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The Effects of Class-Wide Function-Related Intervention Teams

in Two Middle School Art Classrooms

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A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Educational Specialist

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ABSTRACT

The Effects of Class-Wide Function-Related Intervention Teams
in Two Middle School Art Classrooms

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Classroom management is a common challenge in middle schools. Class-wide Function-Related Intervention Teams (CW-FIT) is a multi-tiered intervention designed to decrease problem behaviors at the classroom level (Wills et al., 2010). It is comprised of evidence-based practices such as teaching classroom expectations, increasing teacher praise, and using positive reinforcement in an interdependent group contingency. CW-FIT has shown promise in a variety of school settings, but it has not been tested in middle school art classrooms. This was initial investigation examining the effects of CW-FIT using a single-subject ABAB design in two middle school art classrooms. Results indicated that class on-task behavior increased by more than 25% and teacher praise-to-reprimand ratios more than doubled during CW-FIT implementation, compared to baseline levels. Results also indicated that on-task behavior for students identified as at-risk for emotional/behavioral disorders improved by more than 18% during the intervention. Teachers and students found the intervention to be socially valid. Results indicate promising implications for using CW-FIT in other middle school art classrooms.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

Introduction

The transition from elementary school to middle school tends to be fraught with many novel challenges that can lead to students losing motivation, disengaging, and behaving inappropriately (Symonds & Hargreaves, 2016). Transitioning students are not only coping with starting a new school, they are also contending with physiological, social, and emotional challenges, which can be difficult for students to navigate (Susman & Rogol, 2004; Young, Caldarella, Richardson, & Young, 2012). Teachers are in a prime position to help students, but sadly relationships between middle school students and their teachers are often strained (Symonds & Hargreaves, 2016). Factors such as the ever-increasing discrepancy between the number of students and the number of teachers in middle schools, higher demands and expectations on students, and lack of creativity and relevancy in lesson plans can cause students to feel a lack of fit between themselves and their environment (Beaty-O'Ferrall, Green, & Hanna, 2010; Eccles, 2004). As a lack of fit increases, students often become increasingly apathetic toward school and act out, thus leading to poor academic outcomes and classroom misbehavior (Gottfredson, Gottfredson, & Hybl, 1993).

Middle school art classes, although uniquely structured and different from core classes, can in many ways exacerbate student problem behaviors common to middle schools (Jason & Kuchay, 2001; Susi, 1995). Art classrooms offer students a space to be creative and tend to be less restrictive in rules, which can have a negative effect on student behavior (Larochelle, 1999). As with middle schools in general, art classes are also increasing in size, thus leading to many teachers feeling overwhelmed as they attempt to meet student needs (Kuster, Bain, Newton, & Milbrant, 2010). An increase in students and a less structured environment can lead to higher

instances of students behaving inappropriately. Unfortunately, many art teachers feel that they have not received sufficient training in classroom management to handle problem behaviors when they inevitably arise (Kuster et al., 2010). Many schools rely on punishment tactics such as suspension and expulsion to control student behavior, however policies like these have been shown to be ineffective and detrimental to student learning (Sugai & Horner, 2002). Educators need better and more proactive approaches that are relevant to the problems facing middle schools, particularly art classes.

Class-Wide Function-Related Intervention Teams (CW-FIT) is a classroom management intervention based on Positive Behavior Intervention and Supports (PBIS) principles (Wills et al., 2010). CW-FIT has shown promise in elementary school art classrooms in helping increase student on-task behavior, increase instances of teacher behavior specific praise, and decrease teacher reprimands (Nelson et al., 2018). CW-FIT has also shown promise in middle school classes (Conklin, Kamps, & Wills, 2016). Due to the unique challenges that middle schools and art classrooms face, and due to the promising results of CW-FIT in such classrooms, this initial investigation seeks to test the effects of CW-FIT in two middle school art classes. This study aims to answer the following questions:

1. Can middle school art teachers implement CW-FIT with fidelity?
2. Will CW-FIT increase overall student on-task behavior in a middle school art classroom?
3. Will CW-FIT specifically increase at-risk student on-task behavior and decrease disruptions?
4. Will implementing CW-FIT increase teachers' praise-to-reprimand ratios?
5. Do middle school art teachers and students consider CW-FIT to be socially valid?

CHAPTER TWO

Literature Review

Transitioning from elementary school to middle school is a significant life event in which some students excel, while others struggle to succeed (Symonds & Hargreaves, 2016). This can be an exciting time for a transitioning student as it offers many new opportunities not afforded in elementary school. Students are given a chance to explore their interests and to create self-identities by engaging in sports and clubs and by forming new relationships (Young et al., 2012). Many students are also excited about the prospect of increased independence and being viewed as more mature by adults and peers (Booth & Gerard, 2014). Opportunities provided by transitioning to middle school can foster a sense of purpose and can urge students to take ownership of their coursework, thus leading to academic success. However, not every student can take full advantage of such opportunities, and some find this transition period not as a time of growth, but as a time of stress and anxiety.

Although the transition from elementary to middle school is initially exciting, many students become disenchanted with their new environment and begin to lose motivation, disengage, and act out (Symonds & Hargreaves, 2016). Booth and Gerard (2014) found that students entering the seventh grade are initially excited about making the transition and have more positive perceptions of themselves and school. Students in this study liked the idea of having lockers, expanding their social lives, and being able to choose some of their classes. This excitement, however, did not last. By the end of seventh grade, students were no longer excited about their new school, and a lack of fit between them and the middle school environment became more pronounced. Symonds and Hargreaves (2016) stated that as a student's positive feelings towards school decrease, the student becomes more and more apathetic towards

learning, is no longer motivated to stay engaged in the classroom, and therefore begins to exhibit problem behaviors.

Middle School Challenges

There are many student challenges unique to middle school, and educators need to understand these behaviors to address them. Adolescents face novel issues, such as self-doubt and worrying about what others think (Harrison, Vannest, Davis, & Reynolds, 2012). They also tend to require repeated directions and are more inclined to act silly or immature. Most commonly, as Harrison and colleagues (2012) discovered, middle school students are punished or sent to the office for being disrespectful, defiant, and disruptive. Student apathy and loss of motivation, coupled with inappropriate behavior, not only stunts growth academically, socially, and emotionally for the student as an individual, but can also be detrimental to the classroom as a whole (Gottfredson et al., 1993).

According to research, 29% of teachers seriously considered leaving their profession due to negative student behavior and 33% found that inappropriate behavior interferes with their teaching (Gottfredson et al., 1993). Negative student behavior can result from a mismatch between the students' environment and biological, psychological, and social status (Eccles, 2004). Strained student/teacher relationships, a desire for autonomy versus a lack of independence, and increased responsibilities without the capability to meet them are also contributors (Young et al., 2012). Understanding why such behaviors exist during this transition is vital so that educators can more easily mitigate these problems and help students succeed.

The rapid biological, psychological, and social changes that adolescents undergo during the transition from elementary school to middle school can create disharmony between the

students and their environment (Susman & Rogol, 2004). For many years, adolescence was labeled as a time of great "storm and stress" due to hormone changes, but it has been found that adults have higher concentrations of the same hormones in their systems with less stress (Susman & Rogol, 2004, p. 15). The current thought is that stress cannot be attributed to hormones alone. Instead, it is the novelty of a combination of the rapid changes in the adolescent's environment coupled with the hormones. Adding to this novelty are expectations placed on adolescents by their culture, families, and peers as they develop physically (Susman & Rogol, 2004). As an adolescent begins to look more like an adult, family and community members may start to give the adolescent more adult responsibilities (Young et al., 2012). This can lead to more pressure on the adolescents to behave adult-like, regardless of their age and ability (Susman & Rogol, 2004). The rate at which an adolescent develops can affect behavior. Adolescents who develop earlier tend to get more attention from their peers, but they also have a greater tendency to engage in risky behaviors like drug and alcohol abuse and sexual promiscuity (Young et al., 2012). Students who participate in such actions are also prone to academic failure, antisocial behavior, truancy, and acts of vandalism against the school (Metzler, Biglan, Rusby, & Sprague, 2001).

Along with physical changes, an adolescent also undergoes rapid psychological growth that can create increased stress and defiant behavior. As cognitive growth increases, adolescents become more efficient in brain functions such as reasoning, decision making, information processing, working memory, and problem-solving (Keating, 2004). Cognitive improvements are essential to a student's academic success; however, these increases also help students become better equipped to challenge classroom rules and expectations. Students demand more reasons for why they need to learn what they are being taught or why they need to behave in specific

ways (Young et al., 2012). Because of these increases, adolescents need an educational environment that challenges them to think critically and creatively. If the new middle school environment does not properly challenge the students and fails to give clear expectations, students tend to defy their teachers, and learning is disrupted (Metzler et al., 2001).

Other changes that may not fit well within the middle school environment are changes to the student's identity and social life. Adolescence can be fraught with changes in students' attitude towards school and how they behave, as well as towards how they feel about themselves (Symonds & Hargreaves, 2016). Adolescents face problems that were not apparent when they were children. When students enter middle school, they demonstrate self-doubt, worry about what others think, and striving for personal perfection (Harrison et al., 2012). As students become more self-focused and self-conscious, they begin to link their satisfaction in school to relationships (Booth & Gerard, 2014). Students' relationships are significant to their overall school experience, and students need to have a safe environment to help them navigate complex social interactions.

As the transitioning student's relationships become more peer-oriented, educators can help students learn about healthy social interactions to facilitate success. Middle school offers a bevy of opportunities for students to interact with one another and create new relationships. Navigating different relationships and new social expectations can be challenging. As relationships begin to strengthen and develop, like casual dating turning into a more adult romantic relationship, the expectations change, and this can be complicated to deal with (Young et al., 2012). Relationships are essential for an adolescent, but if the relationship is not a positive one and peer pressure on the adolescent is to behave negatively, then the adolescent begins to struggle. Young and colleagues (2012) state that teachers can provide valuable opportunities for

students to learn about healthy social interactions inside and outside of the classroom. Teachers can provide instruction and examples of proper social behavior in different contexts like in class, the hallway, sporting activities, and school dances (Young et al., 2012).

Need for Behavior Management in Middle Schools

Unfortunately, there is a trend of strained relationships of students and their teachers during middle school transitional stages (Symonds & Hargreaves, 2016). A commonly cited explanation for student disengagement, loss of motivation, and problem behavior is a worsening of teacher-student relationships. Although students are becoming more peer-oriented, students still desire interactions with adults to influence decisions for moral and conventional considerations (Smetana & Bitz, 1996). Teachers can be great role models for students to look up to as they undergo the challenges of adolescence. Positive teacher-student relationships foster greater student motivation, engagement, and success (Young et al., 2012). Beaty-O'Ferrall and colleagues (2010) argue that positive student-teacher relationships start with teachers taking a personal interest in their students, establishing clear learning goals, and demonstrating equitable and positive behaviors. These are teachers who attempt to be empathetic to students, allow students to use their unique talents to better the class, and curb their impulses and adverse reactions when students misbehave. Regrettably, research has found that middle school teachers tend not to exemplify these attributes and tend to be less friendly, supportive, and caring than elementary school teachers (Reddy, Rhodes, & Mulhall, 2003).

Teachers have an accountability to student engagement and success, but due to the pressures and the sheer number of teachers that work in middle schools, many students can fall through the cracks, and teacher-student relationships can become strained. Middle school teachers face a myriad of demands. They are expected to know content, pedagogy and engage

and build relationships with over one hundred students a day (Beaty-O'Ferrall et al., 2010).

Teachers, especially in middle schools, often have low self-efficacy in their ability to teach,

resulting in lower expectations for themselves and ultimately their students (Eccles, 2004).

Students can adopt a teacher's belief about themselves as their own. When a teacher lacks

confidence in a student's ability to learn or in their ability to teach, students can feel alienated

and disengaged (Young et al., 2012). When students think they do not belong, they may act out

to gain attention from a teacher. Teachers then tend to overlook "troublesome" students and fail

to ask them questions and involve them in learning, leading to further disengagement and

increased inappropriate behavior for more attention (Gottfredson et al., 1993).

Lastly, reasons attributed to lower student success after the middle school transition

include the differences in classroom instruction between elementary school and middle school.

According to Young and colleagues (2012), secondary students may be less "adequately served"

than elementary school children in areas such as "instruction in academic, social, and behavioral

concerns" (p. 24). As cognition and reasoning increase, adolescents want to link what they are

learning to their lives. Many secondary students do not feel what they are learning is relevant to

them or their interests. This can lead to the infamous "When am I ever going to need this?"

question (p. 25). Secondary students who don't see how what they are learning could be useful

to them become bored and disengaged. Their motivation may not go any further than getting a

passing grade.

Although teachers attempt to make their lessons engaging and relevant to their students,

many lack the creativity that abounds in elementary schools (Young et al., 2012). Teachers

who strive to make their subjects relevant to their students tend to have better results (Eccles,

2004). If students become interested in the topic, they take ownership of what they're learning

and want to succeed. However, some instruction in secondary schools lacks creativity and exploration (Young et al., 2012). Elementary schools may use art, music, or other creative means to help students learn, but some secondary teachers steer away from these practices, assuming they are too immature for their students, even if these approaches encourage student engagement (Eccles, 2004; Eccles, et al., 1993).

Middle school students also have less freedom and an increased workload, creating a sense of lost autonomy and independence, thus causing some to become bored and disengaged. Students have fewer privileges than in elementary school (Eccles, 2004). Elementary students are given the opportunity to release excess energy, whereas middle school students are told to sit still and stay quiet for extended periods of time (Young et al., 2012). If students' need to release energy is not met, and they feel as though their autonomy is restricted, they may begin to feel marginalized, disengaged, lose motivation, and have strained teacher-student relationships.

Middle school students also need to respond to the needs of several different teachers and different subjects and can start to feel overwhelmed. Workloads increase, and many times, students may view their assignments as busywork. Extra frustration mounts as grades drop due, not so much to inability, but to boredom and exhaustion (Young et al., 2012). Different subjects in middle school, like art, can also influence students' on-task behavior and engagement. Classroom environments can be a force for positive or negative outcomes, and the subject matter of the class has a considerable effect on student behavior (Jason & Kuchay, 2001; Susi, 1995). The environment and physical layout of a classroom specific to different subjects can also either help or hinder teaching (Jason & Kuchay, 2001; Susi, 1995).

Need for Behavior Management in Art Classes

Art classrooms are especially vulnerable to problem behaviors from students. Unlike math, science, English, and other core academic classes where rules are enforced, art classes cultivate imagination and creativity rather than structure (Larochelle, 1999). When entering such an environment, students tend to view it as "party-time" and abandon attempts at following school rules or using prosocial skills (Larochelle, 1999, p. 28). Art classes can become stressful environments as some students receive too much stimuli from the art room itself, or from other students talking loudly and being distracting (Susi, 1995). Art classes are also getting bigger, and it is not uncommon for a new art teacher to have forty students in class, making it increasingly difficult to manage their classrooms (Kuster et al., 2010).

Despite the difficulties art teachers face, they are expected to be not only masters in their subject but also masters in classroom management. To help school administrators select effective art teachers, Saunders (1989) enumerated the qualities an art teacher should possess before being considered for hire. First, an art teacher must have effective management skills. Art teachers must create a positive and enthusiastic environment while also establishing boundaries for a safe and neat space. According to Saunders (1989), it is especially vital that secondary school art teachers become polychronic and thrive well under conditions that require the teacher be doing several projects at once. Secondary art teachers are also expected to have competency in the art world as well as strong pedagogical skills. Art teachers in secondary settings must function as both teacher and manager over all aspects of the class and must be able to anticipate problem behavior before it happens. Such skills are essential and useful, but unfortunately, many art teachers enter the field feeling less than prepared to manage a classroom effectively.

To better understand the challenges facing art teachers, Kowalchuk (1999) observed 37 novice art teachers during their first year of teaching. Each of the art teachers in the study was asked to write reflective statements describing their successes, struggles, and areas for improvement throughout the semester. All the participants had previously completed courses in art education theory, but many teachers felt that their education should have focused as much on classroom management as it did on art. Challenges with classroom management was one of the most commonly stated problems. Only 6% of new art teachers said they were successful in managing their classes and 29% struggled to maintain control. Other art teachers lacked knowledge regarding how to determine if a situation was going to escalate, or if they would be better off ignoring minor problem behaviors. Overall, teachers struggled to teach art content while also managing problem behaviors. Kowalchuk (1999) argued that teaching art needs to be a mix of different orientations including the study of art and the technical aspects of teaching.

Kuster and colleagues (2010) studied first-year art teachers and found they too struggled with classroom management, more specifically student engagement and apathy. After analyzing 11 new art teachers, researchers found that the most common problems they were facing were classroom management, getting students motivated, and lacking sufficient resources or training when dealing with students with disabilities. Teachers with high school and middle school-aged students struggled with their students' lack of motivation. Secondary students wanted to rush through their assignments and were very vocal in refusing to complete the task at hand. New art teachers found it difficult to focus on individual students because of large class sizes and time constraints to teach the lesson, create the art project, and clean up afterward. New art teachers also felt like they did not have proper training or help from school administrators when dealing with students with disabilities. These two studies show that there is a problem with behavior in

secondary school art classrooms, and that art teachers' lack of support and training in classroom management, especially at the secondary level, needs to be addressed.

Ineffective Punishment Tactics

Although there is a need to enhance positive behavior in the classroom, unfortunately, many school districts rely on ineffective exclusionary tactics like suspension and expulsion to maintain order. Isolated instances of gun violence and increased usage of illegal substances in schools have led to the creation of coercive and exclusionary tactics like zero-tolerance policies in the United States (Sugai & Horner, 2002). Zero-tolerance policies that are set in place to keep students safe by enforcing strict rules have led to a dramatic increase in students getting expelled and suspended (Skiba, 2014). The philosophy behind such policies is that using such harsh punishments will deter future disruptive offenders by sending a message that specific behaviors will not be tolerated. Skiba (2014) also states that zero-tolerance policies have led to students being punished by tactics that are disproportionate to the actual offense (dress code violations, drawing pictures of guns, etc.). Over the past 20 years, many schools have adopted harsh punishments in the hope that they will be better able to discipline their students and gain control, but to no effect (Simonsen, Sugai, & Negron, 2008).

Zero-tolerance policies have not improved school security or behavior and can be very detrimental towards a child's future. Excluding children from school as a punishment has been found to be ineffective at improving the school environment and can have lasting effects on the child's academic and social growth (Skiba, 2014). Sugai and Horner (2002) list some long-term effects of harsh punishments: (a) an authoritarian environment is created; (b) the punishment can inadvertently reinforce the negative behavior; and (c) taking students out of school denies them opportunities for learning and academic involvement. Students who experience a high amount of

exclusive punishments tend to fall into the criminal justice system (Skiba, 2014). An alternative to such tactics should be paramount for educators when implementing classroom management programs. Simonsen and colleagues (2008) suggest that schools implement universal positive behavior support programs that have measurable outcomes, rely on data, are relevant to the problems students and educators are facing, and use evidence-based practices. Class-Wide Function-Related Intervention Teams (CW-FIT) is one such program.

CW-FIT

Class-Wide Function-Related Intervention Teams is a multilevel interdependent group contingency that aligns with Positive Behavior Intervention and Supports (PBIS; Wills et al., 2010). It is a proactive approach to mitigating negative student behavior without the use of coercive consequences. CW-FIT is designed to be easy for class-wide implementation and has been found to increase teaching time by reducing the number of disruptions and problem behaviors that negatively impact classroom learning (Wills et al., 2010). Much like other PBIS interventions, CW-FIT utilizes evidence-based practices like teaching classroom expectations and positive behaviors and then reinforcing those skills and behaviors through praise and rewards (Sugai & Horner, 2002; Wills, et al., 2010). CW-FIT also uses group contingencies and self-management strategies to increase student engagement, prosocial skills, and on-task behavior (Kamps, Conklin, & Wills, 2015). CW-FIT has two tiers with varying levels of intervention to accommodate and assist students who may not be responding to the primary level of treatment.

Tier 1. Tier 1 of CW-FIT focuses on teaching classroom expectations and extinguishing negative behaviors by reinforcing positive behaviors with praise and rewards through the

implementation of a group contingency. The rationales behind these CW-FIT components are described below.

     Teaching classroom expectations. Teaching classroom expectations is an important, but often overlooked aspect of PBIS based interventions. Having clear expectations in the classroom is essential to classroom management, yet some students have trouble meeting expectations (Epstein, Atkins, Cullinan, Kutash, & Weaver, 2008). Student failure to meet classroom expectations could be due to a lack of social skills. Social skills are "specific behaviors related to the competent performance of social tasks" (Shepherd & Linn, 2015, p. 288; Young et al., 2012). In the classroom, these are skills such as raising one's hand rather than shouting out the answer to a question, being respectful to teachers and peers, making eye contact, etc. Some teachers do not consider teaching social skills to meet classroom expectations necessary.

     These teachers assume that it would be too complicated for them to incorporate such teaching into their classes, or that their students do not require being taught something so rudimentary (Shepherd & Linn, 2015). However, it is a common misconception that all students have the proper social skills to meet classroom expectations. According to Gresham, Van, and Cook (2006), there are students with social skill deficits that may have never learned the skill and therefore cannot display it. Other students may have learned proper social skills but have difficulty using or choose not to use them. Assisting students to become competent at meeting classroom expectations takes time and practice but will ultimately help them succeed. This is true not only in an academic setting, but in their future lives.

     It is critical that students learn and perform proper social skills during their school years to create better futures as adults, and it is especially essential in secondary education when students are faced with so many new challenges and higher expectations (Young et al., 2012).

Studies have found that students who exhibit prosocial behaviors tend to have higher levels of academic achievement, motivation, peer and teacher acceptance, and fulfilling relationships (Walker, Ramsey, & Gresham, 2004; Wentzel, 2009). Conversely, students lacking prosocial skills are at greater risk of social rejection, difficulty in maintaining relationships, school dropout, future unemployment, and mental health challenges (Cook, et al., 2008; Maag, 2006; Merrell & Gimpel, 1998; Merrell & Gueldner, 2010). As noted earlier, secondary schools possess a different social environment from elementary schools and learning how to navigate new situations correctly can be difficult. Adolescents are also facing greater expectations from teachers, trying to fit in or stand out amongst, and develop stronger and more intimate bonds with peers, while trying to distance themselves from adult guidance (Cook et al., 2008; Yeager, 2017). It is imperative during this vulnerable time that students are taught the correct skills to handle new social situations and meet expectations successfully.

CW-FIT aims to set clear classroom expectations and teach appropriate prosocial skills to replace problem behaviors to improve learning in the classroom (Wills et al., 2010). Problem behaviors can be a roadblock for students to learn and meet classroom expectations. Such barriers can often be referred to as competing behaviors because they contend with prosocial behaviors to attain the same desired goal (Gresham et al., 2006). Students without knowledge of, or training in, prosocial skills often resort to problem behaviors to gain attention, access to supplies or activities, or escape stressful situations (Young et al., 2012). CW-FIT teaches specific prosocial skills to combat problem behaviors. The goals of these prosocial skills are to prepare students to meet such classroom expectations like how (a) to gain teacher attention properly, (b) obtain access to activities and supplies, and (c) ignore inappropriate behavior (Wills et al., 2010).

For example, Conklin and colleagues (2016) tested the effects on classroom management in elementary and middle school classes through teaching classroom expectations and prosocial skills with CW-FIT. Measured prosocial behaviors were defined as being on-task, compliant, and raising hands to gain attention. Also measured were disruptive behaviors, such as getting out of seat at inappropriate times and talking out of turn. During CW-FIT implementations, there were significant increases in on-task, compliance, and hand-raising behaviors both class-wide and for target students. A decrease in talking out of turn and out-of-seat behaviors was also found for both groups. As prosocial behaviors increased, problem behaviors decreased. Teaching social skills thus had an impact decreasing problem behavior in students and helping students meet classroom expectations.

Praise to extinguish problem behaviors. CW-FIT emphasizes ignoring problem behaviors while simultaneously increasing teacher praise of positive behaviors to reinforce desired outcomes. Teacher praise is a verbal statement intended to encourage, strengthen, and support appropriate responses (Hester, Hendrickson, & Gable, 2009). Hester and colleagues (2009) found that using praise while ignoring minor problem behaviors increases positive behaviors. This is done by helping students determine which actions will or will not receive attention. Educators using CW-FIT are trained to provide praise when students comply with desired skills, such as hand raising to gain teacher attention and to ignore undesirable behaviors, such as calling out to gain the teacher's attention (Wills et al., 2010).

As with other PBIS interventions, praise should be behavior-specific (Simonsen et al., 2008). Instead of giving general praise showing approval (e.g., "Nice job, Team One!"), CW-FIT encourages praise that is tailored to specific behaviors (e.g., "Nice job keeping eyes on me, Team One!"). As teachers use behavior-specific praise, students learn exactly what behaviors

are gaining attention and will continue to display desired behaviors and abandon negative responses that no longer receive attention.

Caldarella, Williams, Hansen, and Wills (2015) found a moderate correlation between praise and on-task behavior while implementing CW-FIT in early elementary school classrooms. During baseline observations, there was no significant difference in the teacher's praise-to-reprimand ratio between the treatment and control classrooms. Control classrooms had a praise-to-reprimand ratio of 1.85:1 at baseline, and the treatment class had a ratio of 1.04:1. Both classes also had low percentages of group on-task behavior at baseline, with the control class at 61.63% and treatment class at 59.79%. A significant difference was noticed after CW-FIT was implemented. The treatment class increased its praise-to-reprimand ratio to 6.77:1 and achieved an increase in on-task behaviors at 74.58%. The control group, however, stayed roughly the same with a praise-to-reprimand ratio at 1.82:1 and on-task behavior percentage at 69.61%. Based on these results, Caldarella and colleagues (2015) found a moderate positive correlation, indicating "a significant linear relationship between teacher praise and group on-task behavior" (p. 362). Thus, increased teacher praise was associated with increased student on-task behavior.

Token economy. A token economy is a classroom management system that allows students to earn tokens when they display positive behavior or meet classroom expectations, which they can later redeem for a predetermined reward (Kazdin, 1977). According to Maggin, Chafouleas, Goddard, and Johnson (2011), token economies have been shown to work well in improving behavior in academic settings with students varying across different age ranges, race, and disorders. There are several factors to consider when implementing a token economy system. First, educators need to identify a specific problem behavior to be addressed and then use tokens as immediate reinforcement for students who are meeting expectations (Martin &

Pear, 1999). Tokens can be something tangible, like stickers, or kept track of by using a point system (Robacker, Rivera, & Warren, 2016). If students earn enough tokens, they can exchange them for predetermined backup reinforcers such as a desired activity or tangible reward. It is important to keep in mind student preferences because the more meaningful the backup reinforcement, the more likely students are to work to earn it (Robacker et al., 2016).

CW-FIT uses a token economy in the form of a point system to reinforce positive behavior in students. During CW-FIT, students can earn points by participating in the positive skills the teacher has laid out. A poster of these skills and a point chart are kept at the front of the class for all the students to see (Wills et al., 2010). Based on these points, students can earn pre-agreed on prizes. These prizes are determined during the start-up phases of CW-FIT when the teacher collaborates with his or her students about what rewards would be the most meaningful. Wills, Iwaszuk, Kamps, and Shumante (2014) set out to test the effects of CW-FIT in a first-grade classroom across the span of a day in different academic settings. The points in this class could be exchanged for a few extra minutes of recess time or an in-class game. The researchers found that on-task behavior increased and that the use of a token economy gave direct reinforcement to students' meeting expectations and "increased students' overall rate of desired classroom behaviors" (Wills et al., 2014, p. 204).

Group contingency. Group contingencies are a practical and inexpensive way to increase on-task and positive behaviors in the classroom and have been shown to improve student behavior on average in middle school settings (Chafouleas, Hagermoser Sanetti, Jaffery, & Fallon, 2012). Litow and Pumroy (1975) defined three types of group contingencies: dependent, independent, and interdependent. A dependent group contingency is based on a small group, or an individual student, meeting defined expectations to gain a reward for their whole

team. Independent group contingencies are based on a single student's performance to obtain a prize for the group, and an interdependent group contingency requires that every member of the team must meet expectations for the whole group to earn a reward. Interdependent group contingencies work well because students rely on peers to gain the prize, and thus individuals work harder to meet expectations to not let their group down (Kelshaw-Levering, Sterling-Turner, Henry, & Skinner, 2000).

CW-FIT utilizes an interdependent group contingency in which every student in a group must be on-task to receive points and gain a reward. Wills et al., (2014) found that when implementing CW-FIT on-task student behavior increased and that the interdependent group contingency was easy for the teachers to implement and modify to fit the needs of their classrooms. Kamps and colleagues (2011) also studied the effects of the group contingency aspects of CW-FIT in six elementary school classrooms. They found an increase of on-task behavior in all six classes and for a majority of behaviorally at-risk students. Along with improved positive student behavior, teachers increased their attention toward students by giving more praise when expectations were met. This study illustrates how the use of group contingency can better the environment of a classroom through boosting student on-task behavior and teacher praise.

Tier 2. Tier 2 of CW-FIT is structured to assist students who did not respond to Tier 1 interventions and have ongoing problematic behaviors despite implementation. Students are identified for Tier 2 through behavioral screening assessments and are then taught self-management skills. The self-management aspect of CW-FIT Tier 2 refers to the use of different techniques intended to help students manage and improve their classroom behaviors without the need for teacher intervention (Young et al., 2012). In part, educational institutions seek to

promote self-sufficiency and independence in their students, so when students leave, they can govern their behaviors without the support of others (Cooper, Heron, & Heward, 2006). As students learn to manage their actions, they rely less on external controls like praise and token economies; this is important considering the ever-increasing number of students entering the classroom. Larger and more diverse classes make it more and more difficult for teachers to attend to the needs of every student. There are many different teacher-directed classroom management programs, but many of these programs are not feasible. Some of these programs are very expensive or take too much time away from teaching to be worth the effort of implementation (Briesch & Chafouleas, 2009). Self-management gives students the opportunity to learn essential skills for the future and helps them improve academically and socially, while also giving the teacher time to concentrate on teaching (Briesch & Chafouleas, 2009).

Many steps and techniques are involved in implementing a self-management program. First, before a student qualifies for Tier 2, educators must adequately assess that the student needs this level of intervention. Once the student is evaluated, educators can then identify specific problem behaviors that the student is exhibiting that need to be addressed (Young et al., 2012). Educators should consider the antecedents and consequences of the problem behavior and gauge why the student may be utilizing it in the first place (Young et al., 2012). From here, they can understand what goals the student may be trying to achieve by using the problem behavior and teaching them better ways to achieve the same goals.

This is much like teaching classroom expectations in Tier 1, except students in Tier 2 are taught expectations on an individual level. Teaching classroom expectations individually gives the educators an opportunity to address the student's specific problem behaviors that were not improving in Tier 1. Educators can then also help the student understand the importance of

using the skill; a student that determines an ability to be relevant will be more likely to use it (Shepherd & Linn, 2015). Finally, students are taught to self-manage. There are different techniques to help a student learn to self-manage, but all are geared to enable students to govern themselves so they can achieve in the classroom and eventually generalize self-management skills to their personal and future lives.

Three common self-management techniques: (a) self-monitoring, (b) self-evaluation and (c) self-reinforcement have been shown to improve student on-task behavior. First, self-monitoring consists of students observing and recording their actions (Rafferty, 2010). Next, self-evaluation gives students an opportunity to compare their behavior against the standard set by the teacher (Shepherd & Linn, 2015). Lastly, students work with teachers to choose rewards and then self-reinforce when they have exhibited positive social skills and behavior (Bandura, 1976). These three techniques can be used in isolation, but when used together, they can help students understand how well they are performing and where they could improve (Briesch & Chafouleas, 2009). Moore, Anderson, Glassenbury, Lang, and Didden (2013) implemented a self-management program with high school students and found that using self-monitoring with self-reinforcement lead to fewer "demands on the teacher's time and resources (p. 309)." These students were also able to increase their on-task behavior without their teachers rewarding them with substantial reinforcements.

Self-management techniques and strategies have shown positive results in CW-FIT. In Tier 2 of CW-FIT, students are taught how to self-manage through self-monitoring (Wills et al., 2010). Kamps, Conklin, and Wills (2015) studied the effectiveness of CW-FIT Tier 2 for students in an urban elementary school that were not adhering to Tier 1 alone. Four target students were selected that had not shown significant improvement from baseline to Tier 1 of

CW-FIT implementation, and one student's behavior worsened during Tier 1 of CW-FIT implementation. These students were given booster sessions with CW-FIT coaches to review specific skills taught in Tier 1 (Kamps, Conklin, & Wills, 2015). After reviewing the skills, each student was given a self-management chart to keep on their desk so they could track their progress. When appropriate, students would add points on their chart and, if by the end of the day, their group had enough points, they were rewarded a prize. Kamps, Conklin, and Wills (2015) found that the target students' on-task behaviors increased and disruptive behaviors decreased when self-management was included in the implementation of CW-FIT. They also found that self-management provided more chances for the students to earn reinforcements and gain positive attention from teachers.

CW-FIT in Art Classes

CW-FIT has shown promising results in many classrooms but has not been widely tested in middle schools. Out of fifteen published articles studying the effects of CW-FIT, fourteen are based in elementary schools or early education settings, and only one is based in a middle school. Each of these studies found an increase in overall student on-task behavior and teacher praise when CW-FIT was implemented. Nelson and colleagues (2018) sought to address the need of art teachers who feel unprepared to manage student behavior and tested CW-FIT in one fifth-grade and two third-grade art classrooms. It was found that on-task behavior, as well as teacher praise significantly improved during each CW-FIT intervention phase, and the intervention was found by the participating teacher and students to be socially valid.

The current study seeks to expand the results gathered by Nelson and colleagues (2018) and address some of their limitations. Nelson and colleagues only tested CW-FIT in an elementary school setting, and solely focused on overall class-wide data. The current study

seeks to implement CW-FIT in a middle school art classroom to test the results with the whole

class, and target at-risk students within those classes.

CHAPTER THREE

Method

Settings and Participants

This study was conducted in two seventh-grade art classrooms in a Title 1 middle school in a Mountain West state in the U.S. where 51% of students received free or reduced-price lunch. Two art teachers participated in this study. The art teachers chose these classes to participate due to inappropriate behaviors and lack of motivation from the students. The teacher in Classroom 1 was a 29-year-old female with a Bachelor's degree and six years teaching experience. Classroom 2 was taught by a 44-year-old male with a Master's degree and four years teaching experience. Both classes were taught during the 2017-2018 school year. Classroom 1 consisted of 30 students and Classroom 2 consisted of 26 yielding a total of 56 students who participated in the study (see Table 1). Of the total number of students, 27 were male and 29 were female. All students were identified as being either Caucasian or Hispanic.

Table 1

Demographics for Student Participants

Variable	Classroom 1	Classroom 2
Total Number of Students	30	26
Gender		
Male	19 (63.33%)	8 (30.76%)
Female	11 (36.66%)	18 (69.23%)
Ethnicity		
Caucasian	17 (56.66%)	18 (69.23%)
Hispanic	13 (43.33%)	8 (30.76%)
Average Age	12.3	12.23

Participating teachers were asked to nominate at-risk students based on internalized and externalized behaviors using stage 1 of the Systematic Screening for Behavior Disorders (Walker, Severson, & Feil, 2014). Once students were nominated, teachers were asked to rank their nominations according to the degree to which each student exhibited at-risk behaviors. Parents of these students were then sent consent forms to sign. Following the consent process, student behavior was then assessed using the School Social Behavior Scales, second edition (SSBS-2; Merrell, 2002). The SSBS-2 assesses students based on different subscales including self-management, social competence, relations with peers, and academic and anti-social behavior. Selection criteria required that students were ranked as "At-Risk" in at least one of the SSBS-2 scales. Once this was done, researchers observed the nominated students during baseline phase, in which selection criteria involved having an average on-task percentage of 70% or lower. None of the nominated students were receiving special education or resource accommodations at the time of the study.

Initially, four students were nominated across both classrooms, but two students were not included as target students because they either did not rank as "At-Risk" on any subscales of the SSBS-2 or had an average on-task percentage higher than 70% during baseline. The remaining two students did meet selection criteria. One student was in Classroom 1 and the other was in Classroom 2. Both target students were males in the seventh-grade. Their ages ranged from 12-14. One target student was Caucasian and the other was Hispanic.

Context

Both art classes were taught Monday through Friday for 45 minutes, with the exception of "Late Start Mondays" and assembly days when class was shortened to 35 minutes. Both classes primarily focused on visual arts and were working on ceramic and painting projects

through the duration of the study. Classes varied slightly on structure depending on what goals the teacher was trying to accomplish for the day. For example, some class periods consisted almost entirely of a lecture, while other class periods were focused entirely on starting and completing art projects.

Procedures

University and school district Institutional Review Board approval was obtained, and researchers were trained in IRB ethical protocols before the study began. Teachers were then recruited after being contacted individually and meeting with the researchers. Consent forms (see Appendix A) to participate were signed by both teachers and modified consent forms (see Appendix B) were sent to all the students in Classrooms 1 and 2. Consent forms were also mailed to the parents of the target students, which were signed and returned to the researchers (see Appendix C).

Baseline. Before implementing CW-FIT into either classroom, five data points were collected in Classroom 1 and six were collected in Classroom 2. Data focused on group and target student on-task behavior, as well as teacher praise and reprimands. Data for all four target students were collected at the same time as the class-wide data. During baseline, teachers conducted their class as they normally would. Classroom expectations in Classroom 1 were (a) Use materials properly, (b) Be positive and polite, (c) Keep hands to yourself, and (d) Use time wisely. Students also had assigned seating and were only allowed to leave their seats to get supplies, wash paint brushes, or use the lighted tracing tables at the back of the class. The teacher in Classroom 1 managed disruptions by pulling students aside to talk with them privately to correct behavior. She then called parents for concerns about behavior and, if needed, sent

students down to the office. If students were meeting her expectations she would allow them to sit wherever they chose.

In Classroom 2, the teacher's expectations were to (a) Produce Quality Work, (b) Be Responsible, and (c) Take Care of Materials. He also had a positive and negative consequence system that he would go over with students at the beginning of the semester and would refer to it when needed. Positive Consequences were awarded to students that were meeting expectations and involved being able to sit by and talk with friends, as well as listening to music. Students received Negative Consequences when they were being disruptive or disrespectful to the teacher or classmates. Such consequences included being sent back their assigned seat, not being able to talk to friends, and after three warnings parents were contacted. There were no changes made to the routines, instruction, or either teacher's classroom management style.

Training. Teachers were then trained by the researchers on CW-FIT procedures. The training session occurred in October and lasted approximately 45 minutes. The training reviewed all components of CW-FIT (i.e., teaching classroom expectations, providing behavior specific praise, awarding points to teams when the timer goes off, and providing group rewards) and the rationale behind them. The training was led by researchers using a PowerPoint presentation and videos of how CW-FIT works in the classroom. After the first training session, researchers provided the teachers with feedback on CW-FIT as teachers began implementation.

Teachers were given two days to become familiar with CW-FIT and researchers remained available to the teachers for consultation as needed. During the initial two days of implementation, researchers monitored teachers to make sure they were implementing CW-FIT with fidelity and consulted with teachers regarding rewards that would work best in their classrooms. Throughout the study, researchers provided brief 1-2-minute consultations and

corrections on aspects of CW-FIT such as remembering to do pre-corrections before class, giving behavior specific praise, putting expectation posters where the whole class could see them, and using the timer at appropriate intervals.

Intervention. The independent variable, Tier 1 of CW-FIT, was then implemented in the classrooms. This was comprised of teaching classroom expectations, using an interdependent group contingency, giving praise, and awarding points that could be redeemed for a reward.

Classroom expectations. The teachers were given the opportunity to decide what classroom expectations their classes needed to learn or strengthen. For Classroom 1 the teacher chose the expectations of "Listen" and "Work." In Classroom 2 the teacher focused on "Showing Respect" and "Staying on Task." Using a script (see Appendix D) to guide them, both teachers taught one expectation a day for the first two days of intervention. The script required that students also participate in the lessons.

After the teacher described the expectation being taught, they had the students divide into groups to discuss what skills were necessary to meet that expectation. After two minutes, the students were asked to share what they had discussed. For example, for the expectation "Listen," students responded a skill to meet the expectation could be keeping "eyes [on] the teacher, book, screen, etc." Students were then asked to discuss in their groups why they believed the expectation was important. After two minutes students gave their rationale for the expectation, such as listening helps students "know what to do." Posters of each classroom expectation (see Appendix E) were created and displayed in a prominent place in the classroom easily visible to all students. Both teachers gave their classes two to three minute pre-corrects as a reminder of the expectations before each subsequent class.

Teams. Both classrooms divided students into six teams comprised of approximately three to six students per team. Teams were organized by tables students were already sitting at. Target students were not placed on their own team. Depending on the art project, students could leave their desks to obtain supplies or use lighted tables for tracing, but they remained on the same team. Students mostly remained in their assigned seats during art instruction.

Timer. Both teachers set their timers at five-minute intervals in line with the 35 to 45-minute class timeslot and personal preference. The timers had either a beeping or vibrate function, but teachers felt the students would only display desired behavior when they heard the audible beep. For this reason, they switched the function to vibrate as has sometimes been done in past studies of CW-FIT (see e.g., Nelson et al., 2018). Teachers awarded points after every five minutes once they felt the timer vibrate.

Points, praise, and goals. A point goal was set by the teachers at the beginning of each class. Teams that reached the point goal were given a reward. Daily point goals were based on 75-85% of how many times the timer would vibrate during the class period. For example, if the time in class allowed for the timer to vibrate 9 times, the teacher would set the point goal to be 6 or 7 points. A chart (see Appendix F) was used for the teachers to keep track of each team's points and was placed in a prominent area in the classrooms so all students could see it. Teachers were trained to scan each group every time the timer vibrated. If every student in a group was on-task, they were awarded a point. If at least one person in a group was off-task that group did not receive any points. Teachers could also award bonus points to groups or individuals who were meeting expectations in between timer intervals to help those who were behind in points catch up.

Along with awarding points to teams who were meeting expectations, both teachers were also trained to provide behavior specific praise. When the timer vibrated teachers would praise groups and/or individuals while awarding points. For example, "Great job Team 1 for keeping your eyes on me while I'm teaching, you earned a point," or "Team 2 got right to work when I asked them to, good job!" If a team did not earn a point, teachers were trained to remind them of the expectations and encourage them to work for the next point or try to earn bonus points. For example, "Team 5, you were not working so I cannot give you a point. Get to work so you will be able to earn the next one."

Reward. At the end of the class period the teachers tallied up the points for each team and provided rewards to teams who reached the point goal. Rewards were based on student input and what would be practical for the teacher to provide. For example, the first two days of implementing CW-FIT both teachers asked their students what rewards would be desirable incentives to stay on-task. Classroom 1 asked to receive tangible rewards (e.g., lip balm, flexible pencils, mini flashlights, erasers, and mini pencil sharpeners). Classroom 2, being the final period of the school day, decided to leave class two to three minutes early as their reward. Teams that did not meet the point goal were not given a reward. Target students were not given any extra individualized rewards but were rewarded along with their teams.

Reversal. A reversal phase was conducted after data were gathered for CW-FIT implementation. During this phase, both teachers removed expectation posters and point charts. The timers were not used and teachers did not award any points. Teachers went back to the classroom management techniques used during baseline and there were no daily rewards. Five data points focusing on group and target student on-task data and teacher praise and reprimands were collected in each classroom during this phase.

Pre-intervention meeting. Researchers met with both teachers after reversal phase to show data from baseline and intervention phases. Teachers were shown graphs of overall class and target student on-task percentages. Praise to reprimand ratios were also shared and teachers were given feedback on CW-FIT components in which they could improve.

Intervention. After the reversal phase, teachers re-implemented CW-FIT in their classrooms. The same expectations as the first intervention phase were used, so teachers did not have to re-teach classroom expectations. However, pre-corrects were still given at the beginning of each class. All other aspects of CW-FIT (posters, timer, points, rewards) were reinstated. CW-FIT remained in place until the end of the study. Six data points were gathered in Classroom 1 and five were gathered in Classroom 2 during this final phase.

Post-intervention meeting. After all the data were collected, researchers again met with teachers to show them overall class and target student on-task percentages, along with teacher praise to reprimand ratios. Teachers were also asked to assess if Tier 1 of CW-FIT had an effect on their target students, and if Tier 2 self-management was necessary. Teachers completed a ranking sheet (see Appendix K) and ranked target students from 1 to 4 on how they responded to the intervention. The rankings went from (1) *Poor response to CW-FIT* to (4) *Great response, behaviors much improved*.

Dependent Variables and Measures

Researchers chose dependent variables and measures based on previous CW-FIT studies to be able to compare results (Conklin et al., 2016, Nelson et al., 2018; Wills et al., 2010). These measures are described below.

Group on-task behavior. Researchers used a 30 second time sampling method to record group on-task data in each classroom. Trained undergraduate and graduate researchers observed

each class for 20-minute intervals. Using a digital stopwatch, observers would visually scan each team every 30 seconds to look for on- and off-task behaviors. On-task behaviors included students working on art projects, watching the teacher demonstrate how to use different supplies, listening to the lecture, etc. Off-task behaviors included disengaging, getting supplies without permission, talking while the teacher was talking, etc. Since CW-FIT uses an interdependent group contingency, for a team to be considered on-task every student in the team needed to be on-task. Using paper and pencil method, observers would mark each group with a plus sign for on-task and a minus sign for off-task behavior (see Appendix G). Once the 20-minute observation was completed, observers calculated the overall class on-task percentage.

Target student on-task and disruptive behavior. Target student data were collected in the same manner as the overall class data with a few exceptions. First, after all the teams were scanned, each target student was individually observed for on- and off-task behavior. Also noted were target student disruptions. If a target student was engaging in disruptive behavior (e.g., such as talking with another student or banging their supplies on their desks) observers would record this on the observation, sheet. At the end of the observation individual on-task percentages were calculated for each target student and the number of individual disruption checkmarks were also tallied and recorded.

Teacher praise and reprimand. Observers recorded instances of both teachers providing praise and reprimands at the same time as on- and off-task data. Tally marks were recorded using paper and pencil each time the teachers praised or reprimanded groups or individuals. Praise was defined as a verbal statement of approval, for example, "Everyone is waiting patiently for permission to get supplies, nice job!" Reprimands were defined as verbal

statements in which the teacher told individuals or groups to stop an undesired behavior. For example, "Team 5, you need stop goofing off and get back to work."

Treatment fidelity. To gauge whether the teachers were implementing CW-FIT with fidelity, a nine-item checklist was completed at the end of each 20-minute observation (see Appendix H). The checklist enumerated CW-FIT procedures such as "Classroom expectations clearly posted," and "Points awarded to teams for use of skills," and a separate scale indicated whether these items were observed. Observers also gave each of the items a quality ranking. The quality ranking scale ranged from (1) *Implemented with partial fidelity*, to (3) *Implemented with full fidelity*. For example, the item, "Classroom expectations clearly posted" indicated that the expectation poster should be posted in a visible location of the classroom. If the expectations were posted, they were then given a quality rating based on the percent of students who could see the poster with an unobstructed view. A "1" was given if the poster was only visible to 50% or less of students in the class, a "2" was given if it was visible to 50-90% of students, and a "3" was given if it was visible to 90-100% of students 90-100% of the class period. Quality rankings were then totaled and divided by the total amount possible to determine the percentage to which the teachers implemented CW-FIT with fidelity.

Social validity. At the end of the study, a researcher distributed to teachers a seven-item questionnaire assessing the social validity of CW-FIT (see Appendix I). The questionnaire was separated into five questions where the teachers ranked their thoughts and experiences with CW-FIT on a four-point Likert scale that ranged from perceptions of (1) *Very True* to (4) *Not True*. Questions were on the practicality of CW-FIT and how much support the teachers received during the study. There were also two open-ended questions regarding what the teachers would modify about CW-FIT, and if there was anything that helped them implement the CW-FIT

intervention more easily. A questionnaire was also completed by students in both classrooms (see Appendix J). This questionnaire consisted of 4 questions regarding what the students liked and disliked about CW-FIT and why. Target students received the same questionnaire as other students.

Interobserver Agreement

Interobserver agreement data were collected for 38.09% of the observations in Classroom 1 and 25.00% of the observations in Classroom 2. Prior to beginning the study, researchers trained observers (three graduate and one undergraduate) to measure class on-task, target student on-task, teacher praise, and teacher implementation fidelity data. Before assisting in the study, observers memorized definitions and practiced gathering data by watching a video of CW-FIT being used in a classroom. Accuracy was tested by comparing the observers' data with a master code file, with which observers achieved 90.00% reliability across three sessions. Observers then achieved 90.00% reliability compared to the research coordinator by observing a non-study classroom across three sessions. Interobserver agreement averaged 96.63% for class on-task data, 98.59% for target student on-task data, and 99.92% for target student disruption data.

Design and Analysis

For this study, a single subject reversal design (ABAB; Cooper et al., 2006) was used. Observers in Classroom 1 collected five data points for baseline, two for training, five for the first intervention and reversal phases, and six for the final intervention phase. All phase changes were based on stability of group on-task data, because this was the primary dependent variable of interest. When Observers in Classroom 2 collected six data points for baseline, two for training, and five for the first intervention, reversal, and final intervention phases. Changes in level, trend, and variability of group on-task, target student on-task, and teacher praise and reprimand were

analyzed visually. To determine if teachers were implementing CW-FIT with fidelity over the course of intervention phases, researchers averaged the percentages from teacher fidelity forms that were gathered after each observation. Researchers also conducted Tau-U analyses (Parker, Vannest, Davis, & Sauber, 2010) to compare the averages between phases using an online calculator (www.singlecaseresearch.org/calculators/tau-u). Baseline data were compared to intervention data. Baseline was corrected in situations in which the trend of baseline data was increasing to the point it could have confounded the researcher's interpretation of the effectiveness of the intervention (Bruni et al., 2017). Researchers did not correct for baseline instances of clear differences between baseline and intervention data points.

CHAPTER FOUR

Results

Results of the current study are described in the following section. In order to determine

if both teachers were able to adequately implement CW-FIT, treatment fidelity will be addressed

first. Next, changes in group and target student on-task behavior and instances of target student

disruptions will be discussed, because these were the primary dependent variables of the study.

Finally, teacher praise to reprimand ratios will be discussed followed by social validity results

from both teachers and their students.

Treatment Fidelity

The first research question asked in this study was "Can middle school art teachers

implement CW-FIT with fidelity?" The teacher in Classroom 1 implemented CW-FIT with an

average fidelity of 97.02% (*SD*=3.34) during intervention phases. Likewise, during intervention

phases, the teacher in Classroom 2 implemented CW-FIT with an average of 95.89% (*SD*=3.67).

During baseline and reversal phases, teachers averaged 1.14% (*SD*=0.57) fidelity in Classroom 1

and 5.55% (*SD*=7.85) in Classroom 2.

During intervention phases, the following components averaged 100% fidelity across

both classroom: "team point chart displayed," "daily point goal posted," "points awarded to

teams for use of skills," and "praise and reprimands were behavior/skill specific." Classroom 1

also averaged 100% for "points tallied and reward delivered," and 96.97% for both

"praise/points to reprimand ratio approximately 4:1" and "timer used and set at appropriate

intervals." Classroom 1's lowest fidelity average was 90.9% for "classroom expectations clearly

posted" and "pre-corrects on skills at the beginning of each session." Classroom 2 averaged

100% for "classroom expectations clearly posted," 96.67% for "timer used and set at appropriate

intervals," and 90% for both "pre-corrects on skills at the beginning of each session" and "points tallied and reward delivered." The lowest average fidelity component in Classroom 2 was 86.67% for "praise/points to reprimand ratio approximately 4:1."

Group On-Task Behavior

The second research question asked, "Will CW-FIT increase overall student on-task behavior in middle school art classrooms?" Overall, baseline phases across both classrooms showed a group on-task average of 59.01% (SD=15.76). During training the average level on on-task behavior increased to 81.73% (SD=3.86). The group on-task level continued to increase with the introduction of CW-FIT to 87.51% (SD=4.87). During reversal the average level decreased to 55.53% (SD=13.22). When CW-FIT was reintroduced, the average increased to 86.35% (SD=7.23). Tau-u analyses were also run on changes in group on-task percentages in each class. Significant differences between baseline and intervention phases were found in both classrooms combined (Tau-U= 0.9501; p<0.0001).

Data from each classroom is discussed individually below (see Figure 1). During baseline phase, Classroom 1 had a group on-task average of 61.35% (SD=20.94) with an upward trend and high variability. There was an immediate increase in the level of on-task behavior during training phase to 86.07 (SD=5.35), with one overlapping data point. During CW-FIT intervention, the average increased to 88.94% (SD=4.41) with a moderate upward trend and high variability and one overlapping data point. During reversal phase, this level decreased to 57.25% (SD=15.70) with a downward trend and moderate variability. During the final intervention phase, the average level of on-task behavior increased to 87.34% (SD=6.48) with a downward trend and moderate variability, with two overlapping data points. Significant differences between baseline and intervention phases for this classroom, (Tau-U= 0.8909; p= 0.0006).
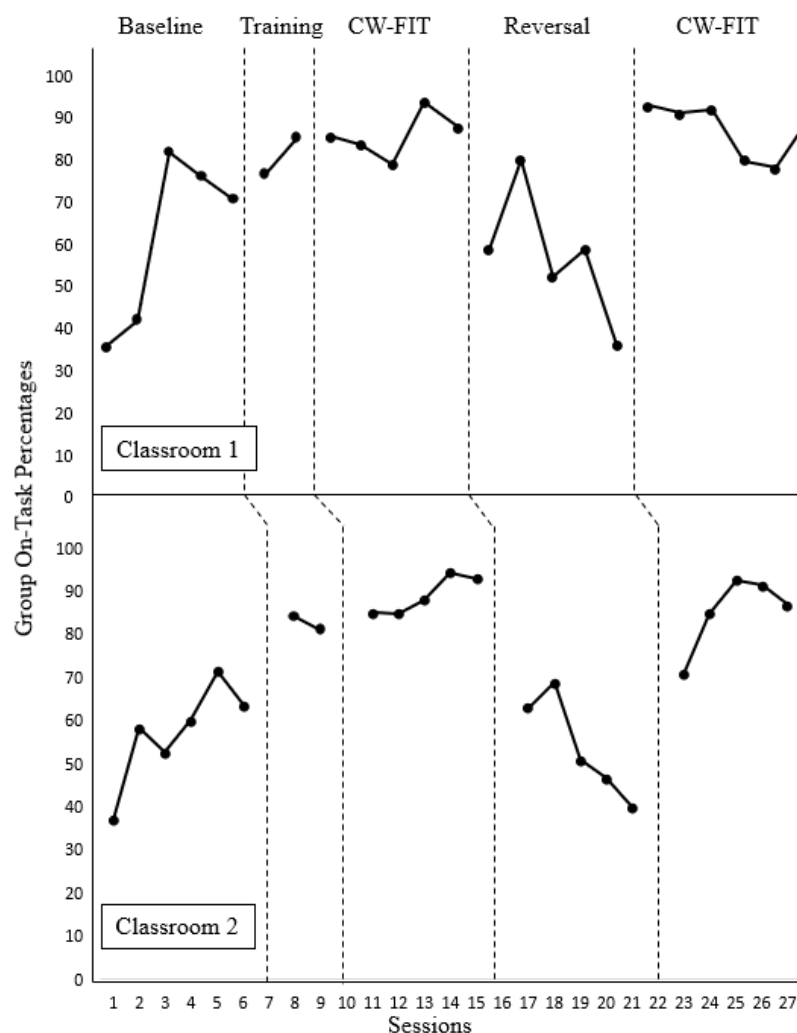
Figure 1. Average percentages of group on-task behavior across phases.

In Classroom 2, baseline group on-task percentages averaged at 57.06% (*SD*=11.66) with

an upward trend and low variability. There was an immediate increase in the level of on-task

behavior during training phase to 80.95% (*SD*=6.15). During intervention, the average level

increased to 82.5% (*SD*=2.12) with a high upward trend and moderate variability. During

reversal phase, the average decreased to 53.81% (*SD*=11.80) with a downward trend and

moderate variability. During the final intervention phase the average level of on-task behavior

increased to 85.16% (*SD*=8.66) with a slight upward trend and low variability. Significant

differences between baseline and intervention phases for this classroom, (*Tau-U*= 0.9818; *p=*

0.0001). There were no overlapping data points between baseline and training/intervention phases for Classroom 2.

Target Student On-Task Behavior

The third question asked was, "Will CW-FIT specifically increase at-risk student on-task behavior and decrease disruptions?" Overall, at baseline for both target students, the average on-task percentage was 66.03% (SD=17.93). During training, the average level of on-task behavior increased to 85% (SD=10.80). When CW-FIT was introduced the average increased to 82.5% (SD=14.19). During reversal the average decreased to 63.20% (SD=16.45). When CW-FIT was reintroduced, the average level of on-task behavior increased to 81.94% (SD=18.54). Overall, there were significant changes in levels of on-task behavior between baseline and intervention phases across classrooms (Tau-U= 0.5941; p= 0.001).

Data from each target student are discussed individually below (see Figure 2). During baseline, Target Student 1 had an on-task average of 70.77% (SD=19.29) with an upward trend and low variability. During training the average level of on-task behavior increased to 90% (SD=0) with a stable trend. When CW-FIT was introduced, the average decreased to 73.5% (SD=15.37) with an upward trend and low variability. During reversal the average decreased to 67% (SD=6.22) with a stable trend and low variability. When CW-FIT was reintroduced, the average level of on-task behavior increased to 86.88% (SD=11.34) with a slight upward trend and moderate variability. There were no significant changes found between baseline and intervention phases for Target Student 1 (Tau-U= -0.0818; p= 0.7513).

Figure 2. Average percentages of target student on-task behavior across phases.

Target Student 2 had an average on-task behavior of 62.08% (*SD*=17.42) during baseline with a downward trend and moderate variability. During training, the average level of on-task behavior increased to 77.50% (*SD*=3.53), with an immediate increase. When CW-FIT was introduced, the average continued to increase to 91.5 (*SD*=3.79) with an upward trend and moderate variability. During reversal the average decreased to 59.4% (*SD*=23.10) with a downward trend and high variability. When CW-FIT was reintroduced, the average level of on-task behavior increased to 76% (*SD*=24.85) with an upward trend and moderate variability. There was a significant difference between overall baseline and intervention phases for Target Student 2 when correcting for baseline (*Tau-U*= 0.8; *p*= 0.0019). Other significant changes

were found for Target Student 2 from baseline to intervention (*Tau-U*= 0.8333; *p*= 0.0225) and intervention to reversal (*Tau-U*= -0.84; *p*= 0.0283).

Researchers also sought to find if instances of target student disruptions decreased with CW-FIT. Overall, instances from both target students averaged at a rate of 2.18 (*SD*=2.89) instances during baseline phase. During training the average level of disruptions decreased to 1 (*SD*=0.82). When CW-FIT was introduced the average increased to 2.7 (*SD*=2.98). During reversal the average continued to increase to 7.6 (*SD*=6.08). When CW-FIT was reintroduced, the average level of disruptions decreased to 3.45 (*SD*=4.55). Overall, there was no significant difference between baseline and intervention phases across classrooms (*Tau-U*= -0.1927; *p*= 0.285).

Data for each target student's disruptions are discussed individually below (see Figure 3). Target Student 1 had a baseline average of 1.2 (*SD*=1.64) disruptions with a slight upward trend and moderate variability. At training the average level of disruptive behavior decreased to 0.5 (*SD*=0.71) with an upward trend. When CW-FIT was introduced the average level increased to 4 (*SD*=3.81) with a slight upward trend and moderate variability. During reversal the average level of disruptive behavior slightly increased to 4.4 (*SD*=1.34) with a stable trend and low variability. When CW-FIT was reintroduced, the average level decreased to 1.83 (*SD*=1.47) with a stable trend and moderate variability. There were no significant differences between baseline and intervention phases for Target Student 1 (*Tau-U*= -0.0818; *p*= 0.7513).
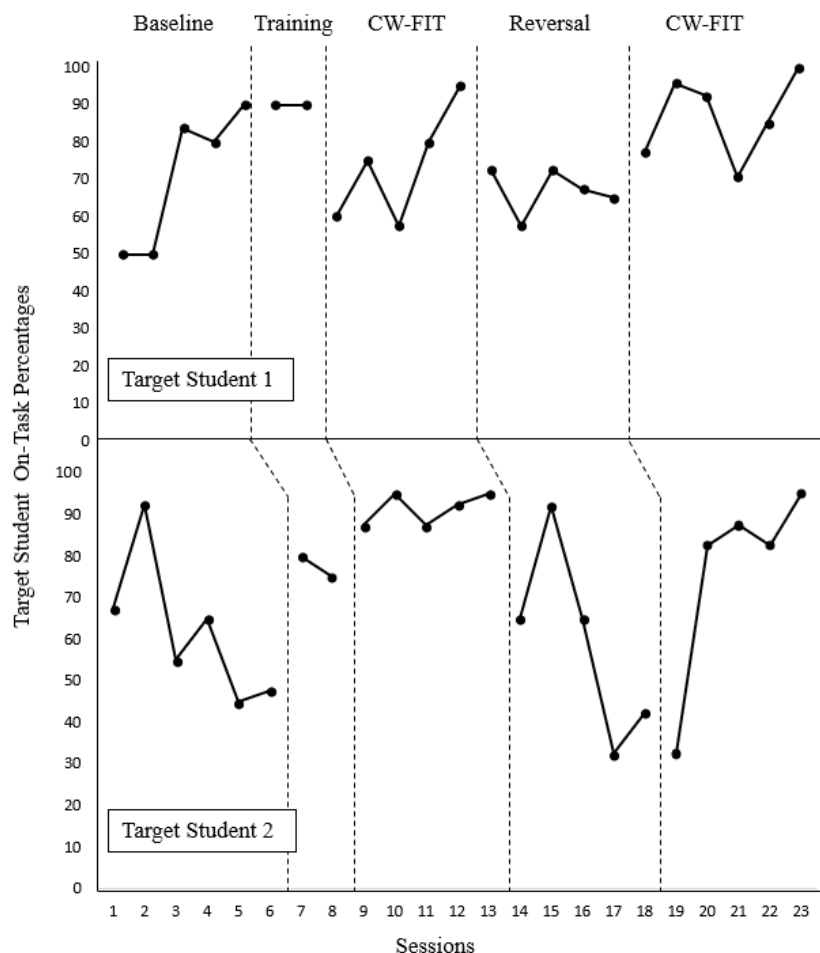
Target Student 2 had a baseline average of 3 disruptions (*SD*=3.58) with an upward trend and moderate variability. During training, the average level of disruptive behavior decreased to 1.5 (*SD*=0.70) with an immediate decrease and upward trend. When CW-FIT was introduced the average was 1.4 (*SD*=1.14) with a slight downward trend and moderate variability. During

reversal phase the average level of disruptive behavior was increased to 10.80 (*SD*=7.46) with an

upward trend and low variability.
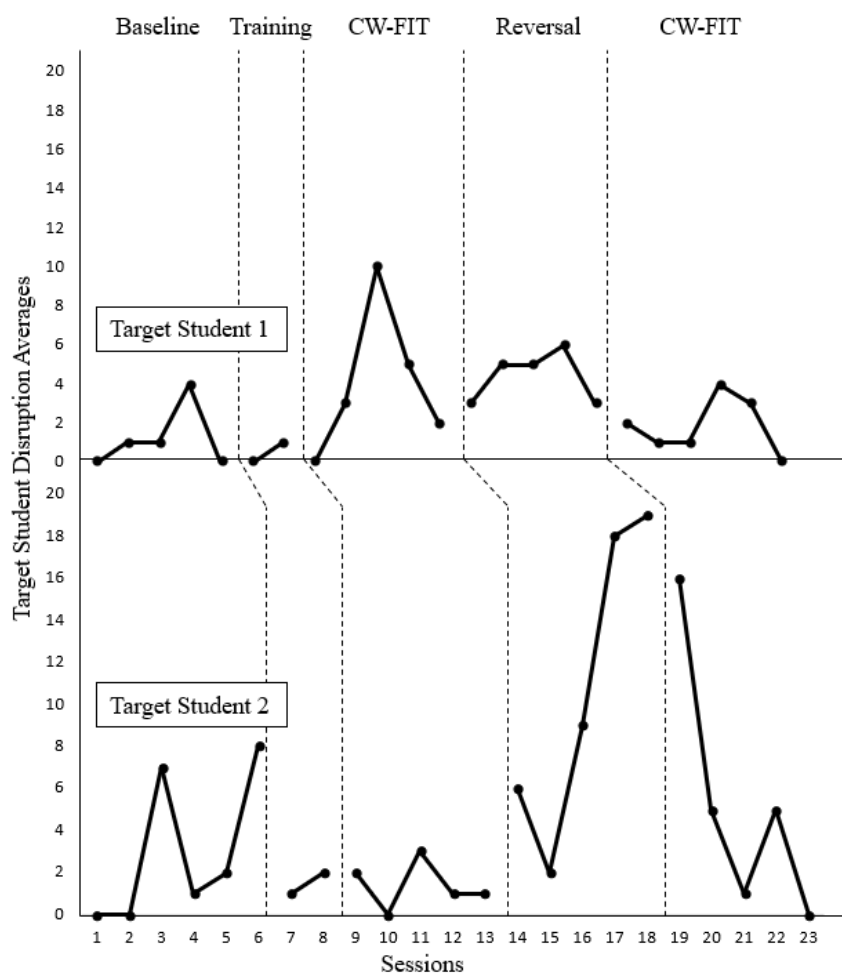
Figure 3. Average percentages of target student disruptions across phases.

When CW-FIT was reintroduced, the average level of disruptive behavior decreased to

5.4 (*SD*=6.35) with a downward trend and high variability. When correcting for baseline, there

was a significant difference between baseline and intervention phases for Target Student 2 (*Tau-*

U= -0.6727; *p*= 0.0092), but not for Target Student 1 (*Tau-U*= -0.3091; *p*= 0.2313).

Teacher Praise and Reprimand

The fourth research question asked was, "Will implementing CW-FIT increase teachers'

praise-to-reprimand ratios?" Overall, baseline praise rates across both classrooms averaged 0.27

(*SD*= 0.47) with an average reprimand rate of 5.18 (*SD*=2.64), resulting in a ratio of .05:1. During training, the average praise rate was 6.5 (*SD*=4.20) with a reprimand rate of 3 (*SD*=1.41) resulting in a ratio of 2.17:1. During the first intervention phase, the average praise rate increased to 10 (*SD*=5.29) and reprimands averaged 3.8 (*SD*=1.48) resulting in a ratio of 2.63:1. At reversal, average praise rates decreased to 0.8 (*SD*=1.03) and reprimands averaged 7.2 (*SD*=2.86) resulting in a ratio of .11:1. Finally, when CW-FIT was reintroduced, average praise increased to a rate of 10.09 (*SD*=5.89) and reprimands averaged 4.36 (*SD*=3.31) resulting in a ratio of 2.31:1. Tau-U analyses were run for both praise and reprimand rates. Overall, significant increases in praise were found in both classrooms combined between baseline and intervention phases (*Tau-U*= 1; p<.0001).

The following information details individual classroom praise and reprimand results (see Figure 4). During baseline, the teacher in Classroom 1 praised the students an average of .04 times (*SD=.55)* and the rate of reprimands was 4.6 times (*SD*=3.29). The baseline praise to reprimand ratio was .01:1 with a slightly downward trend with low variability for praise, while reprimands showed a slightly downward trend with high variability. During the training phase the praise rate in Classroom1 increased to 4.5 (*SD*=4.95), with a reprimand rate of 2 (*SD*=1.41) and a praise to reprimand ratio of 2.25:1. Training phase showed an immediate increase in praise and an immediate decrease in reprimands. When CW-FIT was introduced, the praise rate in Classroom 1 increased to 7 (*SD*=2.12) with a reprimand rate of 4.4 (*SD*=1.34), resulting in a praise to reprimand ratio of 1.59:1. During this phase, praise showed as stable trend with moderate variability while reprimand had a slightly upward trend with low variability.

Figure 4. Teacher praise and reprimand averages.

During the reversal phase, the praise rate in Classroom 1 was 1.4 (SD=1.14) with a reprimand rate of 5.6 (SD=1.14) and a ratio of .25:1. Praise during reversal had a downward trend with low variability and reprimand had a slightly downward trend with high variability. When CW-FIT was reintroduced, Classroom 1 had a praise rate of 8 (SD=3.46) and a reprimand rate of 3 (SD=3.16) with a ratio of 2.67:1. This phase showed praise with a downward trend and moderate variability, while reprimands showed an upward trend with moderate variability. There were no significant decreases in reprimands between baseline and intervention phases for Classroom 1 (*Tau-U*= -0.3727; *p*= 0.1489).

In Classroom 2, at baseline the teacher praised the students an average of .17 times (SD=.41) and the rate of reprimands was 5.67 times (SD=2.16). The baseline praise to reprimand ratio was .03:1 with a stable trend and very low variability for praise, and a slightly downward trend with low variability for reprimand. During the training phase, the praise rate in Classroom 2 increased to 8.5 (SD=3.53) with a reprimand rate of 4 (SD=0), and a praise to reprimand ratio of 2.13:1. Training phase showed an immediate increase in praise and a slight decrease in reprimands. When CW-FIT was introduced, the praise rate in Classroom 2 increased to 13 (SD=6) with a reprimand rate of 3.2 (SD=1.48), resulting in a praise to reprimand ratio of 4.06:1. During this phase, praise showed a moderate upward trend with moderate variability while reprimands s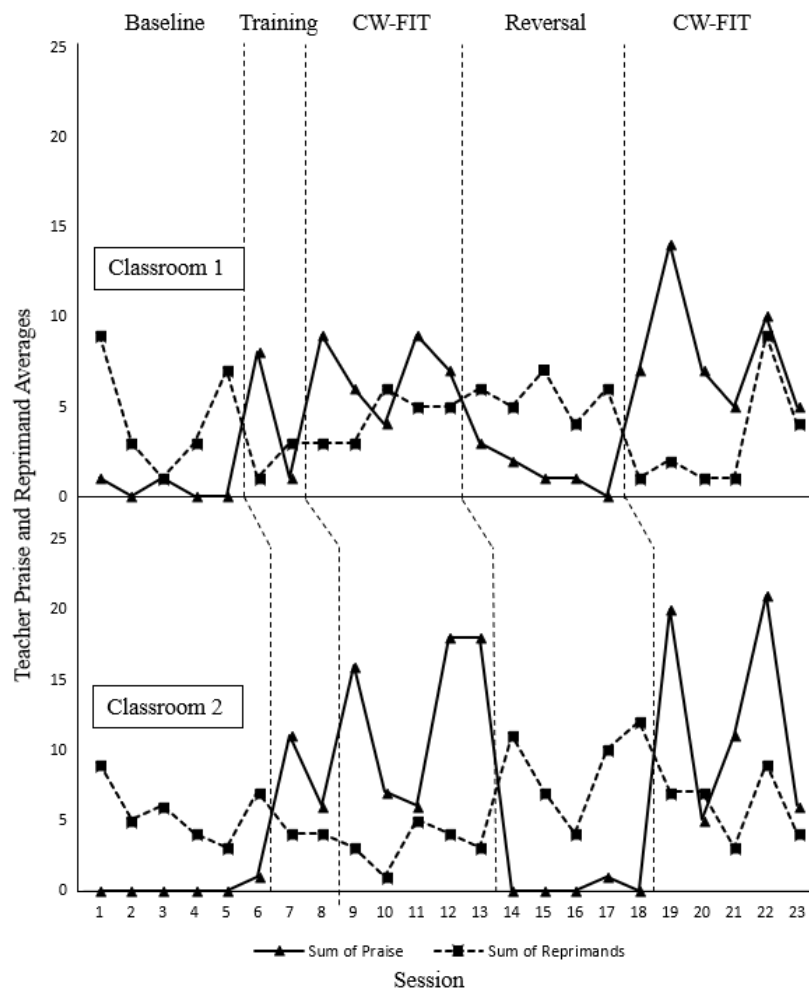howed a slight upward trend with low variability. During the reversal phase in Classroom 2 the praise rate was .2 (SD=.45) with a reprimand rate of 8.8 (SD=3.27) and a ratio of .02:1. Praise during reversal had a stable trend with very low variability and reprimands had a slight upward trend with moderate variability. When CW-FIT was reintroduced, Classroom 2 had a praise rate of 12.6 (SD=7.57) and a reprimand rate of 6 (SD=2.45) with a ratio of 2.1:1. This phase showed praise with a downward trend and moderate variability and reprimand with a stable trend and low variability. There were no significant decreases in reprimands between baseline and intervention phases for Classroom 2 (*Tau-U*= -0.4818; *p*= 0.062).

Social Validity

Teacher. The last question posed by this study was "Do middle school art teachers and students consider CW-FIT to be socially valid?" The teacher in Classroom 1 answered *Mostly True* for the questions, "The CW-FIT program was easy to learn and implement in my classroom" and "The training I received was adequate." She also answered *Very True* for "The Procedural Fidelity sheet was an effective teaching tool" and "In class support and feedback

provided by the researcher was helpful." She answered *Somewhat True* for "I will continue to use CW-FIT in my classroom." Regarding her thoughts on what was most helpful in learning how to implement CW-FIT in her classroom, she responded that having a copy of the fidelity checklist was helpful, but that initial training packets could be condensed, and the first training only clarified a few points on how to implement the program. When asked how she would modify CW-FIT for the future, she responded that the timer could always be on a vibrate function, students could have individual plans and goals rather than be in a group, and that the prizes could be weekly instead of at the end of each day.

The teacher in Classroom 2 answered *Very True* for "The CW-FIT program was easy to learn and implement in my classroom," "The Procedural Fidelity sheet was an effective teaching tool," and "In class support and feedback provided by the researcher was helpful." He answered *Mostly True* for "The training I received was adequate" and "I will continue to use CW-FIT in my classroom." Regarding his thoughts on what was most helpful in learning how to implement CW-FIT in his classroom, he responded that he found the daily feedback to be very helpful. As for what he would modify about CW-FIT in the future, he responded that he was unsure and needed more time to process this question. Approximately one week after completing the survey he was asked the same question by a researcher and answered that he did not have any suggested charges to share at that time.

Both teachers were asked to rank their target students to determine if Tier 2 was necessary. The target student in Classroom 1 was ranked at a 4, and the target student in Classroom 2 was ranked as a 3.5. Due to these high rankings, and overall class data, both teachers decided they were pleased with the progress in their target students and did not feel it was necessary to implement CW-FIT Tier 2 self-management.

Students. A total of 48 students across both classrooms (86% of total students participating) were also surveyed. Of these students, 95.83% responded that they enjoyed CW-FIT, while 4.17% responded that they did not enjoy the intervention. Students were also given open ended questions as to what they liked and did not like about CW-FIT. The most common answers to what students liked about the intervention were "getting prizes/rewards" (*n*=32), "It helps people work harder/stay on-task" (*n*=5), and "it is a simple way to quiet our class down" (*n*=3). Regarding aspects students did not like about CW-FIT, 21 (43.75%) students stated that there were no aspects of CW-FIT that they disliked. However, other students stated they disliked when other group members were not on task and made it hard to earn points (*n*=6), stopping the timer every 5 minutes became distracting (*n*=4), and others stated that the intervention was "unfair" (*n*=4). Some students also commented that they disliked losing points (*n*=4), which is not an aspect of CW-FIT, but which one teacher did spontaneously on her own without the knowledge of researchers (researchers corrected her when they were made aware of this). When asked if CW-FIT would help other classes, 89.58% of students said "Yes," 8.33% said "No," and only 2.08% said "Sometimes." Common responses as to why CW-FIT would be helpful were "the prizes are motivating" (*n*=26) and it helps keep students quiet and on-task (*n*=5). Only four students stated that it would not be helpful in other classes because some students may not find the prizes very motivating or some students only pretend to be on task when the timer goes off.

CHAPTER FIVE

Discussion

The purpose of this study was to determine the effectiveness of CW-FIT (Wills et al., 2010), a multitiered classroom management intervention based on PBIS principles, when implemented in two middle school art classrooms. Previous studies have shown CW-FIT to be effective at improving behavior in elementary art classrooms (Nelson et al., 2018) as well as in middle school classrooms (Conklin et al., 2016). Previous studies have also shown CW-FIT to be effective in improving at-risk student on-task behavior, as well as decreasing instances of at-risk student disruptions (Conklin et al., 2016; Wills et al., 2014; Wills et al., 2010). This was an investigation of CW-FIT in a middle school art classroom. Overall findings suggest that CW-FIT was effective at improving behaviors at class-wide and individual target student levels. This is important because the research into classroom management in middle school art classes is very limited, and the results of the present study indicate that CW-FIT may be a viable option for teachers looking to improve student on-task behaviors.

Results of the study indicated that middle school art teachers were able to implement CW-FIT with fidelity. These results are consistent with levels of fidelity found in other CW-FIT studies (Caldarella et al., 2015; Nelson et al., 2018; Wills et al., 2014). The fidelity for most items ranged from 96.67% to 100%. Both teachers received high quality ratings, indicating that they were not only able to implement with fidelity, but also able to implement well. Items in which the teachers had somewhat lower fidelity were "praise/points to reprimand ratio approximately 4:1," "pre-corrects on skills at the beginning of each session," "classroom expectations clearly posted," and "Points tallied, and reward delivered." These findings are

important because they corroborate previous research (Wills et al., 2010) that suggests that art teachers could feasibly implement CW-FIT into their classrooms.

Teacher praise increased in both classrooms though changes in teacher reprimands were not as consistent. Overall, there were significant increases in teacher praise between all baseline and intervention phases in both individual classrooms. During baseline phases the teacher from Classroom 1 had a praise to reprimand ratio of 0.14:1, and a ratio of 2.08:1 during intervention phases. Classroom 2 also had a praise to reprimand ratio of 0.03:1 during baseline phases and a ratio of 2.58:1 during intervention phases. The results were consistent with other CW-FIT studies in which praise to reprimand ratios increased significantly (Nelson et al., 2018; Kamps, Wills, et al., 2015; Wills et al., 2014). There were no significant differences in reprimands for either classroom.

Percentages of group on-task behavior improved with implementation of CW-FIT, particularly for Classroom 2 in which there were two replications of effects and no overlapping data points between baseline and intervention phases. The average group on-task percentage during baseline phases in Classroom 1 was 59.30% and increased to 84.79% during intervention phases, a 25.50% improvement for this classroom. Likewise, in Classroom 2 the average percent of group on-task during baseline phases was 55.44%, which increased to 85.53% during intervention phases, a 30.09% average improvement. These increases are consistent with previous CW-FIT studies (Kamps, Wills, et al., 2015; Kamps et al., 2011), and somewhat higher than previous CW-FIT results in elementary art classrooms (Nelson et al., 2018). Classroom management is a frequent problem in middle schools and art teachers feel underprepared to successfully manage classroom behaviors, especially when entering the field (Harrison et al., 2012; Kuster et al., 2010). Finding an effective classroom management tool can help teachers

have more instruction time (Carter & Poole, 2012). CW-FIT has been shown to increase

teaching time and has been shown to be effective at improving class wide behavior in middle

school art classrooms as demonstrated by the present study.

Although there were significant increases in on-task behavior for target students across

both classrooms, there were no statistically significant increases found for Target Student 1.

Overall, the combined target student on-task percentage increased by 17.75%, which was lower

than previous CW-FIT studies with target students (Caldarella et al., 2015; Conklin et al., 2016;

Wills et al., 2014). The on-task percentage for Target Student 1 increased from an average of

68.89% during baseline phases to 83.46%, leading to a 14.57% increase, which was not

statistically significant, and was lower than changes in individual target students found in

previous CW-FIT studies (Wills et al., 2014). This was likely due to higher on-task percentages

during baseline and reversal phases for this student. Target Student 2, however, did have a

significant increase in on-task behavior and went from 60.74% during baseline phases to 81.67%

during intervention, leading to a 20.93% increase, which was statistically significant and similar

to pervious CW-FIT studies (Conklin et al., 2016; Wills et al., 2010).

Also, there were no significant decreases found in instances of target student disruptions

between phases. Overall, instances of target student disruptions decreased by 1.57, which is

much lower than previous studies (Kamps, Conklin, & Wills, 2015; Wills et al., 2014). Target

Student 1 did not show a significant decrease between baseline and intervention phases, and

actually increased instances of disruptions by 0.02. This is likely due in part to this student

having one day during the first intervention phase in which he was counted as being disruptive

10 times. His average disruption for all other intervention phase data points was 2.1. Target

student 2, however, did show a significant decrease in disruptions, going from an average of 6.55

during baseline phases to 3.40 during intervention phases, leading to an average decrease of 3.15 disruptions, similar to previous CW-FIT findings (Kamps, Conklin, & Wills, 2015).

Finally, participating teachers and students found CW-FIT to be helpful and socially valid. This is also consistent with previous studies (Caldarella et al., 2015; Nelson et al., 2018; Wills et al., 2010). Both teachers stated that CW-FIT was relatively easy to implement in their classrooms and noticed a positive change in their students. Likewise, both teachers found the fidelity checklist to be an effective training tool. One teacher indicated that she did not like the beeping timer and felt that the initial training material could have been clearer as to what the expectations where and how to implement the intervention. The vast majority of students indicated that they liked CW-FIT and thought that it would be beneficial in other classrooms. Most students enjoyed earning prizes and getting to leave class early, as well as improved class behavior.

Limitations and Areas for Future Research

Although the results of this initial investigation were positive, there were some limitations. First, the study was only conducted in two art classrooms. This is important to note when considering generalizability to other middle school art classes. It is recommended that the intervention be replicated in more classrooms. Also, students were either Caucasian or Hispanic, therefore the intervention should be studied in other, more diverse settings. Secondly, only two target students participated in the study. Significant changes were only found for one student, which leads to the concern of how target students were selected and if modifications could be made to selection criteria. Replications should also consider including more target students to effectively gauge the intervention's effect on at-risk student behavior.

There were ascending on-task behavior baselines in both classrooms, which limit the confidence in a functional relationship between CW-FIT and on-task behavior. More baseline data could have been collected to determine that on-task behavior more fully leveled out prior to starting the intervention. However, the last baseline data-point was down before researchers began the first intervention phase. Future studies would benefit from implementing the intervention in classrooms with more stable baselines.

CW-FIT is a multi-tiered intervention, yet this study only implemented Tier 1. Previous studies of CW-FIT have implemented both Tier 1 and Tier 2 (Caldarella et al., 2015; Kamps, Conklin, & Wills., 2015; Wills et al., 2010). At the end of Tier 1, students who are not responding to the intervention are nominated by their teachers for Tier 2. Both teachers were given rating scales and shown their target student's data to judge whether they needed Tier 2. After completing the post rating scale and reviewing the data, both teachers felt positive about their students' progress and did not feel Tier 2 was necessary. We suggest that both Tiers of CW-FIT should be investigated in middle school art classrooms according to student needs.

Lastly, the teacher in Classroom 1 spontaneously started taking points away from teams as a punishment for off-task behavior. In CW-FIT once points are given to a group, that group maintains these points even if they do not earn a point the next time the timer beeps (Wills et al., 2010). Points were taken away approximately three times. The first time the teacher took points away, a member of the research team corrected her after class. During the next data point the teacher took points away again and was again corrected. She did stop taking points away, but four students noted on their social validity surveys that they did not like having points taken away during CW-FIT. It is recommended that future studies add a section on the fidelity

checklist or training materials that outline and give rationale to why points should not be taken away as a punishment.

Conclusion

CW-FIT has been shown to be effective as a classroom management tool for middle school art classrooms. Although further replications of this study need to be conducted to verify the results, CW-FIT shows promise for application in middle school art classrooms. Results from this initial investigation indicate that middle school art teachers can implement the intervention with fidelity, which leads to greater instances of teacher praise, group on-task behavior, and decreased disruptions. Teachers and students found the intervention to be easy to implement, enjoyed it, and found it to be socially valid. These results suggest that CW-FIT could be a useful tool for classroom management in middle school art classrooms.

REFERENCES

Bandura, A. (1976). Self-reinforcement: Theoretical and methodological considerations. *Behaviorism, 4*(2), 135-155. Retrieved from http://www.jstor.org/stable/27758862

Beaty-O'Ferrall, M. E., Green, A., & Hanna, F. (2010). Classroom management strategies for difficult students: Promoting change through relationships. *Middle School Journal, 41*(4), 4-11. doi:10.1080/00940771.2010.11461726

Booth, M. Z., & Gerard, J. M. (2014). Adolescents' stage-environment fit in middle and high school: The relationship between students' perceptions of their schools and themselves. *Youth & Society, 46*(6), 735-755. doi:10.1177/0044118X12451276

Briesch, A. M., & Chafouleas, S. M. (2009). Review and analysis of literature on self-management interventions to promote appropriate classroom behaviors (1988–2008). *School Psychology Quarterly*, *24*(2), 106-120. doi: 10.1037/a0016159

Bruni, T. P., Drevon, D., Hixson, M., Wyse, R., Corcoran, S., & Fursa, S. (2017). The effect of functional behavior assessment on school-based interventions: A meta-analysis of single-case research. *Psychology in The Schools*, *54*(4), 351-369. doi:10.1002/pits.22007

Caldarella, P., Williams, L., Hansen, B. D., & Wills, H. (2015). Managing student behavior with class-wide function-related intervention teams: An observational study in early elementary classrooms. *Early Childhood Education Journal*, *43*(5), 357-365. doi: 10.1007/s10643-014-0664-3

Carter, D. R., & Pool, J. L. (2012). Appropriate social behavior: Teaching expectations to young children. *Early Childhood Education Journal*, *40*, 315-321. doi: 10.1007/s10643-012-0516-y

Chafouleas, S. M., Hagermoser Sanetti, L. M., Jaffery, R., & Fallon, L. (2012). An evaluation of a class wide intervention package involving self-management and a group contingency on a classroom behavior of middle school students. *Journal of Behavioral Education, 21*(2), 34-57. doi:10.1007/s10864-011-9135-8

Conklin, C. G., Kamps, D., & Wills, H. (2016). The effects of class-wide function-related intervention teams (CW-FIT) on students' prosocial classroom behaviors. *Journal of Behavioral Education*, *26*(1), 75-100. doi: 10.1007/s10864-016-9252-5

Cook, C. R., Gresham, F. M., Kern, L., Barreras, R. B., Thornton, S., & Crews, S. D. (2008). Social skills training for secondary students with emotional and/or behavioral disorders: A review and analysis of the meta-analytic literature. *Journal of Emotional and Behavioral Disorders, 16*(3), 131-144. doi: 10.1177/1063426608314541

Cooper, J. O., Heron, T. E., & Heward, W. L. (2006). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

Eccles, J. S. (2004). Schools, academic motivation, and stage-environment fit. In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 125-153). New York, NY: Wiley.

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist, 48*(2), 90. doi: 10.1037/0003-066x.48.2.90

Epstein, M., Atkins, M., Cullinan, D., Kutash, K., & Weaver, R. (2008). *Reducing behavior problems in the elementary school classroom: An IES practice guide.* Washington, DC: Institute of Education Sciences.

Gottfredson, D. C., Gottfredson, G. D., & Hybl, L. G. (1993). Managing adolescent behavior: A multiyear, multischool study. *American Educational Research Journal, 30*(1), 179-215. doi:10.3102/00028312030001179

Gresham, F. M., Van, M. B., & Cook, C. R. (2006). Social skills training for teaching replacement behaviors: Remediating acquisition deficits in at-risk students. *Behavioral Disorders*, *31*(4), 363-377.

Harrison, J. R., Vannest, K., Davis, J., & Reynolds, C. (2012). Common problem behaviors of children and adolescents in general education classrooms in the United States. *Journal of Emotional and Behavioral Disorders, 20*(2), 55-64. doi:10.1177/1063426611421157

Hester, P. P., Hendrickson, J. M., & Gable, R. A. (2009). Forty years later—The value of praise, ignoring, and rules for preschoolers at risk for behavior disorders. *Education and Treatment of Children, 32*(4), 513-535. doi: 10.1353/etc.0.0067

Jason, L. A., & Kuchay, D. A., (2001). Ecological influences on school children's classroom behavior. *Education, 105*(4), 411-413.

Kamps, D., Conklin, C., & Wills, H. (2015). Use of self-management with the CW-FIT group contingency program. *Education and Treatment of Children*, *38*(1), 1-32. doi: 10.1353/etc.2015.0003

Kamps, D., Wills, H.P., Dawson-Bannister, H., Heitzman-Powell, L., Kottwitz, E., Hansen, B., Fleming, K. (2015). Class-wide function-related intervention teams "CW-FIT" efficacy trail outcomes. *Journal of Positive Behavior Interventions, 17*(3), 134-145. doi: 10.1177/1098300714565244

Kamps, D., Wills, H. P., Heitzman-Powell, L., Laylin, J., Szoke, C., Petrillo, T., & Culey, A. (2011). Class-wide function-related intervention teams: Effects of group contingency

programs in urban classrooms. *Journal of Positive Behavior Interventions*, *13*(3), 154-167. Doi: 10.1177/1098300711398935

Kazdin, A. E. (1977). *The token economy: A review and evaluation*. New York, NY: Plenum.

Keating, D. P. (2004). Cognitive and brain development. In R. Lerner and L. Steinberg (Eds.), *Handbook of Adolescent Psychology* (pp 45-84). New York, NY: Wiley.

Kelshaw-Levering, K., Sterling-Turner, H. E., Henry, J. R., & Skinner, C. H. (2000). Randomized interdependent group contingencies: Group reinforcement with a twist. *Psychology in the Schools, 37*(6), 523-533. doi: 10.1002/1520-6807(200011)37:6<523::aid-pits5>3.0.co;2-w

Kowalchuk, E. A. (1999). Perceptions of practice: What art student teachers say they learn and need to know. *Studies in Art Education, 41*(1), 71-90. doi: 10.2307/1320251

Kuster, D. A., Bain, C., Newton, C., & Milbrandt, M. K. (2010). Novice art teachers: Navigating through the first year. *Visual Arts Research, 36*(1), 44-54. Doi: 10.1353/var.2010.0001

Larochelle, L. (1999). Classroom management in the art room. *Arts & Activities, 126*(1). 62-63.

Litow, L., & Pumroy, D. K. (1975). A brief review of classroom group-oriented contingencies. *Journal of Applied Behavior Analysis, 8*(3), 341-347. doi: 10.1901/jaba.1975.8-341

Maag, J. W. (2006). Social skills training for students with emotional and behavioral disorders: A review of reviews. *Behavioral Disorders, 32*(1), 4-17.

Maggin, D. M., Chafouleas, S. M., Goddard, K. M., & Johnson, A. H. (2011). A systematic evaluation of token economies as a classroom management tool for students with challenging behavior. *Journal of School Psychology, 49*(5), 529-554. Doi: 10.1016/j.jsp.2011.05.001

Martin, G., & Pear, J. J. (1999). *Behavior modification: What it is and how to do it* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Merrell K. W. (2002) *School social behavior scales, 2nd edition.* Assessment-Intervention

  Resources, Eugene, OR: Paul H Brookes Publishing Co.

Merrell, K. W., & Gimpel, G. A. (1998). *Social skills of children and adolescents:*

  Conceptualization, assessment, treatment. Hillsdale, NJ: Lawrence Erlbaum Associates,

  Inc.

Merrell, K. W., & Gueldner, B. A. (2010). *Social and emotional learning in the classroom:*

  Promoting mental health and academic success. New York, NY: Guilford Press.

Metzler, C. W., Biglan, A., Rusby, J. C., & Sprague, J. R. (2001). Evaluation of a comprehensive

  behavior management program to improve school-wide positive behavior support.

  Education and treatment of Children, 4(1)*,* 448-479.

Moore, D. W., Anderson, A., Glassenbury, M., Lang, R., & Didden, R. (2013). Increasing on-task

  behavior in students in a regular classroom: Effectiveness of a self-management procedure

  using a tactile prompt. *Journal of Behavioral Education, 22*(4), 302-311. Doi:

  10.1007/s10864-013-9180-6

Nelson, M. A., Caldarella, P., Hansen, B. D., Graham, M. A., Williams, L., & Wills, H. P. (2018).

  Improving student behavior in art classrooms: An exploratory study of CW-FIT tier 1.

  Journal of Positive Behavior Interventions. doi: 1098300718762744.

Parker, R.I., Vannest, K.J., Davis, J. L., Sauber, S. B. (2010). Combining non-overlap and trend

  for single case research: Tau-U. *Behavior Therapy*, 42*(2),* 284-299. doi: 10.1016/j.beth.

  2010.08.006.

Rafferty, L. A. (2010). Step-by-step: Teaching students to self-monitor. *Teaching Exceptional*

  Children, 43(2), 50-58. doi: 10.1177/004005991004300205

Reddy, R., Rhodes, J. E., & Mulhall, P. (2003). The influence of teacher support on student adjustment in the middle school years: A latent growth curve study. *Development and psychopathology, 15*(1), 119-138. doi: 10.1017/s0954579403000075

Robacker, C. M., Rivera, C. J., & Warren, S. H. (2016). A token economy made easy through ClassDojo. *Intervention in School and Clinic, 52*(1), 39-43. doi: 10.1177/1053451216630279

Saunders, R. J. (1989). How to select and effective art teacher. *NASSP Bulletin, 73*(517), 54–60.

Shepherd, T. L., & Linn, D. (2015). *Behavior and Classroom Management in the Multicultural Classroom.* Thousand Oaks, CA: SAGE Publications, Inc.

Simonsen, B., Sugai, G., & Negron, M. (2008). Schoolwide positive behavior supports: Primary systems and practices. *Teaching Exceptional Children, 40(6)*, 32-40. doi: 10.1177/004005990804000604

Skiba, R. J. (2014). The failure of zero tolerance. *Reclaiming children and youth, 22(4)*, 27-37.

Smetana, J. G., & Bitz, B. (1996). Adolescents' conceptions of teachers' authority and their relations to rule violations in school. *Child Development, 67*(3), 1153-1172. doi: 10.1111/j.1467-8624.1996.tb01788.x

Sugai, G., & Horner, R. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child & Family Behavior Therapy, 24*(1-2), 23-50. doi: 10.1300/J019v24n01_03

Susi, F. D. (1995). Student behavior in art classrooms: The dynamics of discipline. *TeacherResource Series*. Reston, VA: National Art Education Association

Susman, E. J., & Rogel, A. (2004). Puberty and psychological development. In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 15-44). New York, NY: Wiley.

Symonds, J., & Hargreaves, L. (2016). Emotional and motivational engagement at school transition: A qualitative stage-environment fit study. *The Journal of Early Adolescence, 36*(1), 54-85. doi: 10.1177/0272431614556348

Walker, H. M., Severson, H. H., & Feil, E. G. (2014). *Systematic Screening for Behavior Disorders-2nd Ed*. Eugene, OR: Pacific Northwest Publishing.

Walker, H. M., Ramsey, E., & Gresham, F. M. (2004). *Antisocial behavior in school: Evidence-based practices*. Belmont, CA: Wadsworth Publishing Company.

Wentzel, K. R. (2009). Peers and academic functioning at school. In K. Rubin, W. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 531-547). New York, NY: Guilford Press.

Wills, H. P., Iwaszuk, W. M., Kamps, D., & Shumate, E. (2014). CW-FIT: Group contingency effects across the day. *Education and Treatment of Children*, *37*(2), 191-210. doi: 10.1353/etc.2014.0016

Wills, H. P., Kamps, D., Hansen, B., Conklin, C., Bellinger, S., Neaderhiser, J., & Nsubuga, B. (2010). The classwide function-based intervention team program. *Preventing School Failure: Alternative Education for Children and Youth, 54(3)*, 164-171. doi: 10.1080/10459880903496230

Yeager, D. S. (2017). Social and emotional learning programs for adolescents. *The Future of Children*, 73-94.

Young, E. J., Caldarella, P., Richardson, M. J., & Young, K. R. (2012). *Positive behavior support in secondary schools: A practical guide.* New York: The Guilford Press.

APPENDIX A

Teacher Consent Forms

TEACHER CONSENT

Title: Class-wide Function-related Intervention Teams

Dear Teacher,

Introduction
Paul Caldarella, Ph.D. at Brigham Young University (BYU) is partnering with researchers at the University of Kansas on an intervention study of Class-wide Function-Related Intervention Teams (CW-FIT). You are being given the opportunity to participate in a research study using CW-FIT to teach on task behavior to your class in the fall or spring of this school year. The following information is provided for you to decide whether you wish to participate in the present study.

The purpose of this project is to assist teachers in developing and implementing behavior interventions for classrooms and small groups or individual students who may be at risk for emotional or behavioral problems. You have indicated your classroom is eligible as a site for CW-FIT due to potential student behavioral risks. Risks include off-task behaviors or attention problems that interfere with learning. We are requesting permission to assist you in providing behavioral intervention in your classroom and assessing your students' progress.

Procedures
If you choose to participate, you will receive training in CW-FIT, participate in assessment for student classroom needs, self-monitoring and goal-setting, and individual class lessons on classroom rules in the fall or the spring. BYU personnel will (a) assist with teacher training in behavioral interventions and classroom management, (b) monitor academic performance, and (c) observe classroom behavior.

CW-FIT is based on best practices, and includes: 1) individual or class lessons on classroom/school rules, 2) schedules (check points) for teachers and students to receive feedback on behavior, and 3) student self-monitoring with goal setting and rewards for performance. Together, these procedures are described as CW-FIT. Your options for student consequences for inappropriate behaviors during the study are the same as are currently used for all students at your school (e.g., loss of privileges, office referrals). Interventions are implemented for the individual child and for the whole class as a group, with BYU personnel training and assisting teachers in the implementation of CW-FIT.

Assessments may include teacher rating scales and interviews, and observations of student and teacher classroom behaviors. BYU personnel will conduct these direct observations. Teachers will complete rating scales and interviews, some in group meetings and others individually, with total paperwork time being no more than 10 hours spread out over the entire school year.

Time Commitment
BYU personnel may be in your class conducting observations for approximately 4 months during one class period of your normal school day. You will be implementing CW-FIT over the course of 3 to 4 months during regular academic instruction. You will spend no more than 10 hours outside of the regular school day participating in trainings and assessments, for which you are being compensated.

Compensation
At the end of the school year you will be compensated with a $250 check for your time spent participating in this study. Should you choose to withdraw from this study early, the stipend may be prorated according to the amount of time you spent participating in the study. This payment is considered taxable income and we will need you to complete a W-9 tax form to receive your payment.

Risks/Discomforts
We do not foresee more than minimal educational or psychological risks associated with participating. You may possibly feel some discomfort when trying to implement CW-FIT in your classroom while being observed by BYU research personnel.

Benefits
While there are no direct benefits to you, based on prior studies, we expect to see improved student learning, classroom behavior, and social interactions with peers and teachers. The results of this study will also help to further validate CW-FIT.

Confidentiality
All data gathered will be coded with an ID number and no identifying information associated with you or your students will be shared with other researchers or included in any published or presented reports. No identifying information will be associated with the ratings you provide on each student. Any information you provide will be securely stored and only BYU research personnel will have access to the data. Your permission allows a copy of all information obtained from assessment and interventions to be provided to researchers at BYU and at the University of Kansas. This information will be kept confidential in secured files and on password protected, encrypted computers. All school policies on confidentiality will be followed. BYU personnel will have relevant study information regarding you and your students available for you to review. Any information about non-research students will remain at your school and researchers will not have access to that information.

Participation
Your participation in this study is voluntary. You have the right to withdraw from this study at any time. Refusal to participate or withdrawing from this study will not affect your employment or standing at your school in any way. BYU personnel may exclude your classroom from participation in the study if the initial information collected in the classroom reveals high levels of student on task behavior or if the required number of student consent forms are not obtained. You will still have the opportunity to participate in the CW-FIT training.

Questions about the Research

If you have any questions regarding this study, you may contact Dr. Paul Caldarella at paul_caldarella@byu.edu or by calling 801-422-5081.

Questions about your Rights as Research Participants

If you have any questions with regards to your rights as a participant, you may contact the IRB Administrator, Brigham Young University, A-285 ASB, Provo, UT 84602; 801-422-1461 or irb@byu.edu.

Statement of Consent

I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.

_____   _____

Printed first and last name   School

_____   _____

Signature   Date

APPENDIX B

Modified Consent Forms

Dear Parent / Guardian,

Introduction
Paul Caldarella, Ph.D., at Brigham Young University (BYU), is partnering with researchers at the University of Kansas on a study at ████ Middle School. As part of the study, a social skills classroom management program will be evaluated in your child's classroom. The program is called Class-Wide Function-Related Intervention Teams (CW-FIT) and is implemented in the whole class during regular academic instruction. The purpose of CW-FIT is to increase students' social skills, attention, and learning. Teachers may also learn better ways to acknowledge students' social skills and respond to disruptive behaviors.

Procedures
As part of this study, your child's teacher will help evaluate CW-FIT in her/his classroom in the fall or the spring of this school year. CW-FIT is based on best practices, and includes: 1) individual or class lessons on classroom/school rules, 2) students receiving positive feedback (points) for appropriate classroom behavior, and 3) students learning to self-monitor and achieve classroom goals. Interventions are implemented for the whole class as a group. BYU personnel train and assist teachers in the implementation of CW-FIT. The options for student consequences for inappropriate behaviors during the study will be the same as are currently used for all students at your child's school (e.g., loss of privileges, office referrals). CW-FIT will be implemented during regular school hours and no additional time commitment will be required.

For research purposes, BYU personnel will conduct observations of classroom behavior and the implementation of CW-FIT components in the classroom. Your child will not be identified or singled out during this observation and no individual identifiable student information will be collected. The purpose of the observations is to determine whether CW-FIT components are implemented well and improves appropriate student behaviors in the classroom as a whole. Classroom demographic data will be collected. In addition, students will complete anonymous brief feedback forms during the study. Participating teachers will also identify students who are experiencing behavioral challenges in the classroom and who might benefit from more intensive CW-FIT interventions. You will be notified and allowed to consent to participate prior to implementation of these more individualized interventions should your child be identified by her/his teacher.

Risks/Discomforts
There are very few risks involved with having your child observed by BYU personnel or identified by their teachers. Having a BYU observer in their classroom may initially distract students the first one or two observations, but students typically return to their normal classroom behavior once becoming accustomed to this new person. BYU personnel have all been screened and have cleared background checks. If your child's teacher identifies your child as experiencing behavioral challenges, this information will be kept confidential as explained in the section below.

Benefits

There are no direct benefits to you or your child, though studies of CW-FIT at the elementary level have shown improved student learning, classroom behavior, and social interactions with peers and teachers. The results of this study will help to evaluate   CW-FIT and may assist the school in ongoing school improvement efforts.

Compensation

There is no compensation to you or your child for agreeing to participate in this study.

Confidentiality

No individually identifiable information associated with you or your child will be gathered or shared with other researchers or included in any published or presented reports. Any information gathered will be securely stored and only research personnel will have access to the information. Information obtained from class-wide observations will be provided to researchers at BYU and the University of Kansas. All information will be kept confidential in secured files and on password protected, encrypted computers. All school policies on confidentiality will be followed. Any information about non-participating students will remain at your child's school and researchers will not have access to that information.

Participation

Your child's participation in this study is voluntary. You have the right to refuse to have your child participate or withdraw your child from this study at any time, which means that researchers would not include your child in class-wide observations, your child would not complete feedback forms, and teachers would not identify your child for additional CW-FIT interventions, though CW-FIT would still be occurring in your child's classroom. Refusal to participate or withdrawing from this study will not affect your child's status or standing at the school in any way.

Questions about the Research

If you have any questions regarding this study, you may contact Dr. Paul Caldarella at paul_caldarella@byu.edu or by calling 801-422-5081.

Questions about your Rights as Research Participants

If you have any questions with regards to your rights as a participant, you may contact the IRB Administrator, Brigham Young University, A-285 ASB, Provo, UT 84602; 801-422-1461 or irb@byu.edu.

Estimado padre o tutor legal,

Introducción
Paul Caldarella Ph.D. (investigador de Brigham Young University), junto con investigadores de
The University of Kansas, están haciendo un estudio en ████ Middle School. Durante el estudio
se implementará un programa que se llama Class-wide Function-Related Intervention Teams
(CW-FIT) durante instrucción académica regular. El programa ayuda al maestro con el manejo
de comportamiento en la clase con los fines de aumentar las habilidades sociales, la atención, y
el aprendizaje de los estudiantes. Además, los maestros aprenderán mejores formas de reconocer
a sus estudiantes por sus habilidades sociales y cómo responder a comportamientos inapropiados.

Procedimientos
Como parte del estudio, el maestro ayudará en la evaluación de CW-FIT por medio de
implementarlo en su clase en el otoño o la primavera del año que viene. CW-FIT está basado
en prácticas eficazes, los cuales incluyen:

1) Lecciones sobre las reglas de la clase, o de la escuela.
2) Otorgar puntos a los estudiantes por comportarse bien en la clase.
3) Enseñarles a los estudiantes evaluar y controlar su propio comportamiento, con los fines de
lograr las
    metas de la clase.

CW-FIT se pone en practica con individuos y con la clase entera. El personal de Brigham Young
University entrenará y ayudará en la implementación del programa. Las consecuencias del
comportamiento inapropiado durante el estudio serán las mismas que ya existen en la escuela
(p.ej., pérdida de privilegios, reporte a la oficina). El programa de CW-FIT se lleva a cabo
durante el horario escolar y no requiere ningún tiempo fuera de la escuela.

Para propósitos del estudio, el personal de Brigham Young University realizarán observaciones
directas de la conducta de los estudiantes y el programa de CW-FIT en la clase. Su hijo(a) no
será identificado ni señalado durante las observaciones, y ningún tipo de información
identificable será recogida. El propósito de las observaciones es determinar si hayan sido
implementado bien los componentes de CW- FIT y si mejore o desarrolle comportamiento
apropiado en la clase en general. Se recogerá información demográfica de la clase. Además, los
estudiantes llenarán un breve cuestionario anónimo de la aceptabilidad de los componentes de
CW-FIT. Los maestros que participan identificarán a los estudiantes que tengan problemas de
comportamiento en sus clase y a quienes podrían beneficiar de intervenciones de CW-FIT más
intensivas. En el caso de que su hijo(a) sea identificado por una de estas intervenciones más
intensivas, se le notificará y se le pedirá consentimiento antes de implementarla.

Riesgos
Su hijo(a) se enfrenta con muy pocos riesgos al ser observado por el personal de Brigham Young
University o ser identificado por el maestro. El tener los observadores en la clase podría distraer
a los estudiantes durante las primeras o segundas observaciones, pero generalmente una vez que
los estudiantes se familiaricen con cualquier persona nuevo, rápidamente vuelven a su
comportamiento regular. Los observadores han sido seleccionado y han pasado por una revisión

de antecedentes. Si el maestro identifica a su hijo(a) con comportamientos inapropiados esta información se mantendrá confidencial como se explica en la sección abajo.

Beneficios
No hay beneficios directos para usted o su hijo(a), aunque estudios anteriores de CW-FIT han demostrado que el programa: ayuda a los estudiantes aprender mejor, mejora el comportamiento de los estudiantes, y mejora la interacción social de los estudiantes con sus compañeros y con el maestro. También, los resultados de este estudio ayudarán en la evaluación de CW-FIT y ayudarán a las escuelas a desarrollarse en todos sus esfuerzos de mejorar.

Compensación
No hay ningún tipo de compensación para usted o su hijo(a) por participar en este estudio.

Confidencialidad
Ninguna información identificable asociada con usted o su hijo(a) será recogida o compartida con otros investigadores, ni tampoco serán incluidos en los informes publicados o presentados. Toda la información recogida se almacenará de forma segura y solo el personal de la investigación tendrá acceso a los datos. La información obtenida a través de observaciones en las clases será proporcionada a los investigadores de Brigham Young University y The University of Kansas. Toda la información se mantendrá confidencial en archivos privados y computadoras cifradas, protegidas por contraseña. También, se pondrán en práctica las normas y las reglas de confidencialidad establecida por la escuela. Cualquier tipo de información personal de los estudiantes que no corresponde al estudio permanecerá en la escuela de su hijo(a) y los investigadores no tendrán acceso a esa información.

Participación
La participación de su hijo(a) en este estudio es voluntario. Usted tiene el derecho a rehusar la participación de su hijo(a) o de retirarle del estudio en cualquier momento, y así los investigadores no incluirían a su hijo(a) en las observaciones y los maestros no identificarían a su hijo(a) para intervenciones adicionales de CW-FIT, pero el programa de CW-FIT todavía se llevará a cabo en la clase. El declinar participación, o el retirar a su hijo(a) en cualquier momento, no afectará de ninguna manera la posición de su hijo(a) en la escuela.

Preguntas sobre el estudio
Si usted tiene preguntas sobre el estudio, puede comunicarse con el Dr. Paul Caldarella en paul_caldarella@byu.edu o al (801) 422-5081.

Preguntas sobre sus derechos como participantes en un estudio
Si usted tiene preguntas sobre sus derechos como participante, puede ponerse en contacto con el Administrador del IRB en Brigham Young University, A-285 ASB, Provo, UT 84602, al (801) 422-1461, o en irb@byu.edu.

APPENDIX C

Target Student Consent Forms

PARENT PERMISSION

Title: Class-wide Function-Related Intervention Teams

Dear Parent,

Introduction
Paul Caldarella, Ph.D. researcher at Brigham Young University (BYU), is partnering with
researchers at the University of Kansas on an intervention study of Class-wide Function-Related
Intervention Teams (CW-FIT). Your child's classroom teacher is participating in this study using
CW-FIT to teach on task behavior to your child's class in the fall or spring of the school year.
The following information is provided for you to decide whether you wish for your child to
participate in the present study.

The purpose of this project is to assist teachers in developing and implementing behavior
interventions for classrooms and small groups or individual students who may be at risk for
emotional or behavioral problems. Your child has been invited to participate by his/her
classroom teacher as a candidate for early intervention due to classroom behaviors of concern.
These behaviors include off-task classroom behaviors or attention problems that interfere with
learning. We are requesting your permission to assist the teacher in assessing your child's
progress and providing behavioral interventions.

Procedures
As part of this study, your child's teacher will be implementing CW-FIT with all students in
her/his class during regular academic periods. CW-FIT is based on best practices, and includes:
1) individual or class lessons on classroom/school rules, 2) students receiving positive feedback
(points) for appropriate classroom behavior, and 3) students learning to self-monitor and achieve
classroom goals. Interventions are implemented for the individual child and for the whole class
as a group. BYU personnel will train and assist teachers in the implementation of CW-FIT. Your
child may be provided more individualized assistance in these three areas. The options for
student consequences for inappropriate behaviors during the study are the same as are currently
used for all students at your child's school (e.g., loss of privileges, office referrals). CW-FIT will
be implemented during regular school hours and no additional time commitment will be
required.

For research purposes, individual assessments regarding your child's behavior will be collected
using teacher and student rating scales, teacher interviews, and a review of behavior and
academic records, which may include academic assessments, individualized educational
programs (IEPs), and office discipline records. In addition, BYU personnel will conduct direct
observations of student on task performance and inappropriate behaviors. If you agree to allow
your child to participate you will be asked to complete a brief demographic questionnaire and a
behavior rating scale regarding your child

Risks/Discomforts

There may be minimal risks for students exhibiting behavior problems; these students may receive more individualized interventions (e.g., self-management cards) possibly resulting in students feeling like they are being treated differently. However, in past research studies, such risks have not been observed and we will also be working individually with other children in the classroom.

Benefits

There are no direct benefits to you or your child, though prior studies of CW-FIT have shown improved student learning, classroom behavior, and social interactions with peers and teachers. The results of this study will help to further validate CW-FIT.

Compensation

After returning the completed brief demographic questionnaire and behavior rating scale, you will be compensated $50.00 total, in a gift card, for your time in completing the forms.

Confidentiality

All information gathered will be coded with an ID number and no identifying information associated with you or your child will be shared with other researchers or included in any published or presented reports. Any information gathered will be securely stored and only research personnel will have access to the information. Your permission allows a copy of all information obtained from assessment and interventions to be provided to researchers at BYU and the University of Kansas. This information will be kept confidential in secured files and on password protected, encrypted computers. All school policies on confidentiality will be followed. Information from assessments or observations by BYU staff will be shared in verbal or written reports with your child's teacher who is involved in this study. The only person in your child's school who will have limited access to your child's study information is your child's teacher, who is involved in the study. You have the right to contact your child's teacher who will be able to obtain relevant study information on your child for you to review. Any information about non-research students will remain at your child's school and researchers will not have access to that information.

Participation

Your child's participation in this study is voluntary. You have the right to withdraw your child from this study at any time, which means that researchers would not collect any information on your child, though CW-FIT would still be occurring in your child's classroom. Refusal to participate or withdrawing from this study will not affect your child's status or standing at the school in any way.

Questions about the Research

If you have any questions regarding this study, you may contact Dr. Paul Caldarella at paul_caldarella@byu.edu or by calling 801-422-5081.

Questions about your Rights as Research Participants

If you have any questions with regards to your rights as a participant, you may contact the IRB Administrator, Brigham Young University, A-285 ASB, Provo, UT 84602; 801-422-1461 or irb@byu.edu.

Statement of Consent

I have read, understood, and received a copy of the above consent and desire of my own free will to allow my child to participate in this study. I have discussed this with my child and given my child the opportunity to decline to participate.

_____   _____   _____

Print Child's First and Last Name   Child's Signature   Date

_____   _____   _____

Print Parent's First and Last Name   Parent's Signature   Date

<u>**AUTORIZACIÓN DEL PADRE**</u>

Título: Class-wide Function-Related Intervention Teams (CW-FIT)

Estimado padre o tutor legal,

Introducción
Paul Caldarella Ph.D. (investigador de Brigham Young University), junto con investigadores de The University of Kansas, están haciendo un estudio del programa CW-FIT. El maestro de su hijo(a) usará CW-FIT en su clase durante el estudio en el otoño y la primavera del año que viene. Se incluye la información que sigue para que pueda aprender sobre CW-FIT y decidir si quiere autorizar la participación de su hijo(a) en el estudio.

El propósito de CW-FIT es apoyar a los estudiantes (individuos o grupos pequeños) que luchan con problemas emocionales o de comportamiento. El propósito del estudio es ayudar a los maestros a desarrollar e implementar programas como CW-FIT en la clase. Su hijo(a) ha sido invitado a participar en el estudio por su maestro porque se le cree un buen candidato para intervención temprana, debido a comportamientos de preocupación en la clase. Estos comportamientos incluyen conducto que hace el aprendizaje más difícil, como el distraer a los otros estudiantes o una dificultad mantener la atención. Se le pide su autorización para que los investigadores puedan ayudar al maestro a evaluar el progreso de su hijo(a) e implementar el programa en la clase.

Procedimientos
Durante el estudio el maestro implementará CW-FIT con todos los estudiantes en sus clases durante períodos académicos regulares. El programa de CW-FIT está basado en prácticas eficaces, los cuales incluyen:

1) Lecciones sobre las reglas de la clase, o de la escuela.
2) Otorgar puntos a los estudiantes por comportarse bien en la clase.
3) Enseñarles a los estudiantes evaluar y controlar su propio comportamiento, con los fines de lograr las metas de la clase.

CW-FIT se pone en practica con individuos y con la clase entera. El personal de Brigham Young University entrenará y ayudará en la implementación del programa. Es posible que su hijo(a) reciba ayuda más individualizada en las tres áreas arriba. Las consecuencias del comportamiento inapropiado durante el estudio serán las mismas que ya existen en la escuela (p.ej., pérdida de privilegios, reporte a la oficina). El programa de CW-FIT se lleva a cabo durante el horario escolar y no requiere ningún tiempo fuera de la escuela.

Para propósitos del estudio, se usan escalas de conducta (llenado por el maestro o el estudiante), entrevistas con los maestros, los registros de la escuela (académicos o de conducta o disciplina), o programas de educación individualizada (IEP, por sus siglas en inglés) para recoger las evaluaciones individuales sobre el comportamiento de su hijo(a). Además, el personal de Brigham Young University realizarán observaciones directas de la conducta de los estudiantes (p.ej., conductas inapropiadas o la habilidad seguir direcciones). Si usted autoriza la

participación de su hijo(a), a usted se le pedirá llenar un breve cuestionario demográfico y una escala de comportamiento.

Riesgos

Puede haber algunos riesgos mínimos para los estudiantes que presenten problemas de conducta. Es posible que estos estudiantes reciban intervención más individualizada y que sientan que han sido tratado de una manera diferente que los otros estudiantes. Sin embargo, estos riesgos no se han presentado en estudios pasados. También, estaremos trabajando con otros individuos en la clase.

Beneficios

No hay beneficios directos para usted o su hijo(a), aunque estudios anteriores de CW-FIT han demostrado que el programa: ayuda a los estudiantes aprender mejor, mejora el comportamiento de los estudiantes, y mejora la interacción social de los estudiantes con sus compañeros y con el maestro. También, los resultados de este estudio ayudarán a validar CW-FIT.

Compensación

Después de llenar el cuestionario demográfico y escala de comportamiento recibirá $50.00, en forma de tarjeta de regalo, por su tiempo.

Confidencialidad

Ninguno de los datos recogidos serán conectados con su nombre o el nombre de su hijo(a), sino serán codificados con un número de identificación. Ninguna de su información personal será compartida con otros investigadores ni incluida en los informes publicados o presentados. Toda la información recogida se almacenará de forma segura y solo el personal del estudio tendrán acceso. Su consentimiento permite que los investigadores de Brigham Young University y The University of Kansas tengan una sola copia de toda la información obtenida de la evaluación y las intervenciones. Esta información se mantendrá confidencial en archivos privados y computadoras cifradas, protegidas por contraseña. También, se pondrá en práctica las normas y reglas de confidencialidad establecida por la escuela. La información de las evaluaciones y observaciones obtenida por el personal de Brigham Young University será compartida en los informes verbales o escritos con el maestro de su hijo(a) porque está participando en el estudio. La única persona en la escuela que tendrá acceso limitado a la información de su hijo(a) será su maestro. Usted tiene el derecho de revisar datos relevantes de su hijo(a) por medio de contactar al maestro, quien tendrá acceso a ellos. Cualquier tipo de información personal de los estudiantes que no corresponde al estudio permanecerá en la escuela de su hijo(a) y los investigadores no tendrán acceso a esa información.

Participación

La participación de su hijo(a) en este estudio es voluntario. Usted tiene el derecho de retirar a su hijo(a) del estudio en cualquier momento y así los investigadores no recogerían ni mantendrían ningún tipo de información de su hijo(a), pero el programa de CW-FIT todavía se llevará a cabo en la clase. El declinar participación, o el retirar a su hijo(a) en cualquier momento, no afectará de ninguna manera la posición de su hijo(a) en la escuela.

Preguntas sobre el estudio
Si usted tiene preguntas sobre el estudio, puede comunicarse con el Dr. Paul Caldarella en paul_caldarella@byu.edu o al (801) 422-5081.

Preguntas sobre sus derechos como participantes en un estudio
Si usted tiene preguntas sobre sus derechos como participante, puede ponerse en contacto con el Administrador del IRB, en Brigham Young University, A-285 ASB, Provo, UT 84602, al (801)-422-1461, o en irb@byu.edu.

Declaración de consentimiento o autorización
He leído, comprendido y recibido una copia de esta forma de autorización. Autorizo, y deseo de mi propia y libre voluntad, que mi hijo(a) participe en el estudio. He hablado de esto con mi hijo(a) y le he dado la oportunidad escoger si quiere participar en el estudio o no.

_____   _____   _____
Nombre y apellido del estudiante   Firma del estudiante   Fecha

_____   _____   _____
Nombre del padre o tutor legal   Firma del padre o tutor legal   Fecha

APPENDIX D

Classroom Expectation Teaching Script

To identify on-task behavior, you will teach two lessons; one on Respect and one on how to Follow Directions. You will refer back to these behaviors throughout CW-FIT

Each lesson will have:

- Definition
- Rationale
- Student Participation
- Review

MS CW-FIT Expectation Lesson Script - Teaching Lesson (10 minutes maximum)

Today we are going to review our Expectation _____.

In your groups, I want you to discuss what _____ looks like in our classroom.

I am going to give you 2 minutes. When the timer goes off, I will ask each group to give me an example of what _____ is. Or I will ask you why _____ is important.

Definition and Rationale

Okay, 2 minutes is up. (Ask each group to share **definition** and **rationale**)

Student Participation

(Groups share)

Those were great!

(Option: You can write down key words/phrases if the expectation steps are not already posted in the classroom)

Review

Let's do our best to show _____ in our classroom by _____ (read the steps on the poster)

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APPENDIX E

Classroom Expectation Posters

Classroom 1:

Listening
- You're not talking while someone else is
- Raise your hand
- Eyes are on teacher, book, screen, etc
- To learn/be better
- To Know what to do
- To know how to get an A.

Working
- Using tools you need to
- Working more than you're talking
- Working on the assignment at hand
- Finish work so you get a good grade
- Can ask for + get help
- Get project done on time

Classroom 2:

CLASS RULES!
I CAN BE RESPECTFUL TO OTHERS
I CAN STAY ON TASK AND WORK HARD
I CAN BE A RESPONSIBLE PERSON
I CAN PRODUCE QUALITY WORK
I CAN TAKE CARE OF MATERIALS

APPENDIX F

Example of CW-FIT Point Chart

CW-FIT POINTS								
DATE: 10/26/17	REWARD: Leave 2 minutes early				GOAL: 5 points			
TEAMS:	Tmer Beeps:	1	2	3	4	5	6	7
POINTS:								

APPENDIX G

Observation Chart

School	Teacher	Subject	Class Activity Code LG SG IA T	Observer	Date	Time

Observation Day				Reliability		Primary Observer	Reliability Observer	Class On-task IOA %	TS On-task IOA %	TS Disruptions IOA %
Baseline	Start-up	Intervention	Reversal	Yes ☐	No ☐					

Praise Individual		Praise Group				Reprimand Individual		Reprimand Group	
Verbal	Rely %	Verbal	Rely %	Points	Rely %	Verbal	Rely %	Verbal	Rely %
☐		☐		☐		☐		☐	

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

Code: Plus (+) for On-Task; Minus (-) for Off Task; Slash (/) for unable to observe. For Target Students: (+) for On-Task, (-) for Off Task, (/) for unable to code, and place a checkmark ([Symbol]) if Target Student is displaying either a behavioral or verbal disruption at the interval mark.

# of Students	Seating Arrangements	Target 1		Target 2		Target 3		Class On-task %
		On-task %	Disruptions	On-task %	Disruptions	On-task %	Disruptions	

APPENDIX H

Fidelity Checklist

_____ _____ _____
Fidelity Score **Group On Task** **Praise/Reprimand**

School: _____ Teacher: _____ Observer: Primary or Reliability
Date: _____ Time: _____ Subject: _____

Class Activity %: Whole Group __ Small Group __ Independent __ One-to-One __
Transition __

CW-FIT Procedures	Observed
1. Classroom expectations clearly posted.	NP 1 2 3
2. Team point chart displayed.	NP 1 2 3
3. Daily point goal posted.	NP 1 2 3
4. Pre-corrects on skills at the beginning of session.	NP 1 2 3
5. Timer used and set at appropriate intervals.	NP 1 2 3
6. Points awarded to teams for use of skills.	NP 1 2 3
7. Praise/points to reprimand ratio approximately 4:1.	NP 1 2 3
8. Praise and reprimands were behavior/skill specific.	NP 1 2 3
9. Points tallied and reward delivered.	NP 1 2 3
= Not Present = 0	NP

Total Fidelity Score (TF) ____

_____ _____
Point Goal **Reward**

Total Score Possible (TP) ____
TF divided by TP = % yes ____

Classroom management				Rating			
1 – Very Low (40%)	2 – Moderately low (60%)	3 – Average (80%)		4 – Moderately high (90%)			
1. Level of compliance during academic instruction				1	2	3	4
2. Students follow rules appropriate to setting				1	2	3	4
3. Transitions are short with only minor disruptions				1	2	3 N/A	4
4. Students are focused and on task				1	2	3	4
5. Teacher ignores minor inappropriate behaviors				1	2	3	4
6. Level of lesson structure (organized, clear directions, sufficient work to keep students busy)				1	2	3	4

Please subtract out any items
marked N/A when computing
your totals.

Total Management Score (TM) ____
Total Score Possible (TP) ____
TM divided by TP = % yes ____

Teacher Training

Skills	Consult	Modeling	Pre Corrects
Lessons/Precorrects			
Instructive Corrections			
Teams			
Goals/Points			
Rewards			
Praise			
Timer/Time Intervals			
Logistical Questions			
Transitions			
Lesson Structure			
General Behavior			
Self-Management			
Help Cards			
FBA			
OTHER			
Time Spent:			

APPENDIX I

Teacher Satisfaction Survey

CW-FIT Teacher Social Validity Survey

1. **The CW-FIT program was easy to learn and implement in my classroom.**

| Very True | Mostly True | Somewhat True | Not True |
| 1 | 2 | 3 | 4 |

2. **The training I received was adequate.**

| Very True | Mostly True | Somewhat True | Not True |
| 1 | 2 | 3 | 4 |

3. **The Procedural Fidelity sheet was an effective teaching tool.**

| Very True | Mostly True | Somewhat True | Not True |
| 1 | 2 | 3 | 4 |

4. **In class support and feedback provided by the researcher was helpful.**

| Very True | Mostly True | Somewhat True | Not True |
| 1 | 2 | 3 | 4 |

5. **I will continue to use CW-FIT in my classroom.**

| Very True | Mostly True | Somewhat True | Not True |
| 1 | 2 | 3 | 4 |

6. **What was most helpful to you in learning how to implement the CW-FIT program?**

7. **How would you modify the CW-FIT program for future use?**

APPENDIX J

Student Satisfaction Survey

CW-FIT Student Social Validity Survey

Did you enjoy CW-FIT?

    Yes   **No**

What do you like most about CW-FIT?

Is there anything you don't you like about CW-FIT?

Do you think CW-FIT could help students get more work done in their classrooms?

    Yes   **No**

WHY?

APPENDIX K

Ranking Sheet

Teacher: _____ **School:** _____ **Date:** _____

Please rank the students screened to have problem behaviors as to their response to CW-FIT.

Students with Problem Behaviors	*RATING*	*Self-management Or Help cards*	*Peer Students*

Rating Scale
1 = poor response to CW-FIT
2 = some response, still continued issues with behavior
3 = good response, still some problem days
4 = great response, behaviors much improved