of a small group of unengaged male third-grade students?

Methodology/Results

In this study there were five third-grade male students. Four of the students were Caucasian and one was Hispanic. Changing the way students received instruction to using a computer-based program, EdPuzzle, increased engagement tremendously. The tools used to track engagement included engagement samples, grades, and interviews. Before EdPuzzle was implemented, two ten-minute engagement samples showed an overall engagement of 52%. Each student's average engagement during whole group math instruction were as follows: Student 1; 33%, Student 2; 63%, Student 3; 18%, Student 4; 85%, Student 5; 63%. During the course of the research the program was implemented seven times. This resulted in an overall engagement gain of 28% from the entire group, and an engagement gain for individual students of 4-66%. Grades taken over practice problems ranged from 70%-95%. Positive interview responses from the students indicate their acknowledgement of a higher level of engagement during online instruction.

Implications/Recommendations

The results of this study showed success when it came to the increase in student engagement. One thing I would like to have been able to measure is whether or not this would increase their grades overall in math. The grades taken via EdPuzzle from their practice questions demonstrated clear comprehension, but I am not certain that the results were because of the increased engagement or the material being taught. I am continuing this in the future with the individuals who have participated, along with some added individuals that I believe will benefit from this type of instruction. I would recommend that any educator try this if they have more than one or two students who struggle with engagement during whole group instruction.

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Can Decodable Texts Increase Fluency?

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Rationale/Introduction

In my second-grade classroom, there are a couple of students that have a below grade level reading fluency. Even though I give my students plenty of time to read during the school day, and some have fluency homework to do every night, there is little to no growth. This will eventually become a bigger problem as they move to the next grade level. Therefore, I conducted my research by reading decodable texts with my students to see if their reading fluency would improve. I worked with them once a day by having them read decodable texts which will get them ready to read more words within a minute. Fluency takes practice, and I want to work with them to get their reading to the place it needs to be. As I worked through this with my students, I checked in with them daily to see how they are progressing in their reading. They were also asked to do reading fluency homework at home and independent reading in the classroom from self-selected texts.

Question/Wondering

In what ways will reading decodable texts once a day in the classroom affect students' reading fluency in below average second-grade students?

Methodology/Results

This study was conducted in my second-grade classroom. The first participant is an 8-year-old Caucasian boy. The second participant is an 8-year-old Caucasian girl. Neither of the students qualify for free or reduced lunch. I conducted my research inside of my classroom at a small group table. My study would take place every morning for about fifteen minutes. I conducted my research for eight days. I began my research by assessing the student's fluency for one-minute increments to determine a fluency baseline. They were both given the same assessment with the same number of words. When this was given, each of my students read 51 words per minute. I met with my student once a day for eight days. Each student had their own one-to-one time to do their assessments that they were given. During that time, the student read a decodable text three times. The first time they read, I would track how many words they read correctly. The last two times they read were to check my participants' comprehension of the decodable text. Once they were finished reading the text three times, they would answer three comprehension questions. This took about five to ten minutes for each student. Each day, the number of words they read changed. Some days it was higher, some were lower, and some were the same. After, they would read a book of their choice for ten minutes. When they were done, they would count how many pages they would read, and I would keep track of the pages read. I saw that during some days, they read more and some they read less. The reason for this was based on the type of books they decided to read. The last piece of evidence I gathered, was their nightly fluency homework. They were asked to read the same passage for a week and answer a few questions about it. Each day, I saw growth in the number of words read for a minute. Once the eight days were up, I gave my students the initial reading fluency passage to show growth. This was to see if their words per minute increased. Both students read more words per minute on the final fluency assessment. One student read 55 words per minute and the other read 73 words per minute.

Implications/Recommendations

My research inside of the classroom indicates that my students' fluency did increase after reading decodable texts for eight days. When students are given time to read, they will become better readers and enjoy reading as a whole. Some strengths of my study were that I got to know my students and what they needed. I was able to see what they were having trouble with and teach them tools to allow them to become better readers. One weakness would be that I am unsure if having them read self-selected books for ten minutes really helped. It was difficult to keep track of the pages read because each book was so different. Depending on the type of book chosen, it really affected how many pages they read. In my future instructional practices, I plan on making more time to read inside of my classroom. Students really need this time to become stronger readers. The study that I conducted supported my research

findings. All of the references that I used for this study stated that when students are given time to read literature, their reading fluency would increase. As shown in my study, this is accurate and true to my research. Both of my participants words per minute increased. (Mesmer, 2019; Archer, Gleasory, Wachon, 2003; Reading Fluency for Struggling Readers, 2018)

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Do My Actions Affect Others?

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Rationale/Introduction

In my gifted and talented classroom, I have a different class every day of the week consisting of third and fourth graders. Although classroom management usually is centered around the individual student getting attention for either positive or negative behavior (Davis, 2018; Pariser, 2018), I have questioned this strategy. I wanted to teach my students that their behavior affects more than just themselves—it can affect the entire classroom environment. My rationale for this project is to hold students accountable for their actions in attempt to create a positive atmosphere. I wanted to see if my classroom management technique, along with a student motivator, would impact the classroom environment.

Question/Wondering

In what ways does a new behavior management technique affect gifted and talented students within their classroom environment?

Methodology/Results

In this study, students had the ability to earn letters in the word PROACTIVE. They earned these letters when the entire class was either focused while they were working, following instructions, or being helpful towards the goal of a positive learning environment, which consists of collaboration with peers, a raised hand when wanting to speak, and participation in class discussions. If students as a class or an individual failed to do the things listed above, they lost letters that they have earned in the word PROACTIVE symbolized by Xs. At the end of the day, I took the final total of letters. For example, if students earned PROA and then received 2 Xs, they only got credit for earning the letters PR. I collected data on the number of letters earned, the amount of Xs received, and the number of times students spoke out of turn. When the students earned all of the letters, they earned a PROACTIVE party consisting of a donut surprise and the reward of taking their shoes off during class. Two classes earned the party and one was two Xs away at the end of the intervention period. The progress was measured based on baseline data taken and then intervention implemented over three weeks.

Implications/Recommendations

Based on the data collected, it appears that this was a successful classroom management technique. My students who had difficulty at first speaking out of turn soon realized how their actions were causing their classmates to lose the opportunity to earn letters and the secret surprise. As a result, their behavior decreased and the classroom environment as a whole improved. I would recommend that my mentor teacher continue this strategy with different words and rewards to continue to strive for a positive learning environment.

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Increasing Expressive Language

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Rationale/Introduction

During my internship in a first through fifth grade functional academics classroom, functional communication has been an important focus in my students' lives. I have observed that the majority of my students have at least one form of communication, even if they are non-verbal. With nearly every student able to communicate their wants and needs, the addition of a new limited-verbal student with no form of communication has proven to cause a difficult transition, for the student, classmates, and teachers alike. The student effectively sees no value in interacting with others within the classroom or school environment. Through teaching mands with the use of a picture exchange system using visual schedules and first/then cards lies the potential both for this student to better understand the flow of the day, resulting in easier transitioning, and to offer the student the ability to functionally communicate basic wants and needs. According to Sweeney-Kerwin, Carbone, O'Brien, Zecchin, and Janecky (2007), functional communication through mands allows a person with developmental disabilities greater access and control over their social environment while increasing the value of interacting with others in the community.

Question/Wondering

How will mand training with a picture exchange system using visual schedules and first/then cards increase my student's expressive language and result in a greater value being placed on interacting with others in the verbal community?

Methodology/Results

Throughout the semester, I kept a weekly record on a performance goal set for my student. I worked with a six-year-old African American male in the first grade diagnosed with Autism. I began by gathering data from the student's speech teacher and the paraprofessionals that work with him. After gathering baseline on the frequency of mands, both physical and verbal, without the picture exchange system, I concluded his expressive language might best increase with the use of a picture exchange system using a daily schedule and a first/then card. The student's daily schedule was created with PECS cards Velcroed to a chart with three columns. The schedule was displayed in order on the sheet. Each morning, I reviewed the day's visual schedule with the student, reading each activity out loud. Next, I guided the student in taking the appropriate activity cards from the visual schedule to the first/then card that was Velcroed to his desk. As activities were completed, the student was guided in moving activity cards from 'then' to 'first', from 'first' back to the schedule, and from the schedule to 'then'. The student was also guided in exchanging the activity cards for a particular activity. When the student demonstrated a desire to play on the iPad, he was guided in retrieving the 'iPad' card and giving it to a teacher to request iPad time. Similarly, when the student demonstrated a desire for snack or drink, he was guided in exchanging an activity card for access to the activity. Using hand-over-hand, I guided the student in placing the appropriate picture cards on his first/then card. I repeated the names of the activities and asked the student to echo it back. The schedule was revisited each time an activity was completed throughout the day. Further, when the student needed help with a task throughout the day, I modeled how the student should ask for help with the use of a picture exchange and asked the student to do one. Again, I used hand-over-hand to guide the student in an application of the exchange method and immediately rewarded the behavior. Once the student placed 3 mands daily relating using the picture exchange system, I increased the frequency of mands to be placed each day. Throughout the week, I assessed the student over his performance goal, which was to place 3 mands each day using the picture exchange system, with no more than 3 teacher prompts, either verbal or physical, increasing from least to most on 4 out of 5 days, resulting in access to what was being requested. Once the student met the goal consistently, the goal was adjusted to minimize teacher prompts. The student was now assessed on placing 3 mands each day using the picture exchange system with no more than 1 verbal teacher prompt on 4 out of 5 days. The daily schedule was still reviewed daily, but when guiding the student in making requests and placing mands, I only asked the student once for the mand. After 5 seconds or when the student turned away, whichever came first, the trial was marked as incomplete and did not count towards one of the

3 the student was to make for the day. By the end of the intervention, the student placed independent mands up to 10 times in a single trial.

Implications/Recommendations

I would argue that it would be most beneficial to continue with the intervention. The student appeared to show great progress and with more training and time, he will likely be able to place greater value on interacting with the verbal community. As the intervention proved to be successful, similar interventions may be successful with other students with limited verbal behavior in the future. Future research may explore fading teacher prompts and the effectiveness of the intervention with a differentiated reinforcement schedule.

Several implications have been concluded throughout this research that must be taken into consideration for future implementation. To begin, when implementing any type of functional communication training within a classroom or school setting, it is crucial that all staff members that will interact with the student are properly trained to implement the procedures. This ensures consistency throughout data collection. Further, it is beneficial for the training to begin in a low-distraction environment and gradually be generalized to less-controlled environments. This will ensure the student is given the opportunity to fully grasp the concept with no distractions. In a classroom or school setting, it can also be helpful to vary which staff members guide the student in application of the functional communication so as to promote more generalization. When implementing this in the future, it is recommended that there be frequent conferences with supporting classroom staff, including other teachers and paraprofessionals, as well as speech therapists, occupational therapists, and any other necessary parties. This will help ensure consistency throughout from all.

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Assigned Seating: For Better or For Worse

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Rationale/Introduction

In my gifted and talented classroom, I have two days a week that are dedicated to pulling fourth grade for the day. One day has 14 students, and the second day has 17. My first week, I noticed how talkative these students were and how unproductive they seemed to be when it came to getting their work finished. They were taking way too long to complete an assignment because they were goofing around, and when they did turn in their work, the quality was not acceptable (e.g., incomplete sentences, no capital letters, no punctuation, not taking work seriously). They also tended to segregate themselves by race and gender (Gillespie, 2016). Both groups are bright and interested in the classwork, but they gravitated towards talking to their classmates during instruction or work time, causing their performance to decline. Often, their conversations would cause them to miss key learning points or directions and fall behind in their work. Due to this, I asked my mentor teacher if they had assigned seating and was told they did not. Therefore, I decided to see whether or not assigned seating would benefit the classes' productivity and engagement during class time. Having students sit in a specific and thought-out location could have beneficial effects on their attention, engagement, and participation in discussions (Meeks et al., 2013).

Question/Wondering

In what ways does assigned seating affect student performance in their gifted and talented class?

Methodology/Results

In my study, I used one fourth-grade class as a control group, and the other fourth-grade class as my experimental group. Both groups are of the same grade, identified as gifted, and are about the same class size. I determined productivity for the day by handing out a checklist for the students to complete before they had to stop for the day or had a time limit for the students to complete the task during class, as none of my fourth graders have special accommodations in their IEPs. At the end of the day, I looked to see what they had done and used a rubric they are familiar with to determine whether or not they put time and effort into their work or if they rushed through it. Before implementing my experiment, I gave a survey to each student in both groups and asked them to reflect honestly about how much effort they put into their work, how well they pay attention, and the quality of their work that they are turning in. In both classes, I used rubrics and checklists in order to look at the performance of students. One class was given assigned seats while the other was allowed to choose their own seats. After collecting data, I compared the groups. By analyzing students' engagement and work performance, I looked to see if there was any improvement and, if so, if it was connected to the location of their seating. For student performance, I used a rubric to grade what they had done over the past five weeks. Looking over the grades for the first week, which was used as a baseline, and comparing it to the next week's grades, the class with assigned seating had a greater growth. However, at the end of the data collection, the average grade for their projects in both classes was an 84. With that being said, both classes' engagement data increased significantly from baseline to concluding data.

Implications/Recommendations

Based on the data collected, I found similar growth in both classes even though only one class had assigned seating. I think the biggest helper that my students had to benefit their performance in the class was having a rubric to know what was expected from their work and a checklist to know exactly what they are doing. However, during independent working, the class that had assigned seating had a larger amount of growth (55% to 81% on task) than the control group (63% to 84%). Overall, both of my classes had improved student performance, so assigned seating might not have affected these students' performance. Future action research might want to focus on whether or not rubrics and checklists affect student performance, as these seemed to be very helpful to the classes.

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Sensory Fidgets as a Replacement for Stimming in Autism

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Rationale/Introduction

Autism, a disorder that is characterized by difficulty in social skills, repetitive behaviors, and communication difficulties, is an incurable condition that affects 1 in 68 people. Many individuals with autism exhibit self-stimulating (stimming) behavior, some of which can be socially inappropriate. In the article by Brandenburg (2012), it discussed the use of a sensory environment to improve the behaviors of the students with autism. This study explored the effects of providing stimulating sensory fidgets in a special education classroom to replace inappropriate stimming.

Question/Wondering

How does the use of sensory fidgets affect the stimming behaviors in children with autism? Do the sensory fidgets reduce the rate of inappropriate stimming behaviors by acting as a replacement?

Methodology/Results

The intervention plan for GN, a 13-year-old male with autism, was based on a Functional Analysis and a parent interview of his targeted behaviors. In order to reduce problem behaviors, the reason for the behaviors must be discerned. The function of his behavior was determined as self-stimulation. GN exhibited 5 main behaviors that were not socially appropriate. They serve no legitimate purpose, except to stimulate. They were classified as inappropriate behaviors because they were not socially acceptable. Trials for this plan were localized to three 12-minute stations per day, otherwise, the sensory fidgets could have lost their effectiveness if he had increased access to them throughout the day. During intervention, the teacher provided GN with at least one sensory fidget during instruction. If he released the fidget, the teacher cued with "hand on fidget." If he had the fidget but was still exhibiting inappropriate behaviors, the teacher said, "hands out" or "hands on table." The teacher recorded the frequency of the inappropriate behavior on a table/chart. Once the instruction was over (12-minute station), the teacher instructed the student to work on his puzzle or to sort beads. These were his favorite free-time activities and acted as reinforcers for completing his work. The data was analyzed by totaling the number of tallies and then graphing the total number. The fidget that was used during the intervention was also recorded on the data table and was listed as effective, slightly effective, or not effective.

The goal was for GN to, after 6 weeks of intervention reduce his behaviors to 3 or fewer behaviors for 3 consecutive days/trials. At the conclusion of the study, GN was at an average of 3 behaviors. He started at an average of 17 behaviors and has decreased his behaviors by 82%. The sensory fidgets proved to be effective at reducing the rate of inappropriate stimming behaviors by acting as a replacement. Brandenburg also found that providing a "sensory environment" can reduce the stimming in children with autism. These fidgets affected the behaviors by providing a more appropriate form of stimulation for the student.

Implications/Recommendations

By discovering that fidgets can dramatically reduce the frequency of self-stimulating behaviors, teachers like me can provide these students with fidgets during instruction. These fidgets will help in keeping the student stimulated in an appropriate way instead of an inappropriate or disruptive way. The ultimate goal for reducing the inappropriate stimming behaviors was to aid the student in becoming a functional person in society. One weakness that this study has was that certain fidgets were so effective, they were distracting. The student became too enamored with the fidget that he could not concentrate on tasks. Finding the least distracting fidget for each task was tricky and called for discernment and strategic thinking before providing the student with the fidget. For future intervention trials, I recommend trial-and-error with the fidgets with different tasks. For example, I found that listening or non-oral response tasks call for a fidget that keeps the eyes and hands free, like an oral fidget such as a mint, while reading tasks need a non-visual fidget, like a Velcro strip.

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Using Seating Arrangement to Increase Engagement of a Shy Kindergarten Student During Whole Group Instruction

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Rationale/Introduction

One student in my kindergarten class is very shy and does not participate in whole group activities even when prompted. According to Bosacki, Coplan, Rose-Krasnor, and Hughes, "teachers do consider shyness a significant difficulty in the classroom" (2011, p. 9). His academic performance in all subjects is below grade level, which can be linked with his lack of participation and focus during whole group instruction. "Research on shyness in the classroom demonstrates that shyness is indeed a risk factor for children's academic and social adjustment at kindergarten and elementary school" (Kalutskaya, Archbell, Rudasill, Coplan, 2015, p. 7). This study focuses on this student's participation during whole group activities as a result of seating arrangement.

Question/Wondering

How can seating arrangement be used to encourage involvement from a shy student during whole group instruction?

Methodology/Results

My research took place over the course of two weeks and involved a 5-year-old Hispanic male. I changed the students seating placement on the carpet with the goal of increasing engagement during whole group instruction. During the first week, my student was seated in the middle row, towards the back of the group. I took one engagement sample a day, during various times in the day to measure engagement. During the second week, I moved his spot to the front of the group. That way he was directly facing me as I taught. Once again, I took one engagement sample a day during various times of whole group instruction. Overall, engagement did not steadily increase as a result of my student's seating change. However, my student's engagement was higher when videos were utilized during instruction rather than direct teaching from me or my mentor teacher.

Implications/Recommendations

After collecting data, I determined that having my student sitting towards the front of the group may not be the best method of differentiation to increase the engagement of a shy student. The closeness of the teacher seemed to make him uncomfortable at times. However, my observations showed that implementing videos into whole group instruction can be an effective way to get a shy student involved. In the future, I would like to further study the positive effects that content-based videos can have on my student's engagement.

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Engaging with Difficult Texts through Reading Journals

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Rationale/Introduction

When teaching Honors English I, the range of reading levels became a concern as we began reading Charles Dickens' novel *A Tale of Two Cities*. The book is traditionally taught in senior level English courses, but the majority of our students were at the academic rigor where they could handle the reading. By integrating this novel, the challenge became how to meet the needs of each student's reading level when given a difficult text. Scholars such as Ukrainetz and Wang have conducted similar research with scaffolding reading in order to improve the rigor of student ability. My research asked students to keep a reading journal in a given format in order to increase their reading comprehension through reflection and active annotation.

Question/Wondering

Will keeping a reading journal increase reading comprehension of difficult text?

Methodology/Results

Students in Pre-AP ninth-grade fifth period will be expected to keep a reading journal during their elongated class period for Chapters 22-24 of *A Tale of Two Cities*. The assignment, formatted into columns, asks the students to respond to each page of text they read. The first half of the column asks students to record the chapter, page number, characters, and main plot points that happen on that page. The bottom of the column records higher level thinking by requiring students to reflect on what they are thinking about the novel while they are reading. These two questions analyze how students trace plot development within the text and relate it to their own understanding. The purpose of the journal is to extrapolate main ideas in plot and connect the mental reading process through reflection to make them more memorable. The students will hand write their responses and turn in their packets after completing the four chapters. First period pre-AP ninth-grade students will act as a control group during the research. After completing the reading journals, the research was quantified through a multiple-choice quiz over the chapters.

From the recorded data the following results were found from the nine-question reading check quiz:

First period has 27 students. Three students missed zero questions (11.1% of the class), eleven students missed one question (40.7% of the class), six students missed two questions (22.2% of the class), three students missed three questions (11.1% of the class), three students missed four questions (11.1% of the class), and one student missed five questions on the quiz (3.7% of the class). A total of 74% of the class received a passing grade above 70%.

Fifth period, the class that participated in the reading journal, also has 27 students. Every student turned in a completed reading journal. Six students missed zero questions (22.2% of the class), eleven students missed one question (40.7% of the class), three students missed two questions (11.1% of the class), three students missed three questions (11.1% of the class), two students missed four questions (7.4% of the class), one student missed five questions (3.7% of the class), and one student missed six questions on the quiz (3.7% of the class). A total of 74% of the class received a passing grade above 70%.

Based on the results of the reading check quiz, both classes had the same percentage of students receive a passing grade. Fifth period, however, had double the number of students receive a perfect score on the quiz. The students who completed the reading journal both accurately and with more depth received higher grades.

Implications/Recommendations

Through the conducted research, reading journals are able to increase the level of reading comprehension of difficult texts for students. An element that can further increase reading comprehension includes written feedback on the reading journals to make sure students are making correct connections. The feedback given to students could further scaffold extra help for struggling readers.

Overall, reading journals are an effective way to teach and practice the steps of reading comprehension with students. The reading journal I created for this research is best used with ninth grade readers or younger who are participating in novel studies. High school students who are further along in their reading ability could also use a variation of this method with more challenging texts, but the journal does not work well for teaching annotation.

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Increasing Engagement in Writing

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Rationale/Introduction

During independent writing time six first grade students are struggling to stay on task. This creates a distraction for the entire class and is promoting a dislike for writing. This is causing them to not create their best work and not develop the writing skills they need to be successful. They are viewing writing time as a negative time and are causing others to react this way too. Music can help create an "aesthetic learning environment" (DiDomencio 2017), which means music would help create a positive environment for students. Music also helps "increase imagination and provide inspiration" (Brewer 2013).

Questioning/Wondering

How do three genres of music affect student engagement during writing in a First-Grade classroom?

Methodology/Results

The participants in the study were six, first grade students. Three of them are girls and the other three are boys, ranging from ages six to seven years old. The race of three of the participants is Caucasian, two of the participants are African American, and the last participant is Hispanic. One subject is low SES and the rest are middle SES. Through qualitative and quantitative data such as class work, anecdotal notes, and checklists these students were not on task during writing. Over several weeks' three genres of music were used during independent writing time to increase engagement. Over the course of four weeks' various genres of music were used during the writing time. The genres implemented were classical, jazz, and kids' music. I conducted my research by playing the music for a week and then collecting engagement samples, student surveys, and student work. With no music playing the students had a total engagement of 72%. Classical music showed a total engagement of 85%, jazz music was 87%, and kids' music was 67%. However, the children said they could focus and enjoyed the classical music the most.

Implications/Recommendations

The results of this research suggest that students are more engaged and able to stay on task during writing time when there is jazz or classical music playing. The music is a signal that tells students how long they are expected to write and keeps them focused. If changes could have been made to this study, it would have been more beneficial to do this over a longer period of time and with more students. This would allow for the students to become more familiar with the music and evaluate how it affected their writing. My recommendation is to implement music during independent writing time to increase engagement throughout the whole class.

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Increasing Lesson Engagement Through Yoga!

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Rationale/Introduction

My students are always so energetic and talkative during the afternoon. My students have specials (Art, PE, Music, and Computer) from 1:10-2:10 pm each day and when they arrive back for class they are riled up. I have trouble getting them to settle down in order to teach my afternoon lesson (usually Science or Social Studies). I am hoping that taking some time to do yoga and breathe will calm them down before beginning my lesson and will allow them to settle down and really focus in on what we are learning.

Question/Wondering

How does a yoga brain break before afternoon curriculum affect engagement during lessons?

Methodology/Results

In order to test out my wondering, each day as my students came back into the classroom from specials at 2:10 pm, we would take 3-4 minutes to do a yoga brain break before beginning our afternoon lesson. My classroom of twenty-two 3rd grade students consists of eleven boys and eleven girls. My class has a variety of ethnicities and economic income levels. 77% of my students are white, 19% of my students are African American, and 4% of my students are Hispanic. Fourteen percent of my class qualifies for free and reduced lunch. In order to collect data to see how the yoga brain break impacted engagement, I collected data on the following: engagement and interaction along with anecdotal notes about behavior. I collected baseline data for engagement and interaction for lessons before I began yoga in my classroom as well as after I began this practice. I chose these different methods of collecting data because they all directly show results for how the yoga impacted the students' engagement.

I found that my students' engagement increased 8% when we did a yoga brain break before our lesson. The baseline data showed that my students were, on average, 84% engaged during lessons. After beginning yoga brain breaks, this percentage increased to 92% engaged. My baseline interaction data ratio averaged to 3 praises to every 1 correction. After we began implementing yoga, this increased to a ratio of 4 to 1. I also made anecdotal notes about my students' behavior. After the first week of the yoga brain breaks, I made the note "I feel that I have more control at the end of the day, and the class seems less chaotic."

Implications/Recommendations

I found that my students' level of engagement increased when we took the time to do a yoga brain break before our afternoon lesson. My interaction data also showed that I gave a higher ratio of praises to corrections when we did our yoga before the lesson. These results aligned with the research Wei has done, supporting that yoga brain breaks increase engagement (Wei, 2016). This study allowed me to see concrete evidence of increased engagement. A weakness I have identified in my research is that I collected engagement and interaction data at different times throughout my afternoon lessons. If I were to improve this research study, I would collect the data at the same exact time each afternoon or during the same part of the lesson, so that there is as much consistency as possible. I believe an area of strength in this research includes that my data shows the direct influence on engagement, there is no ambiguity in the data I collected or how it correlates to my findings. If I were to extend this study, I would be interested to see how it affects students' scores on assessment. I would highly recommend that teachers use yoga to settle and focus their class and I am excited to implement this in my future classroom.

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Using Music to Help Students Focus: Instrumental vs. Popular?

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Rationale/Introduction

I have noticed that many of my students struggle with staying focused and being engaged during independent and group work time. Research has shown that there are benefits to listening to music while studying, or doing work (Cassidy, 2007; Garcia, 2018). I have also seen through my experience as a student, my teaching experience, that playing music in the classroom during this time can help improve students' focus and engagement, and I was curious to explore this idea within my classroom. Even more so, I was curious to see if there would be a difference in engagement when instrumental music is played versus popular songs with words. I wanted to determine if popular music can end up being more distracting to students, or if it can still aid in improving their engagement.

Question/Wondering

When using music to help students focus and increase engagement, what are the benefits of playing instrumental versus popular music?

Methodology/Results

In conducting this research, I began playing instrumental music in the classroom during independent and group work time for two weeks. During these two weeks, I filled out student engagement forms for students in each class period. I also kept track of if they were turning in their assignment by the end of class or were still taking their work home to finish.

At the end of these two weeks, I sent out a survey to the students to fill out giving song suggestions that were school appropriate. This was done so that while I was playing popular music in class, I could ensure they were songs that the students knew, listened to, and were interested in hearing within the classroom. The next two weeks, I played the students' song suggestions during their work time. I continued to fill out student engagement forms and kept track of whether they turned in their assignment by the end of class or took it home.

After these two weeks, I sent another survey to the students asking which type of music they had felt helped them the most in focusing on their work and being engaged during work time. Overall, 75% of students preferred popular music and 25% preferred instrumental music. In the survey, I also had students rank on a scale from 1-5 (1 being not helpful at all, and 5 being extremely helpful) how helpful both types of music were to them. For instrumental music, the results were pretty even for all numbers 1-5, with 21.7% percent of students saying that it was not helpful to them. But, for popular music 37.8% of students said that popular music was extremely helpful to them, while only 15.4% said that it was not helpful at all.

Looking at my engagement forms over the course of these two weeks, I did notice that during the two weeks popular music was played, students were more engaged in their activity than the two weeks with instrumental music. Based on the survey results, many students felt they were more engaged with popular music, because they had to be quieter to hear it and they wanted to be able to listen to the music. When instrumental music was being played, the students didn't feel as interested in listening to it, so they continued to talk and didn't feel that they focused any more than usual.

Lastly, while keeping track of students turning in their work, I noticed that students who typically did not finish their assignment in class were doing so when the popular music was being played. Although, it wasn't a drastic change where every student was completing their assignment in class, there was still an improvement in the number of students who were doing so.

Implications/Recommendations

Based on the findings in my research, I believe that for my students, popular music was the most beneficial in improving student focus and engagement during independent and group work time. Although not every student showed improvements, there was also no decline in focus and engagement during this time. It is always a worry that students will become distracted and want to sing along or dance when their favorite song is being played, but this wasn't the case with my students. At times, they would sing, but they were still working, and it didn't become so distracting that other students couldn't focus either.

If I were to continue my research, I would be curious to see the difference it makes in student focus and engagement when they are able to listen to music in their headphones while completing their class work. I think that a downside to playing popular music in the classroom, was that the students all have a different taste in music and some students didn't want to hear songs that were playing because they didn't like them. I think that allowing students to listen to their own music in their headphones could eliminate this problem and possibly help students be more focused and engaged overall.

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Look Alive!

Primary Researchers
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Rationale/Introduction

A student in my fourth-grade classroom is often unengaged and fails to complete basic assignments. Frequently, he has to miss lunch with friends or recess to catch up. He hardly participates in class and shows little initiative to work. The mentor teacher gives all students a high level of autonomy and lots of choice. I have researched self-determination theories and have begun to explore the implications of innate psychological needs such as relatedness, competence, and autonomy (Niemiec & Ryan, 2009). I have also learned I must create a safe and supportive classroom environment in order for these basic needs to be met (Urdan & Schoenfelder, 2006). My goal is for this student to be more productive, complete work on time, and be more engaged in lessons. Although I'm not focused on student grades, I will also consider the effect of my intervention on those.

Question/Wondering

How does applying practices based on self-determination theories affect a student's productivity and achievement?

Methodology/Results

I began my intervention the day after meeting with my mentor teacher, the student, and the student's mom. We discussed setting specific goals that would help him be more engaged in class and complete more of his work. I created a chart on paper that listed the goals he set for himself and an area where he could rate his effort from 1–4. His original goals were to pick a seat that would help him be successful, such as a chair instead of the floor; to sit correctly during class; to set a timer to help him manage his time; and to raise his hand to participate or ask for help. Based on my research, I knew it would be important to allow him to set his own goals and help him choose goals that were attainable to support an increase in his feelings of autonomy and competence (Meece, Anderman, & Anderman, 2006). For the first week, I recorded engagement data and the student showed a slight improvement by participating in class at least once a week. He met most of his goals each day and was rewarded for that, but by the second week he had lost the goal sheet and thus lost motivation. Additionally, he was not responding to my teaching as positively as I had hoped. I decided that for the rest of the time I would focus on meeting his need for relatedness by engaging in at least one non-academic conversation with him each day and building a relationship with him, since this has been shown to be effective in increasing student motivation (Lujan & DiCarlo, 2017). I also decided to give him his own code on ClassKick and have him post pictures or descriptions of what he was able to complete during each class to earn points, which he could later cash in for prizes or other benefits such as bringing a drink to class. Again, for a week he posted on ClassKick regularly and benefitted from feedback. Receiving feedback seemed to encourage him to continue making efforts although engagement data stayed about the same. By the last week, he had discontinued posting work on ClassKick and receiving points. However, engagement had increased, our connection was stronger, and his sense of competence in specific subjects seemed to have made slight improvements. The increase in engagement, though minimal, showed that when given an opportunity for autonomy, goals that are attainable, and opportunities to build a connection with the teacher, this student will likely be more motivated to participate in class and complete work.

Implications/Recommendations

A large limitation to my study was that I had little time to observe and get to know the student prior to intervening. Although I have seen his engagement levels increase over the past four weeks, it is difficult to tell if this is a significant improvement from where he was last semester. Additionally, using paper the first half of the time and allowing him to keep up with it was not effective, given that he lost it. ClassKick was definitely a better option, but looking back, I think I would have only required him to post for two subjects rather than all of them. Regardless, I noticed focusing on strengthening my connection with him was effective in motivating him to answer my questions or even just approach me with questions. In my future career, I plan to highly consider ways to meet all of my students' needs for competence, autonomy, and relatedness to ensure positive relationships, motivation, and success.

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Timed Writing in the English I Classroom

Primary Researchers
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Rationale/Introduction

In my English I Pre-AP classroom, we have been working on expository essay writing all year long in order to prepare students for the STAAR. I have found that they have a hard time focusing and being able to write for the full amount of time that we give them within the class period. Due to this observation, I wanted to see how implementing timed writing exercises would affect their endurance. Heller (2007) explores how timed writing training, much like marathon training, should be done in increments to help students develop their stamina, while Fisher and Frey (2011) consider how short frequent writing assignments can develop students' stamina in not only academic writing, but in all disciplines. Consequently, my research addresses how timed writing affects the students' stamina day by day.

Question/Wondering

How does timed writing, with STAAR-based prompts about topics the students find interesting, help my Pre-AP freshmen with writing endurance?

Methodology/Results

The study was conducted over two ninth-grade, Pre-AP English I classes. The first class, which functioned as my control group, was composed of 27 students: 17 females and 10 males. Of these students, 20 were Hispanic, 4 were black, and 3 were white. The second class, the experimental group, consisted of 25 students: 19 females and 6 males: 22 Hispanic, 2 white, and 2 black. For 8 days, 1st period participated in daily timed writings based on the theme "Nature vs. Nurture" which matched with STAAR standards and the content we were reading in class. They were given the prompt and told that they had 5 minutes to write as much as they could with no talking throughout the time. They were told to stop writing when they ran out of things to say. When I called time, they drew a line underneath where they stopped. 5th period only did a timed writing on the 1st and 8th day with the same instruction as 1st period with no additional writing exercises, but different warm-ups over theme, tone, and mood. Once they drew the line and closed their journals, we talked about their answers to the prompt. While they were writing, I kept engagement seating charts to track who was writing at the 1-, 2-, 3-, 4-, and 5-minute marks. At the conclusion of the study, I counted how many sentences they wrote each day, how many of them were writing at the minute mark, averaged them, and graphed them to see the impact it had on their writing endurance/stamina. The control group of 27 students started with an average of 4.19 sentences, which went down to 3.87 sentences on the 8th day and their engagement stayed at a steady decline from minute 1 to 5. They had a loss of .32 sentences over the course of two weeks. The experimental group experienced a bigger loss of .93 sentences, but with increased sentence length and complexity: their 1st day average was 4.5 sentences and their 8th day average was 3.57 sentences. The experimental group had a strong start when it came to engagement, however most of them would stop writing by the 5-minute mark.

Implications/Recommendations

The final results suggest that timed writings do not significantly promote writing endurance when looking at the quantity of periods, but an interesting positive consequence came out of the experiment. When reading through 1st period journals, they had more sentences in the beginning but lacked coherency from line to line. While sentences become fewer, the ones they were writing were varied in structure and were more coherent line to line as the experiment went on. 5th period, the control group, had less loss than 1st period, but their coherency and sentence variation did not improve. In fact, their sentence variation and coherency remained the same or worsened over the two weeks. While conducting research, variables such as spring break and students being out for extracurriculars affected students' attention span and work. Further experimentation is needed and would be best conducted with more attention given to intentional scheduling in order to avoid breaks from school.

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Teaching with Multiple Intelligences in the Co-Teach Model Classroom to Increase Active Participation for Low-Engagement Students

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Rationale/Introduction

Leshkovska, Spaseva, and Dewey argue that incorporating Howard Gardner's multiple intelligences in active learning gives students an invaluable opportunity to express identity through curriculum (2016). My research evaluates whether testing the intelligences of low-engagement students in a co-teach model classroom that serves both general education and special education students and modifying curriculum materials accordingly will provide sufficient accommodations and competitive motivation to foster active participation and project completion.

Question/Wondering

If co-teach students compete against each other in groups divided by individual results from a multiple intelligences test, will active participation and project completion increase?

Methodology/Results

The study was conducted over one tenth grade co-teach English II class that I compared to one on-level tenth grade English II class as a control group over a 10-day instructional unit on *Catching Fire*. The control group was comprised of 22 students, 17 males and 5 females. Of these students, 8 were white, 2 Asian, 2 black, and 10 Hispanic. The experimental group of co-teach students consisted of 21 total students: 13 males, 8 females, as well as 12 white, 1 Asian, 6 black, and 2 Hispanic. On the first day of research, students in the experimental group took an online multiple intelligences test. The top three intelligences for each student was recorded. Each student was then assigned a district. In the *Hunger Games* trilogy, citizens of Panem are broken into districts based on economic and geographic characteristics. Each district then nominates two tributes to compete against each other annually to the death in an event called The Hunger Games. The purpose of this research design is to simulate the district divisions in the novel and encourage student motivation and competition. Intra-personal students were assigned to District 1, Spatial to District 2, Musical to District 3, Naturalist to District 4, Logical-Mathematical to District 5, Inter-personal to District 6, Bodily-Kinesthetic to District 7, and Linguistic to District 8. Over the course of the remaining 8 days of study, the experimental group participated in daily projects to follow *Catching Fire* reading and instruction which accommodated specifically for the individual intelligences. Daily project grades were taken, and each district received a certain amount of points based on the group's average grade on the project. Each new class day was designed specifically for a different district's intelligence; for example, on day three, students created a mixtape with three songs pairing with plot, characters, or tone in *Catching Fire*. The control group, in contrast, completed uniform traditional journal entries, verbal responses, and written worksheet assessments to evaluate reading comprehension throughout the 8-day research period. Averaging grades quantified evidence of engagement with the text as well as completion of the assignment. Various journal entries recorded observable, qualitative data like positive/negative statements from students concerning the daily projects and district competition. The co-teach experimental group showed increased motivation to engage with the text with the addition of district competition. Student progress reports also showed an increase in grade average over the span of the 10-day research in the class receiving differentiated projects based upon the multiple intelligences.

Implications/Recommendations

This research revealed that dividing students into competitive groups based on their individual multiple intelligences increases active participation and project completion in the co-teach class receiving differentiated activities. However, the data results were inconclusive in proving whether students will always perform better on project assignments intended to accommodate for their specific intelligences. For example, not all students who tested strongly for the inter-personal intelligence received their highest score on the "Letter to a Character" project intended to stimulate inter-personal strengths, and not all students who tested strongly for the musical intelligence received their highest score on the "Mixtape" project. This could be due to the fact that many students tested with more than one prominent intelligence. One recommendation for further research is to conduct a new experiment

separate from multiple intelligences to measure whether a competitive point system has more of an impact on engagement, motivation, and project completion than differentiated activities. Another recommendation is to conduct the same experiment comparing on-level and pre-AP English students.

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The Effects of Digital and Traditional Literacy on Reading Comprehension

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Rationale/Introduction

While working with my kindergarten students at Parkdale Elementary, I observed that student comprehension and engagement varied depending on if students were recalling a story from a traditional literacy read aloud or a digital read aloud. According to Dr. R. J. Rickleman (1990), "Telecommunications technology places a large responsibility for future literacy exchange with the classroom teacher and the reading specialist" (p.418). I became curious which method, traditional or digital literacy, was more beneficial for student comprehension. This was a four-week study where I read appropriate level books and showed the same digital books to six students divided into two groups.

Question/Wondering

How is the reading comprehension of Kindergarten students affected by the use of digital literacy compared to traditional read alouds?

Methodology/Results

This study was conducted on two groups of three students who were questioned with five comprehension questions to determine the effect of digital and traditional literacy on comprehension. Baseline data was taken before research to ensure that all six students were at the same reading level before the study took place to assure accurate data. During the three-week study, I met with the first group of three students. The students would listen to a digital literacy version of a book. Upon completion of the book, I would individually ask the students five questions to assess their comprehension of the story. I then met with the next group of three students, repeating the same steps but used a physical book for the read aloud instead of the digital version of the same story. The same comprehension questions were asked to this group of students. Each day the groups would switch listening to a traditional or digital read aloud. This ensured that each group of three students received the same amount of reading a traditional read-aloud as reading a digital read aloud. The students then tracked his/her own data and progress on provided graphs. As a result of the comprehension assessments over the three-week period, my students, overall, had higher comprehension scores after a traditional read-aloud as opposed to a digital read-aloud. While some of the stories produced similar comprehension scores, using physical copies of books proved to have higher and more consistent comprehension results.

Implications/Recommendations

Based on the data collected, this research demonstrated the importance of continued use of traditional read alouds. Technology can increase engagement and effectiveness in a classroom, but it is important to focus technology in areas that will be most beneficial for students. According to the results in this study, digital literacy is not best suited for read alouds for kindergarten students. While traditional read alouds had the higher comprehension scores, they do heavily rely on how effectively the reader presents the story to the students. Further research could investigate what a presenter can do to make a read aloud most engaging for students to improve consistency.

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Goal Setting to Reduce Impulsivity

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Rationale/Introduction

In my gifted and talented (GT) pullout classroom, I had a fourth-grade student who struggled with blurting out in class, controlling his impulses, and having off-task conversations with other students. According to Covington (2000), setting prosocial and behavioral goals can lead to improved academic and behavioral outcomes. Upon analysis of the student's baseline behavioral data, I decided to implement a learning contract with the student that would be discussed in a 5-minute goal-setting conference between the two of us in the morning before beginning instruction. This contract included sections for the student's goals, consequences if he does not meet these goals, rewards for meeting the goals, and a contract review date. I chose a learning contract because the student is self-reflective and capable of analyzing his behavior; he just needed some time away from the group to do so. The intervention lasted for two weeks (two class days), and a new behavior contract was written up at the start of each day.

Question/Wondering

How do goal-setting conferences impact a student's impulsivity?

Methodology/Results

For the duration of the intervention, I took qualitative data samples of the student's behavior, including the antecedent, behavior, and consequence of his behavior. Through this data I saw the frequency of the problem behaviors decreasing to only once every 30 minutes or so, as opposed to before when these behaviors were seen twice every 15–20 minutes. I also saw the duration of desired behaviors increasing, since these behaviors didn't have to be stopped for redirection. I made a tally mark on the whiteboard each time the student blurted out or demonstrated impulsive behavior, something we had discussed in our conference at the beginning of the day. Each day of the intervention, the student received only two tally marks for blurting out or off-task behaviors. The majority of the time when a tally mark was given, the student noticed and corrected his behavior immediately.

Implications/Recommendations

I found that this intervention was successful because it gave the student input in the goals he set for himself and feedback he could use to reflect on whether or not he met his goals that week. According to Locke and Latham (2002), a critical component to goal attainment is data collection to monitor progress and feedback provided to students. In addition, students should be given input about their goals in order to "increase social validity while simultaneously improving behavior" (Bruhn, McDaniel, Fernando, & Troughton, 2016, p. 118). I believe that this skill of goal setting could be further implemented into this student's homeroom classroom, as long as student input is considered and feedback is provided to the student consistently. I recommend that goal setting be implemented individually with students who struggle with impulsivity and other distractive behaviors, or as a whole-group classroom management technique.

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Fidget Devices for the Underachievers

Primary Researchers
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Rationale/Introduction

The purpose of this action research is to increase the level of engagement in those who need more assistance focusing on the material and have lower than a 75 in their eighth-grade science class. The students who have been selected score above average on tests (i.e. A's and B's), but have below average scores (i.e. C's, D's, and F's) on homework and daily work grades. They show at the end of the unit that they understand and can comprehend the material presented but, are having trouble participating in the smaller assignments that really make up their overall grade. According to Ford, Aber, and Heward (1998), "Students attend class, but with little excitement, commitment and pride in mastering the curriculum. They have no psychological investment in learning." Many of the students selected will put their heads down on their desk, doodle in their notebooks, read other books, or work on assignments for other classes. All students in the class are GT and in a pre-AP class. They have the capabilities to succeed but, need the extra push to get them there.

Question/Wondering

How can the use of fidget devices improve in-class engagement in low achieving students?

Methodology/Results

There were eight participants, four control and four experimental. They were all male students in an eighth grade pre-AP science class as a part of a gifted and talented program at Tennyson Middle School. There was one African American student, three Hispanic students, and four Caucasian students. The students were chosen based off of how many assignments they were missing versus how highly they scored on their tests. All of their test grades were at least a B or higher, but their overall grades are lower due to the fact that they have not completed the majority of their in-class or participation assignments. I kept detailed logs of when each student submitted his assignments. I noted whether they were submitted on time, late, or missing. I also tracked their grades and how they changed when they submitted their assignments. I also logged who used what devices and if they were actually using the devices. I had three different types of devices that I used. There was a nylon sleeve with a marble in it that the students could slide back and forth. There was also one device that had two pieces of a bike chain hooked together. The last one I used looked like peas in a pod. The students would be able to pop the peas out of the pod by pressing. It would feel similar to pressing a button, but a little bit more satisfying. I let each student mess with each device for a little bit before they decided which they would use.

On the first day that I started recording data, two of my students broke their devices, so I ended up having to order more. After that, the devices were able to hold together. There was not a variable difference in students' grades. However, the students did enjoy using them and worked well with them. I had one student come up to me as soon as he walked in every morning asking when he would get to use his "toy." It was nice to see that it did have an impact even if it was not a measurable one.

Implications/Recommendations

While I appreciated the opportunity to work on this study, it was difficult to obtain data for several reasons. There was intermittent practice and real STAAR testing, spring break, students who were absent, broken devices and more. In order to compensate for events like these, I would suggest collecting data over a much longer period of time. I would also make a more definite end goal, such as being able to raise their grade by three points considering the fact that mine was a little vague.

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Personal Questions and Student Engagement

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Rationale/Introduction

Getting to know your students on a personal level increases student engagement (Education World, 2012). Although this is not always as easy to do as it sounds, there is a simple solution! If teachers ask students to respond to a personal and/or reflective question on an exit ticket, warm-up, or something similar, teachers can easily learn about all their students. By showing more interest in students and asking them their opinions on certain topics, students will more likely respect and value their teacher, thus making them more engaged in class (Korbey, 2017). Both sides may be surprised by the relationships this simple activity could help cultivate.

Question/Wondering

How transparent will students be when asked a question about their life, and will these questions increase student engagement?

Methodology/Results

I taught 7th grade mathematics on the Atlas side of Tennyson Middle School. Atlas only caters to GT students, most of who come from low socioeconomic households. When closing my lessons, I used exit tickets to assess my students. On these exit tickets, I asked a math-related question and a personal question. The personal questions ranged from topics such as "Who is your hero?" to "What is your favorite food?" I was often impressed and surprised by students' answers and honesty. Students were not forced to answer the question, but most of them did. I tried following up with my students to let them know I was reading their responses, but this was not always possible. However, students often enjoyed elaborating their answers when I did follow up with them. These questions also provided students the opportunity to reflect on their own experiences and feelings, an important skill young people need to develop, and allowed students to integrate writing into their math class.

Unfortunately, I could not determine if this study increased student engagement due to several factors. Since my mentor teacher and I switched teaching so frequently, students were not asked a personal question on a consistent basis, so I could not tell if the questions made students more engaged. I analyzed student grades to determine if they improved when I did ask students questions, but many students stayed around the same grade range each marking period. Some units were also contextually more difficult than others. This, along with students' personal work habits, made the biggest impact on their grades.

I gave my students a survey to inquire whether they felt their teachers did enough to get to know them, if this affected their attitudes about that class, and what teachers could do to get to know them better. They also ranked a variety of characteristics to illustrate what a good teacher looked like to them. I told students to consider any past teachers they have had or teachers they currently have. The survey demonstrated 76% of students at least somewhat agreed their teachers knew them, 76% of students at least somewhat agreed their teachers showed interest in getting to know them, and 64% of students at least somewhat agreed they would be more interested in coming to class and learning if their teachers showed more interest in them. 57% stated teachers could show more interest in them by asking more questions about their day/life, taking interest surveys, and talking to them more in general. 39% of students agreed making good relationships with them is one of the most important things a good teacher does.

Implications/Recommendations

I would highly recommend implementing this procedure or something similar in the classroom. As mentioned above, I learned so many unique and fun things about my students that would have never come up without these prompts. They also provided a way for my introverted students to communicate with me. The survey results showed that although many students agreed their teachers at least somewhat knew them and did things to get to know them, many of them still wanted their teachers to inquire about their day/life. Merely standing at the door,

greeting each student personally and individually, and asking how their day is going can make a dramatic difference for many students.

I would tweak several things if I redid this study. I would want to do a better job at following up with students based on their responses to create stronger connections. It could also be fun and interesting to have students ask each other questions so they could learn more about one another. This could easily be done anonymously to make students feel more comfortable sharing. It would probably take more time and would be implemented less frequently but may be a fun event to do on Fridays or abnormal schedule days. I intended to ask certain questions multiple times throughout the year, such as "What are your goals for this year?" "What is one positive word to describe yourself?" "Are you proud of who you are?" or "Do you feel stressed?" to see if students' responses changed. It would be interesting to see how students' perception of themselves changed throughout the year, if at all, and could be used to show students how they've grown over the year. It would also be interesting to ask students their opinions on conflicting issues. I only asked my students once what I (the teacher) could do to better help them learn but think this is an important question that should often be revisited. This would ensure teachers are truly catering to their students' needs, giving students more control over their learning, and reinforcing to students that they do value and take their feedback into consideration. Lastly, I wish I had asked students if they even liked that I asked them personal questions on their exit tickets. I intended to ask this question several times throughout the semester but did not make it a high enough priority. However, since majority of students answered the questions and no one complained about them, I assumed students were not bothered by them.

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Impact of Summarizing Activities on Student Success in a 6th Grade Science Classroom

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Rationale/Introduction

My students struggle with generalizing information and applying the concepts to new situations. On our previous unit, the students could explain concepts in familiar situations, but when presented with a slightly different scenarios on the test they struggled. Therefore, I am testing if weekly summarizing activities will help my students to generalize concepts and succeed on the end of unit assessment.

Question/Wondering

How do summarizing activities at least three times a week, affect student success rates on the end of unit assessment?

Methodology/Results

For my research, I tested 135 students divided into six class periods. All of my students were between the ages of 11 and 12 years old, and they are all in the 6th grade at Robinson Intermediate School. Each class varies in size between seventeen and twenty-three students. These students come from a rural background, with mixed diversity in my classes. I also have a lot of modifications, most of which involve oral administration. I had one student who transferred during the first unit, so this students' data has been omitted from the research. For my research, I conducted the experiment over the span of two units. Each of these units involved fourteen days of instruction and one day to take the unit exam.

In the first unit, I did not include any extra summarizing activities outside of our already planned lessons and conclusion activities. My students were not taught summarizing techniques, and there was not a summarizing activity for each day. This was what was occurring in the classroom prior to my research, and it was used as the control for my research. In the second unit, I incorporated three summarizing activities a week. These activities ranged in their complexity and in the length required of the summary. My summary methods varied between having students summarize an activity through a paragraph, having students write a sentence summary on sticky notes, a four-part guided summary involving illustrations, and having students complete a summary as a table group. Each summary activity was turned into me and used to formatively assess student learning.

After the two units, I was able to compare student achievement on the Unit Exams. We use the program Eduphoria to analyze student test result data, and I gathered my information from Eduphoria to see the results of summarizing activities on student learning. Student scores increased with summarizing activities. Specifically, the percentage of students that met the approaching mastery level on their unit exam from unit two was significantly higher than the approaching level from the unit one exam. The unit one exam had roughly 83 percent of students meeting the approaching level, and the unit two exam had approximately 88 percent of students meeting the approaching level of achievement.

Implications/Recommendations

My data thus far indicates that summarizing activities are extremely helpful in increasing student achievement on unit exams. Therefore, I will continue to use daily summarizing activities in my future lessons and classroom. I also recommend that teachers attempt to incorporate at least two to three summarizing activities in their classrooms in order to help students generalize concepts and succeed. This study was conducted over two separate units, so that could have affected the results.

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