AN EVALUATION OF A SECONDARY INTERVENTION FOR STUDENTS WHOSE PROBLEM BEHAVIORS ARE ESCAPE MAINTAINED

by

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A DISSERTATION

Presented to the Department of Special Education and Clinical Sciences
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

June 2011

DISSERTATION APPROVAL PAGE

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Title: An Evaluation of a Secondary Intervention for Students Whose Problem Behaviors Are Escape Maintained

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Doctor of Philosophy

Department of Special Education and Clinical Sciences

June 2011

Title: An Evaluation of a Secondary Intervention for Students Whose Problem Behaviors Are Escape Maintained

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Check-in-check-out (CICO) has been demonstrated to produce decreases in problematic behaviors and increases in academic engagement when used as a secondary intervention within a school-wide positive behavior support (SWPBS) framework. In general, research has suggested that CICO is most effective for children whose problem behaviors are sensitive to adult attention without modifications. However, research is lacking on secondary interventions intended for students whose problem behaviors are hypothesized to be maintained by escape or avoidance of academic tasks.

Drawing from research on the utility of function-based interventions and the teaching of functional replacement behaviors to decrease problem behaviors and increase appropriate skills, a secondary intervention, Breaks are Better (BrB), was designed that builds off core features of CICO but also includes function-based components for addressing problem behavior maintained by task avoidance. Modifications included 1) defining specific expectations that were incompatible with problematic behavior during

academic routines and 2) providing students with functional replacement behaviors that allowed them to recruit both brief breaks and help.

Effectiveness of BrB was examined using an ABAB design across three participants whose off-task behaviors were hypothesized to be maintained, in part, by task avoidance or escape. The current study examined the following primary research questions: 1) is there a functional relation between the implementation of BrB and reduced rates of off-task behavior, and 2) is there a functional relation between the implementation of BrB and increases in the use of alternative replacement behaviors (help and break)?

A functional relation was documented between the implementation of the BrB intervention and reductions in off-task behavior for two out of three participants (Gregg and Alex). However, for Diego, off-task behavior was somewhat variable during the final intervention phase. Results from the collection of contextual fit and social validity data indicated that students, teachers, and parents viewed BrB as effective, worth the required effort, and contextually appropriate for use in this school.

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ACKNOWLEDGMENTS

I wish to express sincere appreciation first to Dr. Cynthia Anderson for her supervision and guidance throughout my undergraduate and graduate study and particularly for her support throughout the dissertation process. Her expertise and professional judgment were invaluable in formulating this dissertation, from its earliest stages through the preparation of the final manuscript.

I would also like to extend my gratitude to the other members of my dissertation committee, Dr. Rick Albin, Dr. Laura Lee McIntyre, and Dr. Jennifer Pfeifer for their support in the preparation of this manuscript.

I would also like to sincerely thank the students, teachers, and staff with whom I had the pleasure of working with and learning from throughout the duration of the current investigation.

Finally, I would like to thank a great friend and colleague, Jessica E. Turtura.

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CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

Investing in practices which are not evidence-based may drain limited educational resources and, in some cases, may result in the use of practices that are not in the best interest of children (Horner, Carr, Halle, McGee, Odom, & Wolery, 2005; Odom, Brantlinger, Gersten, Horner, Thompson, & Harris, 2005). School wide positive behavior support (SWPBS) provides a framework for schools to implement evidence-based practice. This three-tiered model is designed to provide (1) a universal behavior support system accessed by all students, (2) a secondary level of support for at-risk students who are in need of additional behavior support to achieve desired outcomes, and (3) a tertiary level of support which entails highly individualized or intensive interventions (Scott & Eber, 2003; Walker, Horner, Sugai, Bullis, Sprague, & Bricker, 1996). As a system, interdependency exists between each level of support; efficiency and appropriate comprehensiveness at one level (e.g., the secondary level) promotes efficiency at the next level (e.g., the tertiary level) through continuity and the maximized availability of resources such as time, cost, and personnel (Walker, Cheney, Stage, Blum, & Horner, 1995).

To date, schools implementing SWPBS systems have experienced a wide range of positive student outcomes such as reductions in office discipline referrals (ODRs; Bohanon, Fenning, Carney, Minnis-Kim, & Anderson-Harriss, 2006), suspensions (Horner, Sugai, Todd, & Lewis-Palmer, 2005) and improvements in academic performance (Muscott, Mann, & LeBrun, 2008). Further, SWPBS provides a mechanism for using data to guide decision-making; particularly around the selection of students who

may benefit from a secondary intervention and using on-going progress monitoring data to determine whether students are making adequate progress (Walker, Cheney, Stage, Blum, & Horner, 1995). While positive outcomes have been particularly evident with respect to the universal level of support, research is lacking somewhat in the area of secondary interventions. Below secondary interventions are described in more detail.

Secondary Interventions within SWPBS

It is important to consider implementation of secondary interventions within the broader framework of SWPBS as this framework provides a context to guide implementation over time (Anderson & Borgmeier, 2010). Within the framework of SWPBS, secondary interventions are intended for only some students; those who are not responding adequately to the universal intervention and who may need additional behavioral or academic support. Furthermore, the academic or behavioral difficulties of these students should not yet be so severe that they warrant tertiary level supports or interventions.

Secondary interventions should require low effort on the part of teachers and staff, be consistent with school-wide expectations, and should be able to be implemented quickly and efficiently (March & Horner, 2002; Crone, Horner, & Hawken, 2004). In addition, secondary supports should provide increased structure to a student's day, increase opportunities for feedback about student behavior, and provide multiple opportunities to practice skills (Anderson & Borgmeier, 2010).

Schools use a variety of interventions which could be considered secondary-level supports (e.g., lunch buddies or homework club; Hawken & Horner, 2003) yet empirical support for specific, secondary interventions intended for students with similar behavioral

or academic needs is limited, especially within the framework of SWPBS. One intervention that has been well researched and can be considered an evidence-based intervention within SWPBS is check-in/check-out (CICO).

Check-in/Check-out. Emerging from research documenting positive outcomes achieved by the use of daily behavior report cards at the individual student level (e.g., Davies & McLaughlin, 1989; Dougherty & Dougherty, 1977), the CICO program promotes self-management and has been demonstrated as a procedurally feasible and highly effective, secondary intervention (Chafouleas, Riley-Tillman, Sassu, LaFrance, & Patwa, 2007; Filter, Benedict, McKenna, Horner, Todd, & Watson, 2007; Hawken & Horner, 2003). Embedded components within this program typically include increased prompts for expected behavior, increased monitoring and feedback to students about their behavior, positive reinforcement of desirable behavior via verbal praise and/or tangible items, and a home–school component (Hawken & Horner, 2003; Todd, Campbell, Meyer, & Horner, 2008). The CICO program is linked directly to the school's universal intervention and thus students are monitored and receive feedback based on the extent to which their behavior aligns with school-wide expectations. Thus, this program provides a framework for schools to implement evidence-based practice.

As a framework within SWPBS, the typical CICO cycle consists of multiple scheduled check-ins during the school day (e.g., morning check-in, before morning recess, before lunch, before afternoon recess, and a check-out at the end of the day). At morning check in, an adult will present a student with their daily point card (Appendix A) and give the student positive encouragement before starting their academic day. After this initial check-in, the student's teacher(s) will perform multiple checks (e.g., one check

at the end of each academic period) where the student will receive verbal feedback, specific praise based on their behavioral performance and points on their card based on the extent to which their behavior matched school-wide expectations. At the end of each day, the student has a final check-out, were the points they have earned are summed. If the student has met their daily point goal, they are able to exchange those points for small rewards such as gum, pencils, or a small toy through a token economy system and are given a brief home-report to share with their parents. In the context of a SWPBS framework, the number of points earned per day are recorded and monitored by a behavioral support team responsible for monitoring student progress on a bi-weekly basis (Figure 1). Therefore, this team would be responsible for determining if a student is adequately responding to the intervention or not (Hawken & Horner, 2003). For example, a student who has achieved 80% or more of their points possible for several consecutive days would likely be considered as successfully responding to the program. On the other hand, a student who infrequently achieves his point goals would be considered as unsuccessful, thus requiring modified or additional support planning. The typical CICO cycle is depicted in Figure 1.

CICO Research. Several studies to date have documented the utility of CICO for decreasing problem behavior in the classroom (Chafouleas, Riley-Tillman, Sassu, LaFrance, & Patwa, 2007; Filter, Benedict, McKenna, Horner, Todd, & Watson, 2007; Hawken & Horner, 2003; Todd, Campbell, Meyer, & Horner, 2008). Hawken and Horner (2003) examined effects of the CICO program on problem behaviors and academic engagement in four middle school-aged boys. Using a concurrent multiple baseline across participants design to evaluate intervention outcomes, the results of their

study indicated reductions in problem behaviors and increases in academic engagement for all four participants.

Todd et al. (2008) also used a concurrent, multiple-baseline across participants design to evaluate the effects of CICO on combined problem behaviors (i.e., talking out, non-compliance, talking to peers, disruptive behaviors, and negative physical or verbal interactions). In this study, four elementary-aged students whose problem behaviors were hypothesized to be maintained by positive reinforcement in the form of attention were placed on the CICO program.

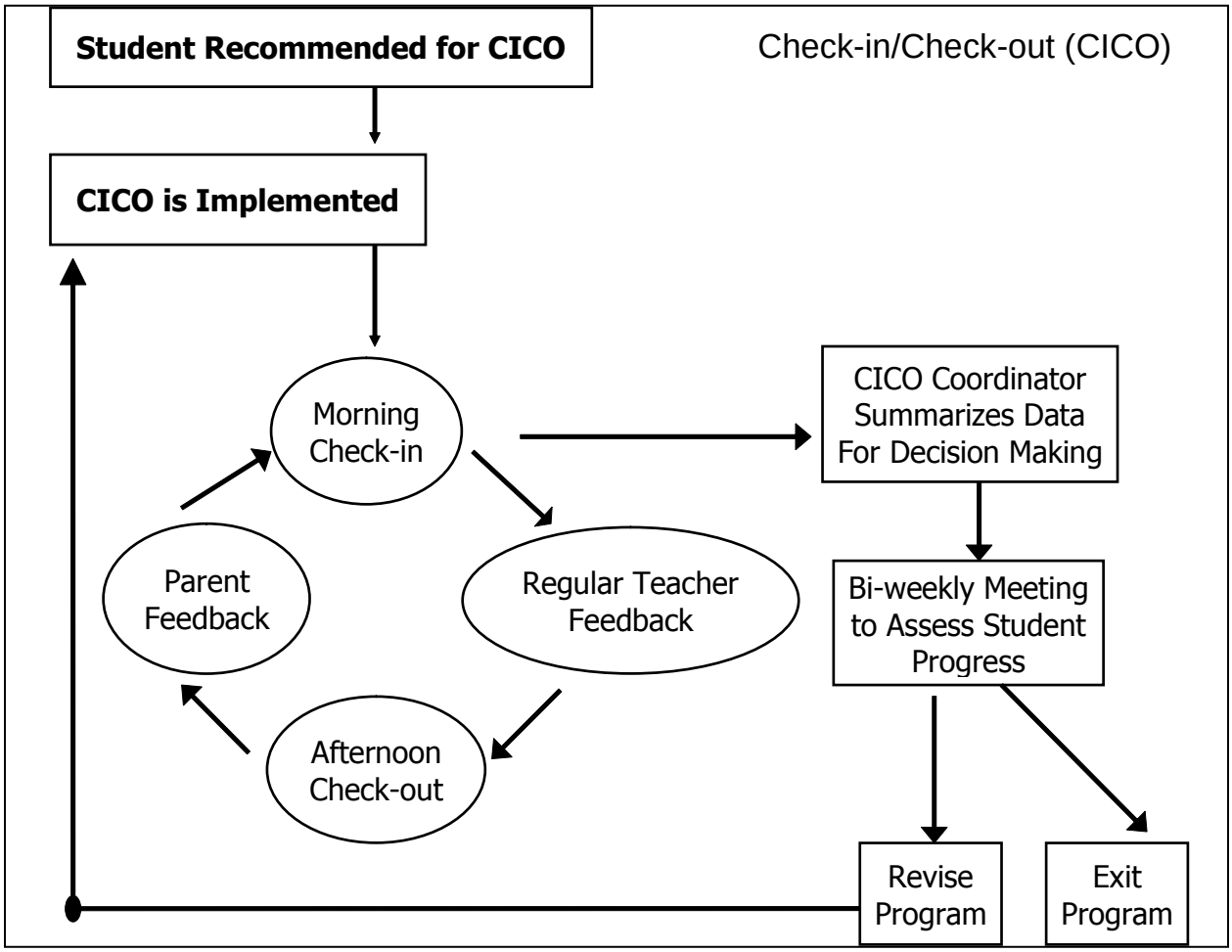


Figure 1. Typical CICO cycle (Hawken & Horner, 2003).

Results showed that this program was related to participant's observed reductions in problem behavior as indicated by reduced numbers of office discipline referrals (only one student received an ODR during the intervention) and meaningful average reductions in problem behavior for these participants. These reductions in student problem behavior ranged from 15% to 19% when compared to baseline.

Filter et al. (2007) provided evidence that CICO can not only be effective, but can also be implemented with fidelity and in a sustainable manner. In this study, the researchers used the number of ODRs as their primary dependent variable, in addition to examining fidelity of implementation data. Data for the participants in their sample of 12 students showed significant decreases in the number of ODRs received per week. Furthermore, via staff report, they were able to document that this secondary intervention can be implemented successfully by typical school personnel.

Limitations of CICO. Although sufficient research supports CICO as an emerging evidence-based practice, several authors (Fairbanks, Sugai, Guardino, & Lathrop, 2007; Hawken, 2006; Hawken & Horner, 2003; March & Horner, 2002; McIntosh, Campbell, Carter, & Dickey, 2009) have noted that this intervention is particularly effective for students whose problem behaviors are sensitive to adult attention. March and Horner (2002) found that behavioral function was predictive of student's success on the CICO program. In their sample of 24 students participating in CICO the majority of students whose problem behaviors were maintained by adult or peer attention (9 out of 13) demonstrated improved behavioral performance. However, 11 (almost half of their sample) were found to engage in problem behaviors which were maintained by escape from academic demands. Of those 11 students whose problem

behaviors were maintained by escape or avoidance of academic tasks or activities, only 3 demonstrated improvements from CICO alone. The remaining 8 students were referred for additional support which resulted in the development of individualized behavioral support plans. Offering an explanation for such findings, the researchers pose that for escape-maintained problem behavior, traditional CICO programs offer little in terms of altering the environmental contingencies which maintain problem behaviors for this group of children.

After using structured teacher interviews to develop functional hypothesis statements for 36 elementary school students nominated for additional behavior support McIntosh, Campbell, Carter, & Dickey (2009) examined the effects of typical CICO on teacher ratings of problem behavior, ratings of prosocial behavior, and number of office discipline referrals. Data were collected prior to any participant beginning the intervention and again, 8 weeks after each participant began the intervention. The results of their statistical analyses showed a statistically significant effect on ratings of problem behavior, ratings of pro-social behavior, and number of office discipline referrals for participants whose problem behaviors were hypothesized to be attention-maintained (i.e., attention group). In contrast, no statistically significant effects were found for any of the outcome measures for students whose problem behaviors were hypothesized to be maintained by task avoidance or escape (i.e., escape task group). Of particular note, T-score group averages for ratings of problem behavior increased from pre to post for the escape task group while decreases were demonstrated for the attention group; suggesting that CICO may lead to exacerbations in problem behavior for this group of students.

Fairbanks et al. (2005) conducted a two-part study in which 10 participants were identified as in need of secondary-level behavior support. Four of their ten participants responded very well to the CICO program, demonstrating reductions in problem behaviors ranging from 10-50% compared to baseline levels. However, for the participants who did not respond sufficiently to CICO, researchers found that modified versions of CICO which included individually defined target behaviors and the addition of function-based components such as the addition of functional replacement behaviors were necessary to achieve satisfactory reductions in their problem behaviors.

Taken together, while evidence supports the utility of CICO as a powerful secondary intervention, two conclusions are supported. First, CICO has been shown to be particularly effective for students whose problem behaviors are sensitive to attention. Second, without modification, typical CICO is less effective for students whose problem behavior is maintained, at least in part, by escape or avoidance of academic tasks or routines. For these students, a modified version of CICO is needed. Next, functional behavior assessment within the context SWPBS is briefly reviewed, followed by evidence to support the utility of function-based intervention components in contrast to non-function based behavioral support strategies.

Functional Behavior Assessment and Interventions

Functional behavior assessments (FBAs) are intended to provide practitioners with an understanding of the environmental events which occasion and maintain identified target behaviors. Specifically, the essential features of an FBA delineate the following: 1) operational definitions of targeted problem behaviors; 2) antecedents or "triggers" which set the occasion or precede problem behavior; and 3) environmental

events (i.e., consequences) which maintain the problem behavior under certain circumstances or situations (Sugai, Lewis-Palmer, & Hagan, 1998). In addition, relevant setting evens or establish operations which may momentarily alter the reinforcing value of consequences for problem behavior must be considered (Crone & Horner, 2003; Horner,Vaughn, Day, & Ard, 1996; Michael, 1993). Once these components have been identified, at least one functional hypothesis is developed which can then be used to develop an intervention with function-based components (O'Neill, Horner, Albin, Sprague, Storey, & Newton, 1997). That is, an intervention which appropriately addresses any or all of the identified environmental features identified via the FBA could be considered to be "function-based". However, it should not be ignored that intervention strategies which are not necessarily based on functional assessment procedures or hypothesis have been demonstrated to change behavior in desirable ways. Punishment based and reinforcement based strategies are described next.

Punishment-Based Interventions. A stimulus which functions as a punisher will, by definition result in a decrease in the likelihood that a target behavior will occur in the future. That is, punishment can be generally defined as the delivery of a consequent stimulus (e.g., mild shock, the removal of a preferred item, loss of a privilege) that decreases the future rate or probability of occurrence of a behavior (Lerman & Vorndran, 2002; Matson & Taras, 1989; O'Donnell, Crosbie, Williams, & Saunders, 2000). Although immediate effects of contingent punishment have been demonstrated (Kaufman & Baron, 1968; Weiner, 1964) punishment procedures, especially those implemented in the absence of reinforcement based or function-based intervention components, may result in undesirable effects for both the individual whose behavior is being punished and

the practitioners or caregivers responsible for delivering the punishing stimulus (Horner, 2002; McGee, Menolascino, Hobbs, & Menousek, 1987; Parsons et al., 2001).

In addition, punishment procedures most contextually appropriate for typically developing children in school settings may be contraindicated if the function of their problematic behaviors are not taken into consideration and may therefore do little to produce meaningful changes in their problem behavior. For example, a time-out procedure when implemented with a student who engages in problem behaviors maintained by task avoidance or escape would be contraindicated, as the time-out procedure could inadvertently provide negative reinforcement for problem behavior (i.e., time away from the aversive tasks).

Reinforcement Based Interventions. Reinforcement can be generally defined as a consequent stimulus that increases or maintains the future rate or probability of occurrence of a behavior (e.g., Alberto & Troutman, 2009). Because highly preferred items can function as reinforcers for social behavior, interventions which provide reinforcers contingent upon desired behavior should be expected to produce increases in the desired behavior. So, while reinforcement-based strategies alone do nothing to address the function of problem behavior or the environmental stimuli which occasion and maintain the problem behavior, they may still be effective in reducing inappropriate behaviors or increasing desirable behaviors without a-priori functional hypotheses. For example, the implementation of token economy systems (Chowdhury & Benson, 2011; Cicero & Pfadt, 2002; Kazdin & Bootzin, 1972) have been shown to result in changes in targeted inappropriate and appropriate behaviors.

Generally, these token economy systems are designed such that students receive relatively arbitrary secondary reinforcers such as stickers, tokens, or points contingent upon the presence or absence of targeted behaviors and these "tokens" are then traded in for preferred activities or tangible items. When used as a singular intervention component however, one potential way in which reinforcement based strategies may fail is that the reinforcers in place begin to lose their relative value (e.g., satiation over time). If this occurs, targeted problem behavior may reemerge; particularly when no environmental modifications or functional alternatives are in place to address behavioral function. However, this would be less likely to occur with reinforcement based strategies which have been based on results of a functional behavior assessment or functional analysis (e.g., Iwata, Dorsey, Slifer, Bauman, & Richman, 1982/1994); particularly when those reinforcement based strategies are implemented in conjunction with other function-based intervention components such as extinction or the teaching of functional replacement behaviors (Marcus & Vololmer, 1996; Hagopian, Fisher, & Legacy, 1994). Furthermore, empirical comparisons of function-based and non-function based interventions suggest that function-based interventions result in greater and more durable changes in targeted behaviors (Filter & Horner, 2009; Ingram, Lewis-Palmer, & Sugai, 2005; Newcomer & Lewis, 2004).

Function Based and Non-function Based Interventions. Ingram, K., Lewis-Palmer, T., & Sugai (2005) examined the effects of function based interventions and non-function based interventions on the off-task and other problematic behaviors of two middle school students. Following the completion of functional behavior assessments consisting of structured interviews with teachers and students and direct observations of

student problem behavior, a functional hypothesis statement was developed for each participant. Next, a function-based and non-function based plan was selected for each. Function-based intervention strategies were developed based upon the recommendations by Horner, Sugai, Todd & Lewis-Palmer (1999–2000) and emphasized ways to neutralize setting events, make antecedents irrelevant, reduce the effectiveness of problem behavior by teaching new behaviors, and provide access to maintaining consequences for appropriate behavior while not allowing access to maintaining consequences for inappropriate behavior.

Using an ABCBC design for each participant their results showed that when function based interventions were in place, levels of problem behavior were observed to be lower than in any other phase. For example, the average percentage of intervals with problem behavior reported in each phase for Bryce was: baseline (M=61%), non-function based intervention (M=38%), function based intervention (M=10%), non-function based (M=56%), and function based (M=8%).

Newcomer and Lewis (2004) also compared the effectiveness of function based and non-function based interventions with three elementary school students. The function-based interventions used in this study involved the use of a self-management intervention and the teaching of functional replacement behaviors. The non-function based interventions varied for each participant but involved either a) a cue-and-prompt strategy; b) teaching "respectful behavior" and increases in social praise; or c) a dependent group contingency for meeting general classroom expectations. Using a multiple-baseline design across participants design, they demonstrated that for two of the three participants, reductions in problem behavior were much greater with the

implementation of a function-based intervention in comparison to the non-function-based intervention. For the third participant, zero or near zero levels of inappropriate behavior were observed during the implementation of the non-function based intervention, but due to relatively low levels of problem behavior during both baseline and non-function-based intervention phases, a strong functional relation between either intervention and levels of problem behavior was not observed.

Finally, following a functional assessment consisting of structured interviews and a functional analysis, Filter and Horner (2009) examined the differential effects of function-based and non-function-based interventions for two fourth grade students (Brett and Dylan). For Brett, the function-based intervention involved an antecedent manipulation which involved listening to audio tapes of his reading work rather than reading the material himself. The non-function based intervention for Brett involved a time-out procedure contingent upon problem behavior. For Dylan, the function-based intervention involved the teaching of a functionally equivalent replacement behavior for requesting brief instructional assistance. The non-function-based intervention for Dylan involved teacher provided encouragement following problem behavior.

Results of their examination demonstrated that the function-based interventions resulted in significantly fewer combined inappropriate behaviors (e.g., talking out, out-of-seat, poking peers) for both participants in comparison to levels of inappropriate behaviors observed when non-function-based interventions were in place.

Taken together, studies comparing the effectiveness and durability of function-based and non-function-based interventions suggest that function-based interventions result in greater outcomes when directly compared to non-function based interventions.

While function based positive behavioral support interventions focus heavily on altering relevant environmental features (altering the discriminative stimuli which set the occasion for problem behavior, manipulating consequences for problem behavior) it should be emphasized that the identification and explicit teaching of functional replacement behaviors is often a fundamental component to any strong function-based-intervention. Next, the rationale for teaching functionally equivialnt replacement behaviors derived via functional assessment hypotheses is presented.

Functional Replacement Behaviors. Functional communication training (FCT), an evidence based practice (Horner et al., 2005) is used as an intervention following functional assessment or functional analysis procedures with children who engage in problem behavior and who lack more pro-social "communicative" skills that are in the same response class as problem behavior. For example, for a student who engages in problem behavior maintained by the removal of academic demands, an alternative response such as handing over a card that says "break please" could be taught. In this example, contingent upon the student handing over the "break please" card, a brief break from academic demands would be provided; thus serving as a functionally equivalent alternative response for problem behavior.

Multiple studies have documented impressive reductions in problem behaviors and increases in communicative responses through the use of FCT (Bird, Dores, Moniz, & Robinson, 1989; Brown et al., 2000; Carr & Durand, 1985; Durand & Carr, 1987, 1991; Hagopian, Fisher, Sullivan, Acquisto, & LeBlanc, 1998; Mildon, Moore, & Dixon, 2004; Wacker et al., 1990).

While many studies have been used with participants with severe problem behaviors and developmental disabilities, the use of FCT methodology can also be applied with more typically developing children in school settings but is traditionally used as part of an individualized or intensive behavior support plan (e.g., Honer & Day, 1991; Filter & Horner, 2009; Stahr et al., 2006). For example, following a functional assessment consisting of teacher and student interviews, direct ABC observations, and other indirect forms of data collection, Stahr et al. (2006) used a multiple baseline across settings to evaluate an individualized behavior intervention for a student whose problem behaviors were hypothesized to be maintained by both positive and negative reinforcement in the forms of adult attention and task escape.

The student had three different cards to display on his desk; a green card indicated that he was doing well and did not need help; a yellow card indicated that the student needed help, and a red card indicated that the student was feeling very anxious and wanted help as soon as possible. Also, a self-management component was included to help the student monitor his own on-task behavior. This was a six-item checklist where the student and teacher would indicate if the student was on-task frequently throughout his day. During baseline, this student's mean percentage of intervals with on-task behavior was 32.83%. During the intervention phases an impressive increase to an average of 74.44% of intervals with on-task behavior was observed.

Similarly, Filter and Horner (2009) designed a function-based intervention consisting of FCT and access to a mastery-level task for a fourth-grade student whose problem behaviors were found to be escape-maintained. Specifically, these researchers taught the student to display a signal on his desk (a small box with a red picture on it)

when he wanted 20-seconds of "help" from a researcher. For completing the task with help, the student then received easier (i.e., mastery-level) tasks. Results of this intervention showed increases in task engagement from an average of 51% during baseline to 95-100% throughout the intervention phase. Also, problem behaviors during intervention were reduced to almost zero.

In sum, interventions emphasizing the explicit teaching of functionally equivalent replacement behaviors such as those described above have been documented to produce impressive reductions in problematic behavior by increasing appropriate alternative behaviors. However, individually designed interventions such as these would be considered tertiary level supports within the three-tiered framework of SWPBS.

Statement of Problem and Research Questions

Conceptually, CICO could be broadly considered an extension of functional communication training/replacement behavior interventions for students whose behavior is sensitive to adult attention. That is, CICO provides a formal mechanism for students to recruit positive adult attention throughout the day (checking in with instructors). For other students, student's whose problem behaviors are escape maintained, this program does not currently provide such a mechanism and may actually be contraindicated for students whose problem behaviors are escape maintained. These students may often be placed on insufficient interventions at the secondary level which could, over time, result in the need for unique and individualized behavior support at the tertiary level.

To date, research examining the feasibility of incorporating function-based components at the secondary level to support students whose problem behaviors are hypothesized to be maintained by avoidance or escape from academic tasks or routines is

unavailable (McIntosh et al., 2009) The present study addressed this gap in the research by applying the logic of function-based replacement behaviors to extend the framework of CICO through the implementation of an intervention known as Breaks are Better (BrB). This intervention was designed to target the needs of student's whose problem behaviors are sensitive to negative reinforcement contingencies in classroom settings through teaching specific expectations which were incompatible with problematic off-task behavior and by providing students with alternative break and help responses as a means by which to access negative reinforcement.

The current study examined the following primary research questions: 1) is there a functional relation between the implementation of BrB and reduced rates of off-task behavior and 2) is there a functional relation between the implementation of BrB and increases in the use of alternative replacement behaviors (help and break)? Furthermore, data were collected to determine if the BrB intervention would be reported by students, teachers, and parents as effective, worth the required effort, and contextually appropriate.

CHAPTER II

METHOD AND PROCEDURES

Setting, Student Screening and Participants

Setting. An elementary school located in the Pacific Northwest was selected for the present study based on the quality of their existing SWPBS system across the three-tiers of prevention which included use of CICO. During the 2009-2010 academic year a total of 227 students were enrolled with 75% identifying as White (non-Hispanic), 7% identifying as Multiracial/Multiethnic, 5% identifying as Hispanic, 4% identifying as African American, 4% identifying as Asian/Pacific Islander, and 3% identifying as American Indian/Alaskan Native. During the time of this study, 47% of the student body qualified for free or reduced lunch plans.

As measured by the School-wide Evaluation Tool (Horner et al., 2004) the Benchmarks of Quality (Kincaid, Childs, & George, 2005), and the Individual Student Systems Evaluation Tool (Anderson et al., 2009) the school had been implementing Tiers I and II of SWPBS with fidelity for at least the last three years. Further, the school had been implementing CICO for approximately four years and, in the year of this study, achieved a score of 100% (17/17) on the Check in Check out self-assessment (Horner, Todd, & Dickey, 2006).

Student Screening. Within the context of this school, the SWPBS team was comprised of the principle, the special education teacher (who also functioned as the CICO coordinator), and three general education teachers. In addition, a district behavioral support specialist and the primary investigator frequently attended the behavioral support meetings. During behavioral support team meetings, students for

whom the universal interventions were insufficient for were reviewed based upon numbers of office discipline referrals or teacher nominations. The behavior support team was asked to identify potential participants who (via teacher reports) engaged in off-task or other problem behaviors during academic periods and for whom they believed may benefit from either CICO or the BrB intervention.

It was specified that only students who had never received tier II behavioral interventions, such as CICO, would be considered for the current study. For students whom the support team determined a secondary intervention would be indicated and met criteria for participation, informal functional behavior interviews were conducted with the student's primary teacher.

Parent and teacher consents were obtained for a total of five students who were recommended for consideration for participation by the team. FACTS interviews were conducted for these five students. Three of the five students were selected to participate in current study, as the results of their FACTS interviews suggested that they engaged in mild problem behaviors hypothesized to be maintained primarily by negative reinforcement in the form of task escape or avoidance. The two students who were not selected to participate were referred for typical CICO. The functional behavioral assessment procedures and results for the three participants selected for participation in the current study are described in the design and procedures section.

Participants.

Alex. Alex was a 9 year old, white male in the 3rd grade. Alex received all of his academic instruction in a general education classroom. On district-wide assessments for both reading and math, Alex scored in the average range for children in his grade. Alex's

teacher was most concerned about his off-task behaviors and, to a lesser degree, his disruptive behaviors (e.g., talking to others).

Diego. Diego was an 11 year old Hispanic, typical developing 5th grade student who spoke English as his second language. Diego qualified for free and reduced lunch services through the school. Although he did not qualify for special education services he received approximately 30 min of supplementary math instruction 1-2 times per week at the time of the study. On the district-wide reading assessment Diego scored in the average range for children in his grade; for math, he scored in the below average range. Diego's teacher was most concerned about his poor academic engagement.

Gregg. Gregg was a 12 year old white, typically developing 5th grade student who did not receive any special education services or programming. On district-wide assessments for both reading and math, Gregg scored in the average range for children in his grade. Gregg's teacher identified poor academic engagement as her primary concern for Gregg.

Measurement

Direct observation data were collected on problematic behavior and on desired behaviors taught as part of the intervention (requests for help or a break). Data were also collected on the amount of time students received help or took a break. Fidelity of implementation was assessed via direct observation and social validity and contextual fit were measured via surveys. Points earned by students when participating in BrB was assessed via the school's CICO-SWIS system (May et al., 2000) but were not routinely examined as part of the current study and are therefore not presented.

Direct Observations. Direct observation data were collected using a real time data collection system on laptop computers. Observations were 15 min in length and were conducted during times when the most problematic routine, as identified during the FBA, was taking place. If the scheduled routine did not take place, (e.g., if the routine was independent math work, but the class was watching a video) observations were not conducted. Target routines were independent work in math, teacher-led group instruction in math, and independent reading during language arts instruction for Gregg, Diego, and Alex, respectively.

Off-task behavior was assessed as a whole interval measure across consecutive 5-s intervals and was operationally defined as "having eyes oriented away from instructor and/or relevant instructional materials (e.g., student's paper, the material being presented to the group, etc.) or engaging in behaviors which were physically incompatible with remaining academically engaged (e.g., walking away from desk when the expectation or teacher direction was to remain in-seat and complete work, looking out the window during teacher-led instruction, having head down when the expectation is to be completing an assignment)". Disruptive behavior was assessed as a partial interval measure across consecutive 5-second intervals and was operationally defined as "speaking above conversational level during times when the expectation was to remain quiet; poking peers; throwing items".

Requests for a break (i.e., raising hand with finger pointed into the air for more than 5-s) or for help (i.e., raising hand in the air without finger pointed for more than 5-s) were scored as frequency measures and the duration of these events (help provided and break period) were also recorded.

Interobserver Agreement. Prior to data collection, data collectors were trained during 3 training sessions, each lasting approximately 1-hour. During the first training session, data collectors were provided with information regarding the background and focus of the current study and were taught how to use the computerized data collection program. In the subsequent training sessions, data collectors were provided with multiple opportunities to practice using video vignettes intended to simulate the anticipated classroom conditions. Each data collector achieved interobserver agreement exceeding 80% for at least three consecutive sessions prior to beginning data collection in the experiment. During the study, data were collected 3-5 times per week and two observers collected data simultaneously, but independently, during at least 33% of the total number of observations for each participant.

Interobserver agreement was calculated for off-task behavior, help requests, and break requests after dividing each session into 5-s intervals. Total agreement was calculated by adding up the total number of intervals both observers agreed a response did or did not occur and dividing that number by the total number of intervals. Occurrence-only agreement was calculated by adding up the number of intervals that both observers scored a response as occurring (i.e., agreements) and dividing that number by the number of intervals in which either observer scored a response. Non-occurrence-only agreement was calculated by dividing the total number of intervals both observers agreed a response did not occur by the total number of intervals either observer did not score a response and multiplying by 100. Results are presented in Table 1, below.

Contextual Fit. During the first week of intervention implementation and upon completion of data collection for each participant, measures of intervention acceptability

and contextual fit were collected from each participating teacher. These teachers completed a modified version of the self-assessment of Contextual Fit in Schools (Horner, Salantine, & Albin, 2003; Appendix B).

Social validity. To measure the degree to which the BrB intervention was viewed as being acceptable and effective, a modified version of the Behavior Education Program (BEP) Acceptability Questionnaire (Hawken & Horner, 2003; Appendix C) was administered to teachers, parents, and participants.

Implementation Fidelity. To examine the degree to which the independent variable was implemented as designed during intervention phases, a 10-item BrB Fidelity Checklist (Appendix D) was completed during observations of the check-in, the target routine (e.g., math instruction) and check-out. The table below (Table 2) indicates the average percentage of implementation accuracy for each BrB component and the overall average for each participant.

Implementation fidelity remained high throughout the course of this study and overall averages for each participant were above 90% (range 92% to 94%). However, some components were observed to be implemented correctly less than 90% of the time. Specifically, these items were: reviewing the break routine, providing break examples, and proving positive and specific feedback at the end of the academic periods. For reviewing the break routine and requesting break examples, the BrB coordinator and other assistants reported forgetting this additional component because it was different from their typical CICO procedure. Anecdotally, when teachers were observed to omit the delivery of positive and specific feedback it was often the case that they chose to wait to implement this component at a later time (e.g., after recess) and that it was most

Table 1

Average (range) interobserver agreement.

		Total Agreement	*Occurrence Only*	*Non-occurrence Only*
Gregg	Off-Task	90.49 (.70-1.0)	95.72 (.82-1.0)	84.00 (.67-1.0)
	Help Requests	97.46 (.91-1.0)	84.00 (.79-1.0)	97.00 (.93-1.0)
	Help Provided	96.70 (.79-1.0)	86.65 (.69-1.0)	96.61 (.91-1.0)
	Break Requests	N/A	N/A	100
	Break Duration	N/A	N/A	100
Diego	Off-Task	86.04 (.61-.97)	87.69 (.70-.99)	86.74 (.61-.99)
	Help Requests	98.90 (.97-1.0)	88.75 (.75-1.0)	99.11 (.98-1.0)
	Help Provided	97.80 (.79-1.0)	87.50 (.79- .95)	99.43 (.82-1.0)
	Break Requests	N/A	N/A	100
	Break Duration	N/A	N/A	100
Alex	Off-Task	93.86 (.85-.99)	93.79 (.88-.99)	95.26 (.85-1.0)
	Help Requests	N/A	N/A	100
	Help Provided	N/A	N/A	100
	Break Requests	98.48	99.5	98.53
	Break Duration	100	100	100

commonly omitted when the academic period was ended slightly later than scheduled and therefore, both the teachers and students were transitioning to the next activity in a rushed manner. Worth noting, the BrB coordinator had explained that in the past, some of the participating teachers had chosen to only provide feedback at the end of the school day with CICO students and therefore may have initially assumed that this was an acceptable deviation from the program. In these circumstances, feedback from the primary researcher produced increases in the correct implementation of these components throughout the course of the study.

Table 2

Average percentage of implementation fidelity for each participant.

Component	*Gregg*	*Diego*	*Alex*
Check In	100%	100%	100%
Card Provided & Expectations Reviewed	100%	100%	100%
Break Routine Reviewed	88%	83%	87%
Break Example Requested	88%	83%	83%
Teacher Break Response	N/A	N/A	100%
Break Routine	N/A	N/A	100%
Feedback Provided	81%	83%	83%
Positive and Specific Feedback	81%	83%	83%
Check Out	100%	94%	100%
Reward Provided	100%	100%	100%
Overall	92%	91%	94%

Design and Procedures

Prior to evaluating the BrB intervention, a functional behavior assessment was conducted with each participant to confirm the hypothesis that problem behavior was evoked by academic requests and maintained by task avoidance.

Functional Behavior Assessment. After obtaining parent and teacher consent, the primary investigator conducted a functional behavior assessment interview with the student's primary teacher using a modified version of the Functional Assessment Checklist for Teachers and Staff (FACTS, Anderson & Borgmeier, 2007). The FACTS interview is used to identify specific times of the day when problem behaviors are most and least likely to occur and to gather specific information on environmental variables which occasion and contingently follow problem behavior during the most problematic routines.

For each participant, at least one hypothesis statement was developed from the FACTS interview with their primary teacher. These hypothesis statements delineated the problem behavior, antecedent variables that evoked problem behaviors, and consequences that likely maintained problem behaviors during a time reported by the students teacher as "the most problematic routine" (e.g., "During group work in math, Mario engages in disruptive behaviors to escape group math work"). For students whose FACTS interview suggested that their off-task or other problematic behaviors were maintained, at least in part, by escape, a confirmatory structural analysis was conducted. Student's whose FACTS interview suggested their problem behaviors were not maintained, at least in part, by negative reinforcement in a classroom setting were

referred for other supports available in the school (e.g., typical CICO) and were excluded from the present study.

Brief confirmatory structural analyses were conducted for each participant and consisted of 6 direct observations. Three observations were conducted during a "test" condition and three observations were conducted during a "control" condition. Test observations were conducted during the time identified via the FACTS as the most problematic routine and when discriminative stimuli or establishing operations hypothesized to be associated with problem behavior were present. In contrast, control observations were conducted during the same routine, but when the primary discriminative stimuli or establishing operations hypothesized to be associated with problem behavior were not continuously present. For example, if a student's problem behavior was found to occur most often during math and the putative establishing operation was a request to independently complete a math worksheet then test condition observations would have been conducted during math when the student was required to complete a worksheet. Conversely, the control condition observations would be conducted during math when the student was *not* required to complete a worksheet but instead was engaged in other math-related activities (e.g., being in a small group working with manipulatives or attending to the teacher as a math lesson was delivered to the whole class).

Upon completion of the structural analyses, response-consequence relations were examined by calculating conditional probabilities in a manner similar to that described by Anderson and Long (2002) and were graphed using the operant-contingency space (OCS) method of graphing as described by Martens et al. (2008). The OCS graphs were used to

depict the following conditional probabilities: (a) the probability of a consequence given the occurrence of a problem behavior and (b) the probability of a consequence given the absence of a problem behavior. These data are presented for each participant in the results section.

Breaks are Better. An ABAB design was used to evaluate effects of BrB on student responding. Phase A was baseline (no intervention or "treatment as usual") and Phase B was the BrB intervention phase. The primary dependent variable of interest was student off-task behavior; therefore decisions to advance from one phase to the next were made via visual inspection with respect to the trend and stability of this variable.

Prior to collecting baseline or intervention data, training sessions with the school's behavior support team members, CICO coordinators, and faculty were conducted. These training procedures are described next.

Training. First, three structured meetings were scheduled with the school's behavior support team which included the check-in-check-out coordinator, assistant coordinator, the school counselor, the principal, and several teachers in the school. The first meeting was used to collaboratively modify the school's existing CICO card to include the BrB components and to define the school-wide expectations in ways that aligned with academic behaviors. The team defined "Be Safe" as "stayed in-seat when I was supposed to", "Be Responsible" was defined as "asked for help the right way, if I needed it", and "Be Respectful" was defined as "followed teacher instructions and directions". The BrB card used in this study can be found in Appendix E.

The second and third meetings were used to train the BrB coordinator and an assistant to implement the BrB intervention with fidelity. In this school, the CICO

coordinator and assistant coordinator took on the same roles for BrB.. The principal investigator trained the BrB coordinators to implement the following components during the two training sessions: 1) how to conduct student orientation for new students starting the BrB intervention (e.g., how to explain the intervention to the student, how to teach the student the break communication routine, and how to teach the student to communicate for "help"); 2) how to conduct check-ins with the student (e.g., to provide points appropriately, to review the break communication routine, and to prompt the student to name an example of when they will probably communicate for a break that day); 3) how to conduct check-outs with the student (e.g., recording the number of points earned and breaks taken, calculating the percent of points to determine if the student met their daily point goal, delivering praise and rewards for meeting point goals, and what to do if the student does not meet their daily point goal); 4) how to orient parents to the intervention and complete brief home-notes identical to those used for the school's existing CICO program; and 5) how to orient and train teachers who would have students on the intervention in their classroom. The implementation and training manual used can be found in Appendix F. Training was conducted using didactic instruction, modeling, role-plays, and feedback.

Upon conclusion of these trainings and prior to initiating the study, a brief school-wide presentation was conducted by the BrB coordinators to the entire faculty.

Baseline. During baseline phases, data were collected on problem behavior and appropriate help and break requests. No participants received targeted or intensive interventions for social behavior and the existing school-wide system was implemented as usual. Thus, students were able to earn school-wide rewards for appropriate behaviors and could receive minor or major office discipline referrals (ODRs) contingent upon

inappropriate problem behaviors. Additionally, teachers often responded to problem behaviors in the classroom by delivering verbal reprimands or removing certain privileges (e.g., recess). Immediately following baseline data collection, student orientation, parent orientation, and teacher orientation were conducted by the BrB coordinators under the supervision of the principle investigator. These are described next.

Student, parent, and teacher orientation. When a student was selected to begin the BrB intervention, the BrB coordinator conducted a 10-15 minute student orientation session the day before the student was scheduled to begin the intervention. The objectives of this orientation were to (1) introduce the intervention and obtain student buy-in, (2) review the list of possible break options which have been pre-approved by the school's behavior support team and teachers, (3) teach "help" and "break" responses, and (4) practice and role-play using examples and non-examples of appropriate behavior (e.g., how to request a break, how to appropriately operate the timer, how to come back from a break, how to check-in, how to check-out).

In addition to student orientation, parent orientation was conducted consistent in the same way the school oriented parents to CICO. Specifically, the coordinator contacted the parents via the telephone, provided the parent with a rationale for using BrB, reviewed the intervention, and discussed parent responsibilities. Parents were asked to (1) prompt the student to share their card at home, (2) sign the card, (3) deliver praise or other incentives for meeting point goals, and (4) avoid providing contingencies at home for achieving or missing a goal that day. The BrB coordinator was responsible for completing parent orientation.

Finally, when a student began BrB the coordinator met for about 10 min with the student's teacher to review the intervention including student responsibilities and teacher responsibilities.

BrB Intervention. With training complete and adequate baseline data collected, the BrB intervention was implemented. As with CICO, BrB consisted of a morning check-in, feedback sessions throughout the day, and an afternoon check-out.

At the beginning of each day, students reported to the BrB coordinators classroom to receive their intervention materials and to "check in". During this time, one of the BrB coordinators: 1) provided the student with a new BrB card; 2) delivered contingent points for approaching the coordinator for check-in and returning the signed home-report when applicable; 3) prompted the student to briefly review the break communication routine (printed on the back of the BrB card, for reference); and 4) prompted the student to name an example of when they might ask for a break that day. At the conclusion of the check-in, the BrB coordinator provided encouragement or positive feedback to the student (e.g., "have a great day, I bet you can earn lots of points").

As shown in Appendix E, the break column contained 3 circles for each period of the student's academic day which represented the number of breaks available. Each student's timer remained on their desk throughout this study and to request breaks, students were taught to do the following: (1) hold up hand with a "#1" signal; (2) wait for teacher to give a "thumbs up" signal or a "thumbs down"; (3) when given the "thumbs up", cross out one of the break circles on the BrB card; (4) start the 2-min break timer, (5) take the break appropriately (i.e., as practiced and for the appropriate length of time); and (6) end the break and return to the ongoing activity when the timer goes off.

Participants were taught that if the teacher responded to their break request with a "thumbs down", this meant that it was not a good time to take a break and that they should try their best to continue to meet the classroom expectations but that they could request another break soon (i.e., after waiting at least 2 minutes). In addition, students were taught that their teachers might remind them to request a break when they were not meeting the classroom expectations by saying something like, "Mario, you can sit quietly and listen or you can take a break".

Examples of what a student's 2-minute breaks looked like during this study are: placing his head down on his desk, setting at a desk positioned away from the group, looking at a book, or doodling in a notebook. A list of several break options and examples were made by the BrB coordinators to enhance the contextual fit and appropriateness of this intervention and were provided to the student participants during student training sessions.

Students received feedback from teachers or the BrB coordinator 10 times per day at the end of each academic period regarding the extent to which their behavior was congruent with BrB expectations. If the teacher did not approach the student first, the student was responsible for approaching the teacher for feedback just as they would with typical CICO. The assignment of points for each behavior goal was dependent on the teacher's perception of the student's performance during each period. The student-teacher interaction was defined per CICO in the school and thus (a) remained brief (i.e., 1-2 minutes) and the teacher would assign 0-2 points for each target behavior, (b) consisted of praise for the student for desired behaviors which were observed and feedback or pre-corrections for how the student could continue to earn points for appropriate behavior. For

example, for the school-wide expectation "be responsible" (i.e., appropriately asking for help, if needed) a teacher would rate the student using a 0-2 scale and provide brief feedback. A 0 would indicate the student had a "hard time", a 1 would indicate that the student did "okay", and a 2 would indicate that the student did "great" (e.g., by always raising his hand instead of talking out to get help). In addition, feedback could have included reminders to communicate for help or breaks if needed, or praise for not using the responses because the student did not need help or a break. The teachers also circled a "Y" or "N" to indicate if the student "took breaks in the right way if they needed or wanted to".

At the end of each day, the student reported to the BrB coordinators for check-out and the student's points were entered into the School-wide Information System (SWIS). Initial point goals for each student starting the BrB intervention were set at 80%. That is, students needed to earn at least 80% of the total BrB points possible (i.e., 48 out of 60 possible points) to earn a reward for that day.

The reward for meeting a set point goal was consistent with the school's existing process for CICO and consisted of small tangible items or intangible rewards purchased through a token economy. If student's met their point goals they could choose to use their points immediately, or "bank" their points towards items with larger point values assigned to them. If the student did not meet his daily goal, the BrB coordinator gave the student neutral feedback (e.g., "Let's try to meet the goal tomorrow") and the student could not exchange points.

In addition to providing the student with behavioral feedback and points, the coordinator completed a home-report form for the student to take home.

Data Analysis

Data collected via direct observation were assessed to evaluate effects of the BrB intervention on (1) problematic off-task behavior and (2) appropriate requests (i.e., break and help). In addition, measures of intervention fidelity, contextual fit, and social acceptability were examined.

Consistent with the conventions of single-case research, graphs of problem behavior, academic engagement, and appropriate break and help requests during baseline and intervention phases were examined via visual inspection. Direct observation data for the primary target behaviors (i.e., off-task and other problem behavior) were examined based on levels, trends, and stability observed during each phase and decisions to advance to the next phase were made accordingly. With each phase change, the immediacy of effect was examined as a function of the introduction or withdraw of the BrB intervention.

Intervention fidelity was continuously monitored throughout the study to examine and document the degree to which the independent variable was implemented as designed during intervention phases. Descriptive statistics were calculated from the self-report measures of contextual fit completed by teachers and from the self-report measures of intervention acceptability completed by teachers, parents, and participants. Collectively, these data were used to examine the degree to which the BrB intervention was perceived as a feasible, sustainable, and acceptable secondary intervention as it was designed for this study.

CHAPTER III

RESULTS

Below, the results of each student's FBA and BrB Intervention Evaluations are presented, followed by the results of indirect data collection measures. FBA results for all participants are described first followed by within-participant outcomes from the intervention. Of note, participants rarely, if ever, engaged in disruptive behavior; therefore, data for disruptive behavior is not presented.

Functional Assessment

Alex. The results of the FACTS interview with Alex's teacher identified independent reading time as his most problematic routine and that during this routine, off-task behavior was evoked by requests to complete reading activities (direct and implicit) and was maintained by negative reinforcement (avoidance of the reading tasks). During the structural analysis observations, and as depicted in Figure 2, higher levels of off-task were observed during independent reading relative to the control observations (large or small group reading). Specifically, levels of off-task behavior averaged 48% (range = 22% to 56%) during test observations while off-task behavior during control observations averaged 2% (range = 1% to 5%).

An examination of the conditional probabilities revealed that off-task behavior was followed by escape on a rich schedule (an average of 95% of intervals scored with off-task were followed by escape and escape rarely occurred in the absence of off-task behavior). Peer attention followed-off-task behavior on a somewhat leaner schedule (54%) but also was more likely to occur following off-task behavior then in its absence—only 10% of peer attention was scored in the absence of off-task behavior. Adult

attention was rarely observed to follow off-task behavior or to be delivered in its absence. Figure 2 depicts the results of Alex's FBA observations and the contingency space analyses.

Diego. The results of the FACTS interview with Diego's teacher identified whole group instruction during math as his most problematic routine and that during this routine, off-task behavior was evoked by requests to participate in group work activities (implicit and explicit) and was maintained primarily by negative reinforcement (avoidance of the tasks). During structural analysis observations, as depicted in Figure 3, higher levels of off-task was observed during group math instruction relative to observations during a control routine (i.e., independent or partner work in math). Specifically, levels of off-task behavior averaged 48% (range = 40% to 58%) during test observations while levels of off-task behavior during control observations averaged 8% (range = 2% to 15%).

An examination of the conditional probabilities revealed that off-task behavior was followed by escape on a rich schedule (100% of intervals scored with off-task were followed by escape and that escape rarely occurred in the absence of off-task behavior). Peer attention followed-off-task behavior on a somewhat leaner schedule (46%) but also was more likely to occur following off-task behavior then in its absence—only 6% of peer attention was scored in the absence of off-task behavior.

Gregg. The results of the FACTS interview with Gregg's teacher identified independent work during math as his most problematic routine and that during this routine, off-task behavior was evoked by requests (direct and implicit) to engage in independent work and was maintained by negative reinforcement (avoidance of the

academic task). During the structural analysis, and as depicted in Figure 4, higher levels of off-task were observed during independent work in math relative to the control observations (large group math). Specifically, levels of off-task behavior averaged 35% (range = 21% to 56%) during test observations while levels of off-task behavior during control observations averaged 1% (range = 0% to 4%).

An examination of the conditional probabilities (bottom panel Figure 4) revealed that off-task behavior was followed by escape on a rich schedule (an average of 90% of intervals scored with off-task were followed by escape and escape rarely occurred in the absence of off-task behavior). Peer attention followed-off-task behavior on a somewhat leaner schedule (48%) but also was more likely to occur following off-task behavior then in its absence—only 14% of peer attention was scored in the absence of off-task behavior.

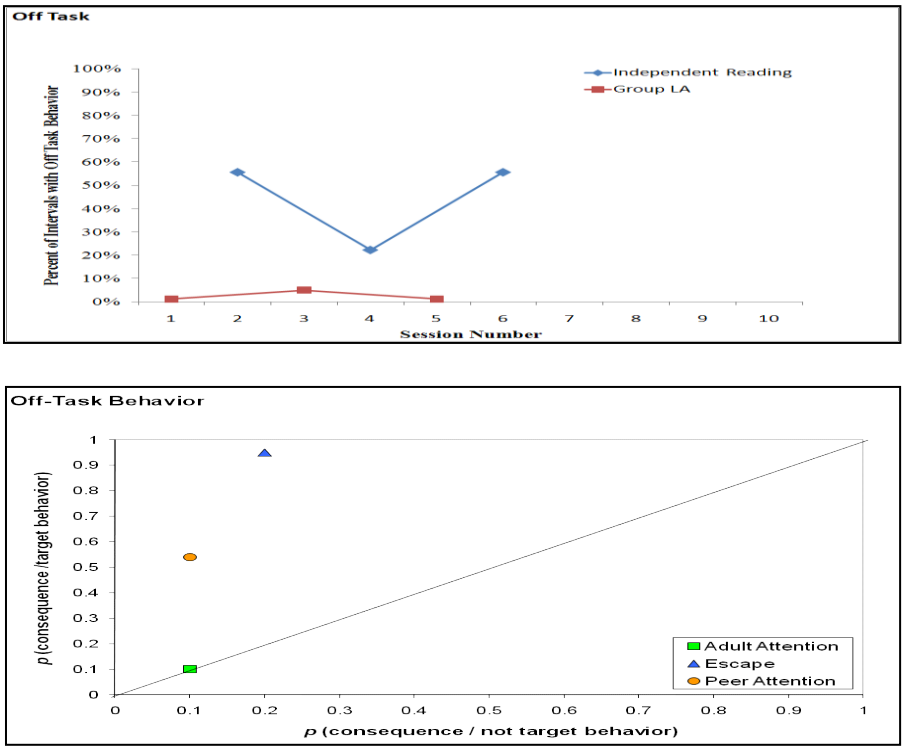


Figure 2. FBA test and control observations and CSA graphs for Alex.

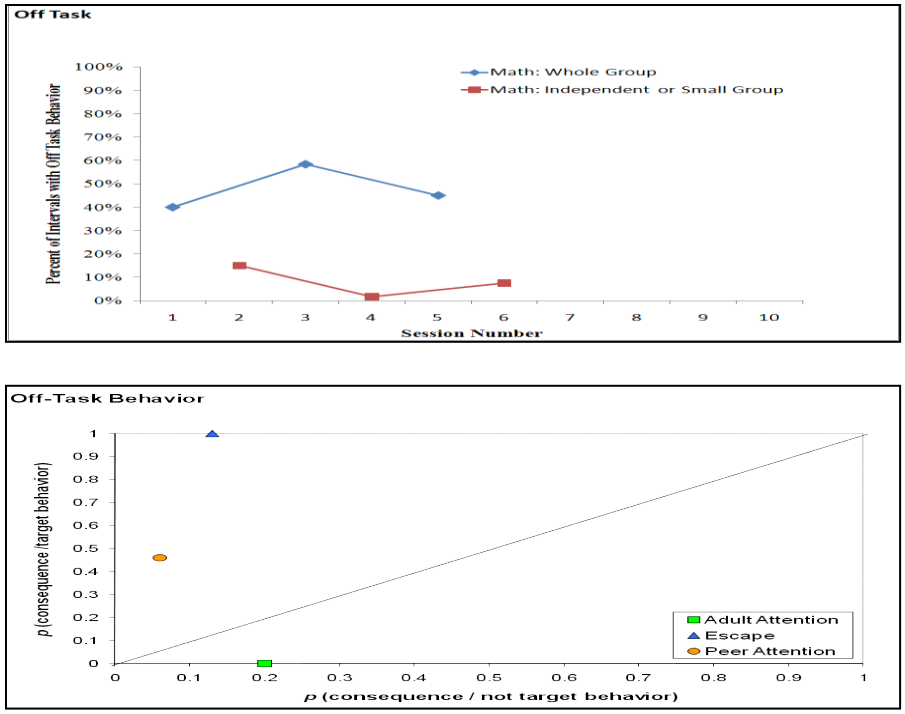


Figure 3. FBA test and control observations and CSA graphs for Diego.

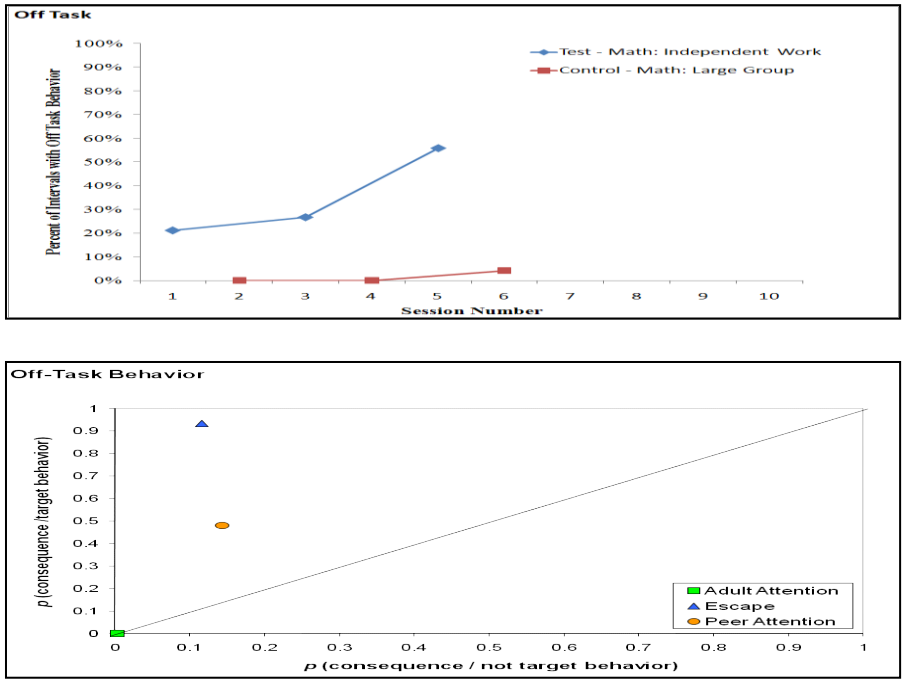


Figure 4. FBA test and control observations and CSA graphs for Gregg.

Intervention Evaluation

Alex. Figure 5 depicts the percentage of intervals scored with off-task behavior and the frequency of appropriate break or help requests. Throughout the initial baseline phase for Alex the levels of off-task behavior were observed to be high and stable with the percentage of intervals scored with off-task behavior averaging 59% (range = 32% to 74%). During this phase, no requests for teacher help were observed.

Upon initiation of the BrB intervention, an immediate and stable decrease in off-task behavior was observed where the average percentage of intervals scored with off-task behavior was equal to 15% (range = 10% to 18%), demonstrating a 25% reduction in off-task behavior as compared to the previous baseline phase. As can be seen in Figure 5, Alex never requested assistance in this phase however he did request breaks twice in the first session—both of which were allowed by his teacher.

Upon withdrawing the BrB intervention, a modest but stable increase in levels of off-task behavior was observed as shown in Figure 5. Specifically, the percentage of intervals scored with off-task behavior averaged 25% (range = 16% to 26%) and no help requests were observed. As a stable pattern of off-task behavior had been observed, the BrB intervention was reintroduced for a total of 6 sessions. No break or help requests were observed during this phase (Figure 5).

With the reintroduction of the BrB intervention an immediate reduction in off-task behavior was observed as shown in Figure 5. Furthermore, a stable, decreasing trend in off task behavior was apparent in this final phase. In sum, the average percentage of intervals scored with off-task behavior was equal to 4% (range = 0% to 10%). During this final phase, no break or help requests were observed (Figure 5).

Diego. Figure 6 depicts the percentage of intervals scored with off-task behavior and the frequency of appropriate break or help requests. . Throughout the initial baseline phase, off-task behavior occurred during an average of 51% of intervals (range = 30% to 66%). Diego never asked for a break or for help during baseline (Figure 6). During this phase a week-long spring break took place between sessions 4 and 5 and, due to the wishes of the BrB coordinator, the intervention phase began after only 2 sessions following this spring break.

Upon initiation of the BrB intervention, an immediate decrease in the percentage of intervals scored with off-task behavior was observed as shown in Figure 6. Furthermore, a notable decreasing trend in off-task behavior was observed. In this phase, levels of off-task behavior averaged 26% (range = 4% to 32%). Worth noting, during this brief phase only one data point for off-task behavior (i.e., session 8) was observed to overlap in comparison to the previous (baseline) phase and upon comparing the means from this phase to the previous (baseline phase) a 51% reduction was observed. Diego never requested breaks during this phase (Figure 6) however he did ask for and receive assistance in the majority of sessions.

Upon withdrawing the BrB intervention, the percentage of intervals scored with off-task behavior averaged 29% (range = 8% to 44%). Worth noting, Diego continued to appropriately requested help during two of the six observations (Figure 6).

Finally, the BrB intervention was again introduced for a total of 11 sessions and the percentage of intervals scored with of off-task during this final phase averaged 18% (range = 3% to 62%) as shown in Figure 6. At session 18, an uncharacteristically high level of off-task behavior was observed which may have been attributed to novel content

during that day's math lesson. During this final phase, no break requests were observed but multiple help requests were observed as shown in Figure 6. Diego requested help at an average of 1.09 requests per observation (range = 0 to 4).

Gregg. Figure 7 depicts the percentage of intervals scored with off-task behavior and the frequency of appropriate break or help requests. During the initial baseline phase, a stable pattern of off task behavior was observed with the percentage of intervals scored with off-task behavior averaging 32% (range = 22% to 39%). During this phase, and as shown in Figure 7, no requests for teacher help were observed.

Upon initiation of the BrB intervention, an immediate decrease in off-task behavior was observed as shown in Figure 7. Specifically, levels of off-task behavior averaged 6% (range = 0% to 24%). During this entire phase only one data point for off-task behavior (i.e., session 11) was observed to overlap in comparison to the previous baseline phase while levels of off-task behavior during all other sessions remained low. During this phase, a week of vacation for spring break occurred between sessions 9 and 10; however, this disruption appeared to have a minimal influence on Gregg's levels of off-task behavior. Interestingly, although breaks were available, Gregg never requested a break or assistance in this phase (Figure 7).

As stable levels of off-task behavior had been observed, the BrB intervention was withdrawn and a brief return to baseline was conducted as shown in Figure 7. During this second baseline phase, a modest, but immediate increase was observed in off-task behavior, closely replicating those observed during the initial baseline phase. During this phase levels of off-task behavior averaged 21% (range = 14% to 35%) demonstrating an increase of 15 percentage points, compared to the previous phase. During this phase,

it was observed that Gregg appropriately requested help once during session 14 and received brief (approximately 36 s) teacher assistance (Figure 7).

Finally, the BrB intervention was reintroduced and an immediate and stable decrease in off-task behavior was observed as shown in Figure 7. The percentage of intervals scored with off-task behavior during this final phase averaged 4% (range = 0% to 11%). Once again, Gregg never requested a break however, and as shown in Figure 6, he appropriately requested help and received brief teacher assistance 4 times during session 25. During this session, the teacher's help responses were discrete answers to questions posed by Gregg.

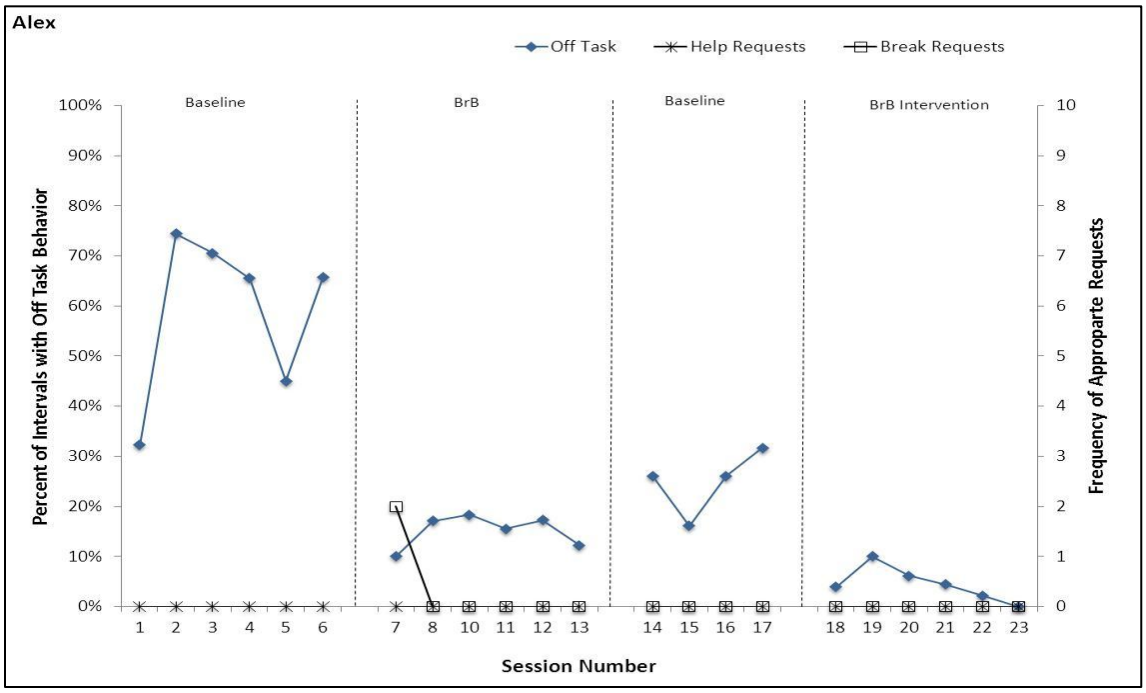


Figure 5. Percent off-task and frequency of break and help requests for Alex.

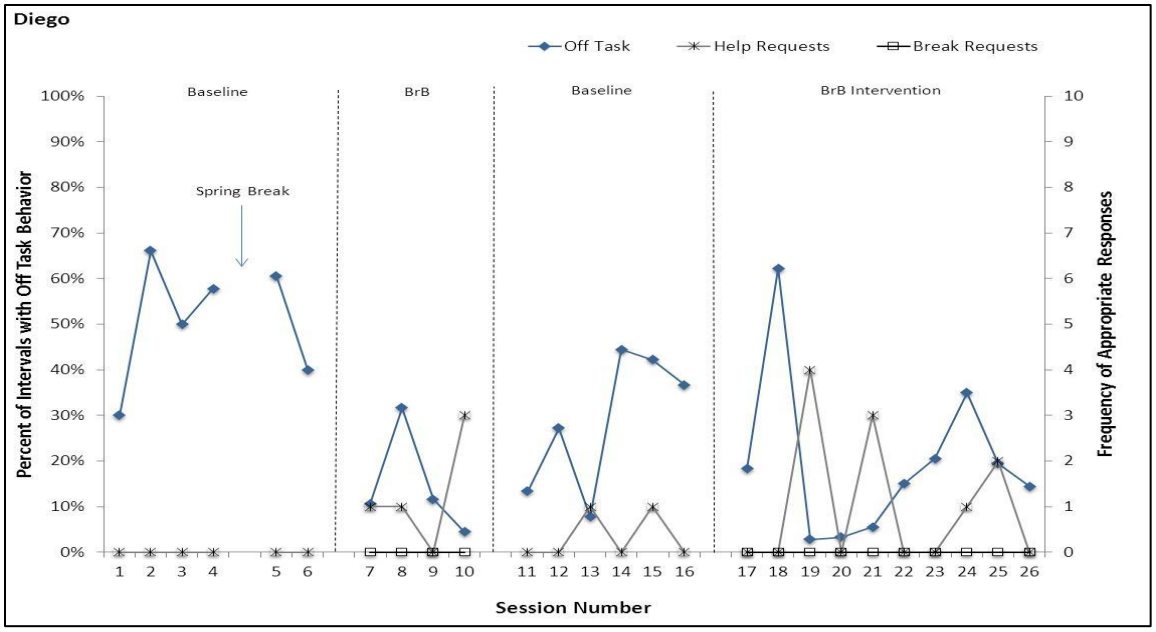


Figure 6. Percent off-task and frequency of break and help requests for Diego.

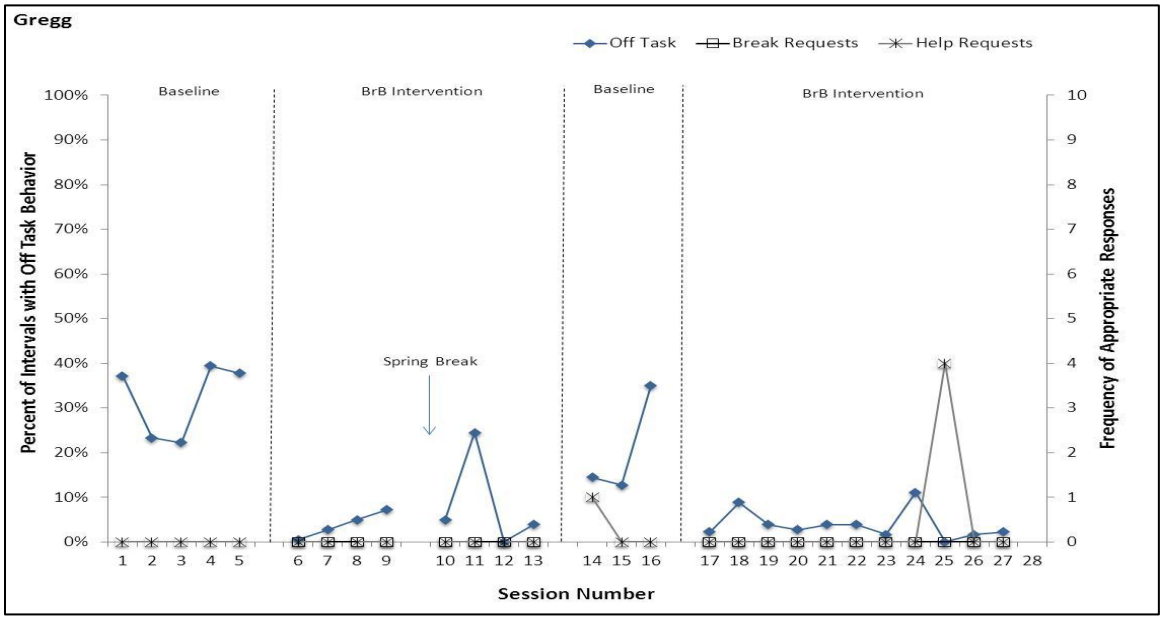


Figure 7. Percent off-task and frequency of break and help requests for Gregg.

Contextual Fit. During the first week of intervention for each participant, teachers rated each item on the contextual fit survey as a 5 or 6 using a 1 to 6 scale. Upon completing the final intervention data collection for each participant, each of the participant's teachers scored every item as a 6. That is, the percentage of items endorsed

as a 6 (i.e., "strongly agree") was 100% across all participants upon conclusion of the study, indicating that the participants teachers overwhelmingly viewed this intervention as acceptable and contextually appropriate for the student's in their school.

Social Validity. To measure the degree to which the BrB intervention was viewed as being acceptable and effective, a modified version of the Behavior Education Program (BEP) Acceptability Questionnaire (Hawken & Horner, 2003; Appendix C) was administered to teachers and parents and the results of this measure are presented below in Table 3. Using a scale ranging from 1 to 6, teachers for each participant scored each item for acceptability as either a 5 or 6 (i.e., moderately agree or strongly agree), thus highly endorsing the utility and acceptability of the BrB intervention. Similarly, each of the participants scored each item as either a 5 or 6 which indicates that these participants moderately or strongly agreed that this intervention was highly acceptable and was related to improvements in their academic and behavioral performance.

Both Gregg and Alex's parents indicated that they either moderately or strongly agreed with each item on the questionnaire by providing ratings of either a 5 or 6 for each item. These ratings were very similar to the ratings provided by the participants and their teachers. Diego's parent provided high ratings for most items except for "the BrB intervention improved the student's academic performance" item. Diego's parent rated this item as a 4 (i.e., slightly agree).

Table 3

Stakeholder Ratings of BrB Acceptability

Participant	*Respondent*	*Improved Behavior at School*	*Improved Academic Performance*	*Worth the Time and Effort*	*Would Recommend to Others*	*Easy to Implement*
Gregg	Teacher	6	6	6	6	5
	Parent	5	5	6	5	6
	Student	6	5	5	5	6
Diego	Teacher	5	5	5	5	5
	Parent	5	4	5	5	5
	Student	5	5	5	6	6
Alex	Teacher	5	5	6	6	5
	Parent	5	6	6	5	6
	Student	6	6	5	6	6

CHAPTER IV

DISCUSSION

CICO has been demonstrated to produce decreases in problematic behaviors and increases in academic engagement when used as a secondary intervention within a SWPBS framework (e.g., Filter, Benedict, McKenna, Horner, Todd, & Watson, 2007; Hawken & Horner, 2003; Todd, Campbell, Meyer, & Horner, 2008). In general, research has suggested that CICO is most effective for children whose problem behaviors are sensitive to adult attention which makes sense given that CICO provides structured opportunities for students to receive feedback and adult attention.

The current study was conducted to examine the feasibility and effectiveness of a secondary intervention (BrB), which builds off core features of CICO but includes components for addressing problem behavior maintained by task avoidance. Modifications included: 1) defining specific expectations that were incompatible with problematic behavior during academic routines and 2) providing students with strategies to recruit both brief breaks and help.

Summary of Key Findings

Effectiveness of the BrB intervention was evaluated using an ABAB design across 3 participants whose problematic off-task behaviors were hypothesized to be maintained, in part, by task avoidance or escape. The current study examined the following primary research questions: 1) is there a functional relation between the implementation of BrB and reduced rates of off-task behavior and 2) is there a functional relation between the implementation of BrB and increases in the use of alternative replacement behaviors (help and break). Furthermore, data were collected to determine if

the BrB intervention would be reported by students, teachers, and parents as effective, worth the required effort, and contextually appropriate.

A strong functional relation was documented between the implementation of the BrB intervention and reductions in off-task behavior for two out of three participants (Gregg and Alex). A comparatively modest functional relation was observed for a third participant, Diego, as off task behavior was somewhat variable during the final intervention phase.

Implementation fidelity collected throughout the course of this study indicated that overall, the independent variable was being implemented with high integrity (i.e., combined averages above 90% for all participants). For components implemented correctly between 80%-90% of the time, feedback coupled with pre-corrections from the primary investigator was found to result in improved implementation accuracy.

Results from the collection of contextual fit and social validity data also indicated that students, teachers, and parents viewed this intervention as effective, worth the required effort, and contextually appropriate for use in this school.

Behavioral Mechanisms

Token Economy. A token economy is a reinforcement system in which the occurrence of appropriate behavior (or the absence of problem behavior) produces secondary reinforcement in the form of arbitrary tangible items (e.g., stickers, poker chips, points on a card) that can be periodically exchanged for other reinforcers (Kazdin & Bootzin, 1972; Rodriguez, Montesinos, Preciado, 2005). Because a variety of incentives typically are used in a token economy, research suggests that token economies can be implemented without an a-priori demonstration of behavioral function; this has been

documented at both the class-wide (Kistner, 1982; Robinson, Newby, & Ganzell, 1981) and individual levels (Higgins, Williams, & McLaughlin, 2001; Kazdin, & Mascitelli, 1980). Thus, token economies may be especially appropriate for Tier II interventions as a pre-intervention functional behavior assessment may not be needed.

Check-in-check-out utilizes a token economy system. Similar to CICO, the BrB intervention is centered on the use of a token economy such that points are delivered contingent upon appropriate behaviors. While traditional CICO programs allow for the delivery of points when students meet school-wide expectations, points in the BrB intervention are contingent on specific behaviors that are either incompatible with off-task behavior (i.e., remaining in-seat) or functionally equivalent alternatives for accessing some form of task avoidance (i.e., help or break). Thus, targeting behaviors which are likely to be most relevant to student's whose problem behaviors are maintained, in part by task avoidance. The use of the token economy in BrB may have increased student's on-task behavior (and use of alternative responses) as the system provided a variety of tangible and intangible reinforcers, at least some of which were valued by students.

Problem Behavior and Appropriate Alternative Behaviors. For each of the participants, data collected on problematic off-task behavior indicated that they engaged in moderate to high levels of off-task behavior during the initial baseline phases; therefore the level and severity of the targeted behavior was consistent with the types of behavioral patterns for which secondary interventions are intended. Requesting breaks or help had not been explicitly taught to these participants until the initiation of the BrB intervention and break requests in particular would not have been expected to be observed. However, raising a hand to request help was reportedly encouraged by all classroom teachers in this

school (as is assumed typical for most elementary school classrooms) and therefore it is unlikely that the participants did not already have the help request in their behavioral repertoires. Importantly, no help requests were observed during the initial baseline phases. While it could be true that these participants simply did not require teacher assistance during baseline, one alternative hypothesis is that this particular response for requesting help had been extinguished (i.e., help was not provided) or teacher responses to help requests (e.g., "try harder") may have functioned as positive punishment. More likely however, help requests were being maintained on a mixed schedule. If the stimulus features associated with delivery of help following hand raising were not clear then student requests for help could have been emitted rarely if ever.

During the first intervention phase, decreases in off-task behavior were observed for all participants and for Alex, the use of two break requests was observed indicating that he had acquired the necessary response chain to request breaks and that the procedures in place for supporting this response in the classroom were intact. However, following this initial observation, no more break requests were observed during direct observations for the remainder of the study, for Alex.

For Diego, requests for help were observed during the first BrB phase while Gregg did not request for help or breaks throughout this phase. Thus indicating that the help response had been acquired by Diego and that upon use of this response, teachers consistently reinforced this response by providing assistance.

For all participants, upon withdrawing the BrB intervention, increases in off-task behavior were observed, demonstrating a functional relation between the intervention and increases in off-task behavior. Worth noting, help requests continued to be emitted by

Diego and Gregg (to a lesser degree), suggesting that in the absence of pre-corrections or visual cues provided by the BrB intervention, students were able to maintain use of help requests. This may be attributed to their history of having these requests consistently reinforced by the teacher during the intervention phases. It is likely that teacher assistance was the functional reinforcer maintaining these help requests as opposed to conditioned reinforcers such as points on the BrB card or the tangible rewards used as part of the token economy.

During the final phase of the study, both Gregg and Alex engaged in low and stable levels of off-task behavior demonstrating a functional relation between the BrB intervention and decreases in off-task behavior. However, Diego's rates of off-task behavior were observed to be variable. During this time for Diego, several school absences were noted in addition to frequent disruptions in the daily class schedule as the end of the school year was approaching. Worth noting however, Diego did continue to consistently request and receive help throughout this phase and often would request help several times throughout the course of one observation.

Functional Replacement Behaviors. Importantly, increases in the frequency of help requests were observed for two of the three participants (Gregg and Diego) while only the use of break requests was observed for the remaining participant (Alex) and only occurred during one observation. Results of the functional behavior assessments conducted for each participant indicated that that their off-task behaviors were maintained, at least in part, by negative reinforcement in the form of task avoidance. While the use of BrB as a secondary intervention would not necessarily require the completion of a formal FBA, it was designed to provide students whose problem

behaviors are sensitive to negative reinforcement with two skills intended to produce functional consequences (i.e., negative reinforcement) similar to those produced by problem behavior. Requesting a break provides students with a brief escape period, while requesting help can provide students with negative reinforcement via decreasing the aversiveness of tasks themselves.

Only one participant, Alex, was observed to request for breaks during his most problematic routine and was never observed to request help. This may be explained by the nature of the work requirements for Alex in comparison to the other two participants. Silent reading with grade-level text was a task Alex had little difficulty with (i.e., no apparent skill deficit). However, the nature of this task did require that Alex remain engaged with the reading material for an extended period of time. So, while it was unlikely that Alex would require help with this task, other features of the task (i.e., task duration, the content of the reading material) may have been more relevant establishing operations which might have altered the relative reinforcing value of a break (i.e., escape) for this participant during observations in which the break request was observed.

In contrast, both Diego and Gregg were observed to request help but not breaks. For these two students it may be hypothesized that variations in academic content may have altered the reinforcing value of help and break requests in different ways. For example, while accessing a break provides escape, the student would still be required to return to a task that may be too difficult and thus, still aversive. Requesting help on the other hand, provides a qualitatively different form of negative reinforcement which produces a more immediate and efficient way to decrease task aversiveness or difficulty and also increases the likelihood that a student can successfully complete the work

requirements. Therefore, the inclusion of both responses within the context of the BrB intervention, as opposed to only one, enhances the utility of BrB as a secondary intervention which may be effective for students with both motivational or skill deficits in one or more academic settings.

An alternative hypothesis for why break requests were observed infrequently, if ever, may be attributed to participant perceptions of how the use of the requests would be responded to by peers. Data on intervention acceptability and contextual fit were not collected for students who did not directly participate on the intervention and therefore it is unknown how this variable may have influenced the behavior of the participants. That is, if students in the classroom did not perceive the intervention in a positive manner, it is feasible that, as fifth graders, Gregg and Diego may have anticipated some form of negative peer attention (e.g., teasing) following their overt break requests.

Study Limitations

To determine that the effects observed during each phase were actually due to the presence or absence of the BrB intervention and not to other unknown or unaccounted for variables, a reversal design was used to evaluate effectiveness of the BrB intervention. Although the design controlled for several threats to validity, there were several threats to internal and external validity. Threats to internal and external validity, as well as other limitations are described next.

Internal Validity. As extraneous variables may have influenced participant behavior during the current study, threats to internal validity must not be ignored as these threats effect the degree to which results of the current study can be confidently attributed to the BrB intervention as opposed to unknown variables not accounted or controlled for

(Campbell and Stanley, 1967; Kennedy, 2005). Direct observations of student behavior were conducted as opposed to the use of indirect data collection for the current study. It is possible that the presence of observers in the classroom exerted some control over participant behavior. However, within the context of this particular school, it was not uncommon for outside observers or in-school staff to conduct observations for a variety of reasons and therefore it is less likely the participants were aware that they were the specific students whose behavior was being observed. In addition, because the current study spanned several weeks, it is likely that any initial reactivity would have diminished over time as the individual data collectors lost their novelty.

Data were not collected on all of the potentially relevant classroom variables that could have exerted control over student problem behavior and academic engagement. For example, as the participants in this study were observed for several weeks during an academic routine in an elementary classroom, the day to day instructional strategies and specific content (e.g., geometry with shapes, word problems including geometry content) were not entirely constant across observations. For students who engage in problematic off-task behavior, the type and level of task difficulty may alter the reinforcing value of problematic off-task behavior in contrast to the reinforcing value of engaging in the targeted incompatible or alternative behaviors the BrB Intervention was intended to increase.

External Validity. The BrB intervention was evaluated within the context of a pre-existing program (CICO) embedded within a SWPBS model; a model that, for this school, had been in place for several years. Therefore, the effectiveness of the intervention in the absence of a SWPBS program which is being implemented with individuals with a

history of using secondary interventions such as CICO is unknown.

Although the BrB intervention was implemented in the same way across all participants, it was only implemented with males between the ages of 9 and 11. It is unknown whether similar effects would be observed with students of different ages or if differential effects would be observed for females in comparison to males.

Considering that direct observations of student problem behavior were conducted during the same academic period for several weeks, the effects of the BrB intervention for each participant across settings or academic content (e.g., math, reaching, and science) is unknown. That is, it is unclear whether similar patterns of off-task and use of alternative appropriate behaviors occurred in these settings.

Other Limitations. If the implementation accuracy of the break routine review and break example were higher (i.e., above 90%) it is possible that students may have used the break responses more frequently given that they would have received more pre-teaching and encouragement for the use of this alternative behavior. However, as students were explicitly taught to use the response and were provided opportunities to practice, it is unlikely that the occasional omission of these prompts could be related to the infrequent use of the break responses overall.

It should be noted that data on academic performance prior to and during the study were not collected. Also, with the exception of a relatively small amount of supplemental math instruction for Diego, none the participants were receiving additional academic interventions or supports during the course of the study. As escape-maintained behavior is precluded by presence of aversive stimuli (e.g., difficult tasks) from which escape is negatively reinforcing, future research could examine the combined effectiveness of

academic interventions used in conjunction with the BrB intervention.

Furthermore, the assumption would be that a direct relation would be observed in student's percentage of time on task and amount or quality of work they produce, however, this relation was not examined in the current study. That is, while decreases in off-task behavior were observed, direct measures of academic performance were not examined and it is therefore unclear if increases in academic engagement and the use of alternative behaviors resulted in any meaningful changes in the students levels of work completion or accuracy.

Future Research

The results of the current study provide preliminary evidence for the effectiveness of the BrB intervention, as designed. However, further research is warrented to further understand the behavioral mechanisms which contribute to the effectiveness of the BrB intervention and modifications which may enhance the utility of it. Suggestions for further research are discussed next.

Replication. Before accepting the BrB as an intervention which consistently produces meaningful and durable changes in student behavior, replications of the current study should be conducted. Replication is particularly important as the current study made use of a small sample size of males who attended the same school. Furthermore, direct observational data were only collected during a single routine identified as the most problematic routine for each participant. Therefore, the effectiveness of the BrB intervention across academic contexts and over the course of the entire school day is unknown. In subsequent replication studies, data should be collected on the frequency of alternative responses and points earned across each academic period and throughout the

entire day; particularly because these data were not systematically collected and reviewed for the current study. These data may be particularly valuable as secondary interventions are often determined to be effective or ineffective by members of a SWPBS team who primarily examine the degree to which students are achieving their daily point goals as a means of determining their response to intervention.

Academic Skills. McIntosh (2005) suggested that a "coercive cycle of educational failure emerges in which students (a) experience academic demands as aversive, (b) engage in problem behavior that is maintained by escaping academic demands (e.g., being sent to the office), (c) lose access to instruction, (d) fall further behind, (e) find academic demands even more aversive, and (f) become even more likely to engage in escape-maintained problem behavior" (p. 1). The design of the BrB intervention was intended to provide both a mechanism for students to recruit adult attention and feedback as well as a mechanism for contacting negative reinforcement in the form of brief breaks and help. Although requesting for teacher help or breaks may serve an abolishing operation which decreases the aversivenss of the tasks, momentarily, BrB does little to address academic skill deficits.

Although supplemental academic instruction may not fit within the context of the BrB intervention per se, the inclusion of components which enhance classroom readiness or organizational skill may be feasible additions for secondary interventions but these were not addressed in the current study. In addition, research examining the combined effectiveness of supplemental academic instruction and the BrB intervention could be examined.

Response Efficiency. Although each participant was provided with multiple

opportunities to request breaks, only Alex was observed to request breaks during the targeted routine. Friman & Poling (1995) note the role of response effort as one independent variable which has been demonstrated to influence desired responding in applied settings. Similarly, Horner & Day (1991) evaluated the role of response efficiency when alternative behaviors were taught to replace aberrant behavior and emphasized multiple variables which must be considered when designing and selecting alternative replacement behaviors. Specifically, they affirm that an alternative response must be brought under the same stimulus control as the problem behavior, produce the same outcome that maintains the problem behavior, and be more efficient than the problem behavior.

Participants in the present study were required to engage in a novel chain of responses to access the functional reinforcer (i.e., escape) by raising their hand, waiting for a teacher response and manipulating a timer. In contrast, engaging in off-task behavior (e.g., turning away from the materials) likely required less response effort in comparison to the newly learned alternative response (i.e., requesting a break). Further research may examine alternative response topographies which require less response effort such as positioning a small break card where it could be seen by the teacher to examine if this modification would increase the use of the break response while maintaining reduced rates of competing problem behavior.

Consequence Manipulations. The current study did not evaluate the role of consequence manipulations (e.g., escape extinction) which, if implemented, may decrease the reinforcing value of problem behavior and increase the value of the alternative behaviors. As participants in the current study were often able to easily contact the

hypothesized reinforcer for inappropriate behavior, future studies may examine the application of escape extinction on rates of problem behavior as well as rates of functional alternative behaviors. However, a requisite step prior to examining this hypothesis would be to replicate the current study and collect data on events which not only follow appropriate behavior but also problem behavior (i.e., teacher attention, escape).

Component Analysis. An analysis of the effects of each component on levels of off-task and other problem behaviors is warranted. As BrB is a modified version of CICO, it is unclear as to which components were most directly linked to reductions in off-task behavior or if CICO alone would have resulted in similar outcomes for these students. Comparisons of this intervention with typical CICO should be conducted in addition to studies designed to evaluate each component in isolation. For example, a study may examine the effects of only defining school-wide expectations in academic terms without the explicit teaching of help and break requests for this group of students. Conversely, examining the effects of only providing students with a card as a visual reminder of the help and/or break routine may provide evidence that for some students, the addition of a daily behavior report card and feedback may not be necessary.

As the current study utilized an ABAB design with a partial withdraw, an alternative to this design may also be considered. For example, an alternating treatments design could be used to compare the effects of BrB and typical CICO as a means by which to examine the break request component specifically. That is, students could alternate between CICO and BrB each day to determine if there were differential effects on problem behavior and appropriate behaviors.

Conclusion

In addition to the need to address mild yet instructionally disruptive behaviors in classroom settings, schools implementing SWPBS models should also value ways in which they can reduce the number of students who require highly individualized tertiary supports. One way to accomplish such a goal is by increasing the range of effective secondary interventions available to students; each addressing different academic or behavioral needs. The BrB intervention shows promise in helping schools achieve this goal. That is, a means by which schools could broaden their existing supports at the secondary level within a system of SWPBS to more readily address the needs of students whose problem behaviors are sensitive to negative reinforcement in classroom settings.

APPENDIX A

EXAMPLE OF TYPICAL CICO CARD

Name:_____ Date: _____

3 = great job 2 = OK – try again 1 = hard time

	Safe	Responsible	Respectful
Check In	0 1 2	0 1 2	0 1 2
Morning Routine/ Core Reading	0 1 2	0 1 2	0 1 2
Core Reading	0 1 2	0 1 2	0 1 2
Writing	0 1 2	0 1 2	0 1 2
Library/Computer Lab/ Spanish	0 1 2	0 1 2	0 1 2
Math	0 1 2	0 1 2	0 1 2
Read Aloud	0 1 2	0 1 2	0 1 2
Check out	0 1 2	0 1 2	0 1 2
Today's goal: 38 points		Today's total points: _____ / 48	
Parent Signature: _____			

APPENDIX B

MODIFIED SELF-ASSESSMENT OF CONTEXTUAL FIT IN SCHOOLS

Self-Assessment of Contextual Fit in Schools

Horner, Salentine, & Albin, 2003
(modified by Roy Justin Boyd on August 28, 2009)

The purpose of this interview is to assess the extent to which the elements of the Breaks are Better (BrB) intervention fit the contextual features of your school environment. The interview asks you to rate (a) your knowledge of the elements of the plan, (b) your perception of the extent to which the elements of the behavior support plan are consistent with your personal values, and skills, and (c) the school's ability to support implementation of the plan. This information will be used as part of an evaluation of the BrB intervention design and to identify practical procedures that will help school personnel support children who engage in problematic behaviors. The information you provide will be maintained and reported in a confidential manner consistent with the standards of the American Psychological Association. You will never be identified.

Thank you for your contribution and assistance.

Name of Interviewee: _____ Role: _____

Support plan: Breaks are Better (BrB) Secondary Intervention

Knowledge of BrB elements.

1. I am aware of the elements of this behavior support plan.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

2. I know what I am expected to do to implement this behavior support plan.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Skills needed to implement the BrB Intervention

3. I have the skills needed to implement the BrB intervention.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

4. I have received any training that I need to be able to implement the BrB intervention.

   (or no training needed)

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Values are consistent with elements of the BrB intervention

5. I am comfortable implementing the elements of the BrB intervention.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

6. The elements of the BrB intervention are consistent with the way I believe students should be treated.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Resources available to implement the BrB plan

7. My school provides the faculty/staff time needed to implement the BrB Intervention.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

8. My school provides the funding, materials, and spaced needed to implement the BrB intervention.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Administrative Support

9. My school provides the supervision support needed for effective implementation of the BrB intervention.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

10. My school administration is committed to investing in effective design and implementation of behavior support plans.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Effectiveness of Behavior Support Plan

11. I believe the BrB intervention will be (or is being) effective in achieving targeted outcomes.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

12. I believe the BrB intervention will help prevent future occurrence of problem behaviors for this child.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

Is the BrB intervention in the best interest of the student

13. I believe use of the BrB intervention is in the best interest of the student.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

14. This BrB intervention is likely to assist the child to be more successful in school.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

The BrB intervention is efficient to implement

15. Implementing the BrB intervention in a classroom will not be stressful.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

16. The amount of time, money and energy needed to implement the BrB intervention is reasonable.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Barely Disagree	Barely Agree	Moderately Agree	Strongly Agree

APPENDIX C

MODIFIED BEHAVIOR EDUCATION PROGRAM QUESTIONNAIRE

Hawken & Horner, 2003

(modified by Roy Justin Boyd on August 28, 2009)

Breaks are Better (BrB) Intervention Acceptability Questionnaire

ID:_____ Date: _____

The purpose of this questionnaire is to assess your perception of the Breaks are Better (BrB) intervention and it's impact for _____ (student participant name). The information you provide will be maintained and reported in a confidential manner consistent with the standards of the American Psychological Association. You will never be identified.

1. The BrB intervention improved this student's behavior at school.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

2. The BrB intervention improved this student's academic performance.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

3. The BrB intervention was worth the time and effort.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

4. The BrB intervention is worth recommending to others.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

5. The BrB intervention is easy to implement.

1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

APPENDIX D

BRB FIDELITY CHECKLIST

BRB FIDELITY OF IMPLEMENTATION CHECKLIST

Directions: Please observe the target student during check-in and during the target routine (to witness at least one break communication and student-teacher check). Some items may be completed using permanent products (e.g., student point card).

	Fidelity of Implementation Question	Yes	No	Don't Know
Check In	1) Did student check-in with designated staff in the morning?			
	2) Did coordinator provide student with daily point card & quickly review SW-expectations?			
	3) Did coordinator briefly review the break routine with the student (i.e., how to ask for a break; thumbs up; thumbs down)			
	4) Did coordinator ask the student to provide an example of when he or she plans to use a break during the day?			
Target Routine	5) Did the teacher respond appropriately (i.e., with a "thumbs up" or "thumbs down") to student break requests?			
	6) Did the student follow the break communication routine appropriately (as planned)?			
	7) Did student take the point card to each teacher to obtain feedback following academic period?			
	8) Were the student-teacher interactions (during checks) positive and include specific feedback on at least 1 target goal?			
Check Out	9) Did student check out with staff at the end of the day?			
	10) Did student earn reward, if applicable?			

Score: _____ / _____ X 100 = _____
of "yes" 10 (# of items)
Observation Start Time: _____; End Time: _____; Duration: _____

Number of Breaks Requested during Observation: _____
Teacher Responses
of "thumbs up":_____
 # Of "thumbs down: _____

Observer Initials: _____ Date: _____ Student ID: _____

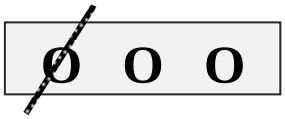
APPENDIX E

BRB POINT CARD

Name:___ Date: _____

2 = great 1 = OK 0 = hard time

	SAFE	**RESPONSIBLE**	**RESPECTFUL**		**Breaks are Better**	
Examples:	Stayed in my seat when I was Supposed To	Asked for Help Appropriately If I Needed It	Followed Teacher Instructions & Directions		2-Minute Breaks I can Take	Took Breaks In The Right Way
Check In	0 1 2	0 1 2	0 1 2	1		
Morning Routine	0 1 2	0 1 2	0 1 2	2	O O O	Y N
Music	0 1 2	0 1 2	0 1 2	3		
Math	0 1 2	0 1 2	0 1 2	4	O O O	Y N
Recess	0 1 2	0 1 2	0 1 2	5		
Reading	0 1 2	0 1 2	0 1 2	6	O O O	Y N
Lunch	0 1 2	0 1 2	0 1 2	7		
Recess	0 1 2	0 1 2	0 1 2	8		
Spanish/Reading/ Writing	0 1 2	0 1 2	0 1 2	9	O O O	Y N
Check out	0 1 2	0 1 2	0 1 2	10		
Today's goal: _____	Today's total points:---------- /_____			**12**	Number of Breaks Used:	

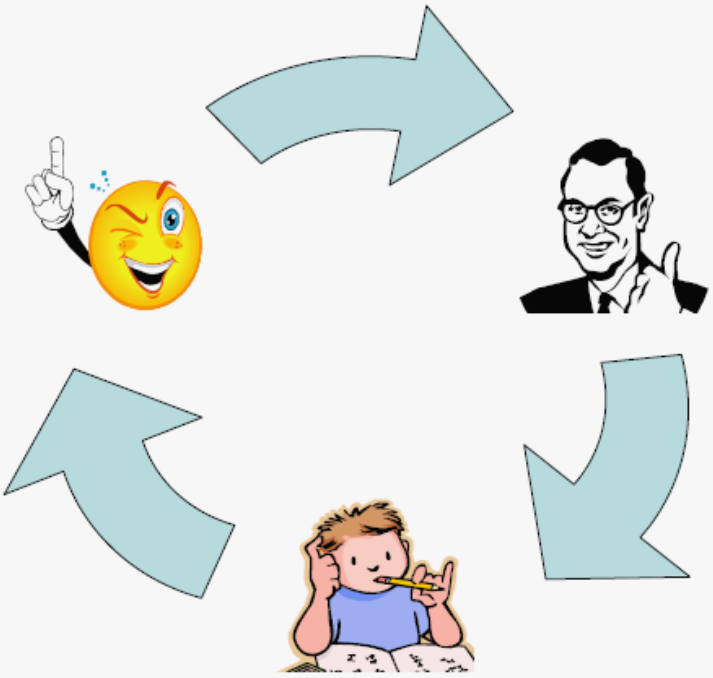
How I Take my Break	When I Might Ask for a Break
(1) hold up hand with an "**#1**" signal (2) **wait** for teacher to give me a "thumbs up" or "thumbs down"  (3) after the "thumbs up", **cross out** one of the break circles on the BRB card  (4) start my break timer for 2-minutes  (5) take my break the **right way** until the timer goes off   (6) when the timer goes off, my break is over & I will **get back to work**!  	✪ When I want to stop working for a few minutes ✪ When I'm having a hard time keeping my eyes on the teacher ✪ If I get frustrated or want to take a break from my work
	If my teacher gives me a "Thumbs Down"
	✓ It's no big deal ✓ I should keep working the best I can ✓ I can keep working to earn my points ✓ I can ask for a break a little later
	My Break Choices
	✪ Put my head down and relax ✪ Doodle in a Notebook ✪ Work on a Drawing or Picture ✪ Look at a Book or Read a Book

APPENDIX F

BRB IMPLEMENTATION AND TRAINING MANUAL

Breaks are Better with Check-in/Check-out

Implementation & Training Manual



Developed by:
Justin Boyd & Cynthia M. Anderson

Breaks are Better

Background and Purpose

Secondary interventions should be easy to implement, be continuously available, and require little time and effort on the part of the teachers and staff who implement them.

The Breaks are Better Intervention (BrB) is a modified version of CICO which incorporates opportunities for students to request a limited number of brief breaks during academic times while keeping other features of CICO consistent. Utilizing a standardized routine for requesting breaks embedded within the popular CICO procedures, implementation of the BrB intervention can be efficient and consistent across students and teachers.

This intervention is best suited for students who engage in problem behaviors maintained by escape or avoidance from academic activities, tasks, or assignments. By having the BrB program available, schools can broaden their continuously available secondary supports to serve more students and maximize their intervention resources.

The components of BrB implementation guide include:

1. *Materials*
2. *Developing Expectations & Rewards*
3. *BrB Daily Cycle*
4. *Holding an BrB Parent Meeting*
5. *Teaching BrB to Students*

Materials

The materials needed to implement the BrB program are listed below:

- *BRB Daily Point Card (sample provided)*: The BRB daily point card will be almost identical to the CICO point card that your school is already using but will contain two additional columns. One column is used to track the number of breaks a student may request during each instructional period and the 2nd column provides a space for the student's teacher to mark "Y" (yes) or "N" (no) to indicate if the student "took breaks in the right way if they needed or wanted to".

Schools may modify their BrB cards to list school-specific behavior expectations that are defined in academic terms.

- *Point Goal Rewards*: The rewards that your school uses for CICO will be used in the same way for students on the BRB program. For example, students reaching their daily point goals may have the option of using their points for a small tangible reward or save their points so that they may earn a larger reward at a later time.

- *List of Break Options*: A list of optional breaks that a student might take will be generated by the school's behavior support team with teacher input. This list will tell the student what types of behaviors are acceptable during the time they choose to take a break. A sample list which can be added to or modified is provided. Suggestions include, doodling in a notebook, looking at or reading a book, putting head down, and setting in a bean bag away from the group.

- *Timer & Materials*: As part of the daily check-in, students will be given a break timer for use during their breaks. In addition, supplies such as pencils and paper can be provided to the student during check-in to ensure that they are better prepared for their school day.

Getting Started: Develop Expectations & Rewards

Develop Expectations

Typical CICO programs are organized around the existing school-wide expectations (e.g., Be Safe, Be Kind, Be Responsible). In the BrB intervention, you will use the same school-wide expectations as are used in CICO however you will work with students to help them understand the link between those expectations and desired academic behaviors. For example, if one school-wide expectation is "be respectful" this may be further defined in academic terms as "keep a calm voice and raise my hand to ask for help if I need it".

1. What are the school-wide expectations for your school?

1._____

2._____

3._____

4._____

5._____

2. Now, define each expectation in terms of desirable academic behavior.

1. _____
   _____
2. _____
   _____
3. _____
   _____
4. _____
   _____
5. _____
   _____

These 3-5 goals will be the daily goals that students will work toward and receive points and feedback on throughout their day. These goals will be printed on each BrB card for consistency.

Each and every BrB point card will include the following goal in addition to those developed by the school team:

"Took breaks in the right way if I needed or wanted to".

In preparation for teaching the goals to students beginning the intervention, please provide at least two examples and non-examples for each goal:

1._____
Examples:

Non-Examples

2. _____
Examples:

Non-Examples:

3._____
Examples:

Non-Examples:

4._____
Examples:

Non-Examples:

5._____
Examples:

Non-Examples:

Rewards for Meeting Point Goals

Earning positive recognition, points, and rewards for reaching goals is an important piece of the BrB intervention that allows students to feel motivated and successful. Rewards for meeting daily or weekly point goals can be kept consistent with the rewards that you may already be using for the CICO program.

Consider however adopting a few additional rewards for students on the BrB program to provide them with an opportunity to lessen the aversivenss of academic tasks, demands, or assignments in some way. For example, a student may earn extra time to complete an assignment or a few minutes of extra access to a special activity (e.g., computer time or recess) at the beginning or end of an academic period.

BRB Rewards Worksheet

Please list potential "escape-related" rewards that you think will be reinforcing for students on the BRB program. Try to avoid rewards that remove the expectation to complete work, such as a homework pass:

1._____

2._____

3._____

4._____

5._____

6._____

BRB Daily Cycle

The BRB program has five main components that will happen each day: 1) morning check-in, 2) point delivery and feedback, 3) brief

breaks when requested, 4) afternoon check-out, and 5) home component.

- *Morning Check-in*:
    - The morning check-in will look the same as for students on CICO, but will include a few additional pieces. After returning the previous day's signed point card students will receive a new BrB card and their break timer.
    - Next, the student will be prompted to provide one example of a time or situation when they will likely request a break that day (e.g., "when I get frustrated with the math worksheet, I will ask for a break instead of talking to my friend"). If necessary, a quick reminder of the routine to request a break can be reviewed with the student using the back of the student's point card as an aide.
    - Finally, provide students with some positive encouragement ("Have a great day!") and send them off to class.

- *Daily Point Card:*
    - The daily point card should look very similar to your school's CICO card. However, each school-wide expectation will be written out and defined on the card (i.e., those previously generated by the school team). Two columns will be on the BrB cards that are not on typical CICO cards. The "break column" will contain 3 circles for each period of the student's academic day. These circles indicate the number of breaks a student can request (i.e., 3) during any academic period. Once a student has taken a break, the student will put a slash or line through one of the circles. In addition to the "break column" there will be a column for the student's teacher to indicate if the student took their breaks in the right way if they needed or wanted to by circling "Y" (yes) or "N" (no).

    - Just like in CICO, students can earn up to 2 points (teacher awarded) for meeting each goal in at the end of each class period.

- *Afternoon Check-out:*

- Students will briefly check out with the BrB coordinator each afternoon. The coordinator will review their point card and determine if they have met their daily goal of earning 80% of possible points. If students have met their goal, they will receive positive verbal feedback ("Great job! I can tell you worked really hard today.") If you are using small daily rewards for students on CICO, you can use them for students on BRB also.
- If students have not met their goal, give them brief neutral feedback ("Let's try harder tomorrow.")
- Each week, students who have met their goal on 4 out of 5 days can earn a weekly reward. Students can choose a reward from a list that includes the BrB-specific rewards the school team developed.
- Each afternoon, you will be sure to reclaim the timer from the student for use next time.
- At the end of the check-out, remind students to share their point card with their parents and to have their parents sign their card.
- Be sure to end the check-out with positive encouragement such as "Have a great evening, see you tomorrow!"

- *Home Component:*
  - Each day after school, students will show parents their daily point card for them to sign, just as they would with typical CICO. Students should return their signed point cards the next day, at check-in.

Holding a BrB Parent Meeting

You will have one 15-20-minute meeting with each student's parents, before the student begins the BRB program. While face-to-face meetings are preferred, meetings may also take place over the phone. All the materials that you need to conduct this meeting are included in the "BRB Parent Guide." The goals of the parent meeting are to: 1) introduce parents to the components of the BrB program, 2) teach parents their role in the home component, and 3) review appropriate ways of responding on days that a student meets his or her point goal and on days they do not meet their goal.

Teaching BRB to Students

You will have a brief meeting with each student before they begin the BRB program. This meeting should look very similar to meetings that you have with students before they begin the CICO program. The goals of the student meeting are to: 1) introduce the student to the components of the BrB program, 2) teach the student the daily goals and how they can meet these goals each day, 3) teach the students the break routine (including the use of the timer), 4) review the appropriate way to ask teachers for "help", and 5) review the list of rewards with the student and find out which rewards they would like to work towards and what types of breaks they would like to take. It may be helpful to go through each component of the BRB program, and teach students what to expect for each part of the program. Also, a quick role-play where the student demonstrates that they can perform the entire break routine must be conducted. Here are some suggestions for introducing each piece of the program to students:

Teaching the Break Routine

- For the orientation session, it is important to 1) teach the student how to use the 2-minute timer and 2) teach and practice the break routine. An example script is provided at the end of this manual which provides examples of how to teach the break routine using positive examples and non-examples. At least one role-play should be conducted with the student to ensure that they are able to request breaks and take them appropriately when the time comes.

Morning Check-in

- First, tell the students where they should come to check-in each morning, and at what time. Next, briefly role-play what a typical check-in will look like. Students will: 1) turn in yesterday's signed point card, 2) show the coordinator that they are prepared for the day with all necessary materials, 3) get a new point card and timer from the coordinator, and 4) think of one example of a time or situation where they anticipate requesting a break during the school day.

Daily Point Card

- Show students the daily point card. First, review the daily goals, using the examples and non-examples that you came up with earlier. Have students come up with some of their own examples and non-examples for how to meet each goal. Next, teach students to show their point card to teachers at the beginning of the day and to remind the teacher (by raising their hand) at the end of each period to get their points.

- *Afternoon Check-out:*
  - Tell students where they should come to check-out each afternoon, and at what time. Next, briefly show the student what a typical check-out will look like. Students will show you their point card and determine if they have met their daily goal. If they have met their goal, they may earn a small daily reward and will also earn points toward a weekly reward. If they have not met their goal, they should expect to receive brief and neutral feedback from you. Finally, 1 bonus point (up to 5) will be awarded for each "Y" that has been circled on the student's card for taking their breaks in the right way, if they needed or wanted to".

- *Home Component:*
  - Tell students that each day after school, they will show their parents their daily point card and get it signed. Students should also be prepared to return the previous day's signed point card to you the next day, at check-in.

Communicating with Teachers

Before beginning the BrB program with a student, it will be important for you to notify the student's teachers. All teachers will already have been introduced to the BrB program, so they should have a general idea of what their role is. A sample letter has been provided that you may want to give to teachers before their student begins the program. This letter will let them know that one of their student's is going to be started on the BrB intervention and remind them of their role (providing points/feedback and how to respond to break requests).

Feel free to contact the Project Coordinator at any time with any questions or concerns you may have along the way.

Contact Information

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Example Script for Student Orientation to the Breaks are Better Program

T: Do you know what the 3 school rules are?
S: Yes (and names them) or No
T: The 3 school rules are: _____ _____ _____

T: We want to help you do better in school by making sure you know how to follow the rules and expectations. To help you, we made this card (present card to student) to help you remember the rules and to earn points for following the rules and expectations. Describe how points are awarded and what the points can be redeemed for as would be done with typical CICO

Break Routine Training

T: "student", I'm going to pretend to be you and you can pretend to be your teacher. I want you to tell me to do this math worksheet. While I'm pretending to be the student, I want you to watch me and I'm going to ask you to how I'm doing and you can give me a "thumbs up" or a "thumbs down".

Teacher models the right way (i.e., working the problems) for about 10-seconds, then asks the student:

T: "How am I doing, thumbs up or thumbs down?"

Student Responds: (thumbs up)

Teacher works for a few more seconds and then puts pencil down, huffs, and starts playing with the paper or starring off away from the work.

T: "How am I doing, thumbs up or thumbs down"

S: Thumbs down!

Teacher models the "right way" one more time and asks for a thumbs up or thumbs down
Student responds: (thumbs up)

T: Now I'm going to show you how to ask for special breaks.
Sometimes, it might be hard to follow the rules and expectations perfectly. To help you, we're going to let you do something very special. We're going to let you take special breaks when you want or need to; and all you have to do is ask for them the right way. So, when you're having a hard time doing the right thing, like working hard on your work, you can take a break. Breaks are better than doing the wrong thing because if you take your breaks the right way, you can still earn all your points!
How does that sound?

S: Cool!

T: Let's say that you're allowed to draw in your notebook during your breaks – does that sound cool? Here is how you ask for a break, the right way:

T: Let's pretend you are the teacher and you give me the "thumbs up" when I ask for a break

Teacher models the right way

T: Now let's see if you can give me a thumbs down if I do it the wrong way

Teacher asks for a break the right way, but wiggles in the chair and pretends to talk-out

T: Was that the right way, or the wrong way to take a break?

S: "Wrong way"

T: Can you tell me how to take a break the right way?

S: Tells the teacher the right way –

T: Great, now let's pretend that I am the teacher and you can practice asking for a break the right way. Let's pretend that you've been working for a few minutes but you feel like you might be getting frustrated and you want to take a break.

Student and teacher role play (at least 1 time but can practice more if desired) and only use positive examples (i.e., the student should only practice the "right way").

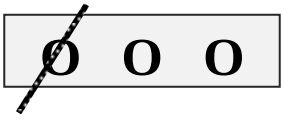
T: Nice Job!!! Now remember, if you feel like you want to stop working or doing what the rest of the class is doing (but you don't want to get in trouble), you can ask for a break! Plus, you get to earn points so that you can earn cool stuff!

How I Take my Break

(3) hold up hand with an "#1" signal

(4) wait for teacher to give you the "thumbs up" signal or say "not right now"

(5) after the "thumbs up", cross out one of the break circles on the BRB card



(4) start your break timer for 2-minutes and take your break the right way (for example, by taking out your drawing notebook and drawing with a quiet voice)

(5) take your break appropriately (i.e., keeping a calm body and a calm voice while you draw in your notebook) until the timer goes off

(6) when the timer goes off, you end the break (quietly put any materials back in their place) and return to the ongoing activity or get back to work

Sample Break List and Reward Suggestions

Examples of optional student breaks

- □ Option to move to a desk in the room, positioned away from peers. (e.g., a desk near the back of the class room with a book)
- □ Option to stay at his/her desk doing a quiet activity (looking at books, etc.).
- □ Option to "doodle" in a notebook
- □ Option to work on a drawing for someone (e.g., a parent or favorite teacher)
- □ Option to stand up & stretch (appropriately & quietly) in the back of the room

Examples of BrB Rewards for Weekly

- □ 3-5 minutes of computer time
- □ 3-5 extra minutes of recess
- □ A coupon to earn 3 bonus points on an assignment
- □ A coupon to "make an assignment easier"
- □ A coupon to work with a buddy on an assignment

Sample Letter to Teachers (adapted from Crone, Horner, & Hawken, 2004)

Attention_____:

_____ will begin the Breaks are Better program (BrB) on _____. This is a modified version of check-in-check-out (CICO). Your student will receive points and feedback in the same way as they would on the CICO program but has been taught that they may request a limited number of brief (2-minute) breaks. The key components of this intervention are that:

1. The BrB point card will have goals that are specifically tied to desirable academic behaviors.

2. At the end of each period, please circle points on the student's card and provide brief positive praise for appropriate behavior (especially behaviors which align with the point card goals.

3. _____ will be able to request brief (2-minute) breaks (e.g., looking quietly at a book, putting head down, doodling in a notebook). To request a break the student will raise their hand with a #1 signal, and wait for your response. To allow the student to take a break, please give them a "thumbs up". When you give the student the "thumbs up signal" he/she will start their 2-minute timer and take their break without disrupting others. When their timer goes off, their break will end and they will return to the ongoing activity. If you choose to disallow the break when they raise their hand to request it, you can say "not right now" and the student should continue working but may ask for a break again sometime later.

4. If your student follows the break routine appropriately when he/she takes breaks please circle the "Y" at the end of the period when you circle his/her other points. You may also circle the "Y" if the student did not take any breaks, but you feel that the student behaved appropriately. If the student had a hard time or did not behave appropriately when taking his/her breaks, please circle the "N".

Thank you for your cooperation with the BRB program. If you have any questions, please contact _____, the BRB coordinator.

Breaks are Better with Check-in/Check-out

Parent Handbook

Developed by:
Justin Boyd & Cynthia M. Anderson

Background and Introduction

Check-in/Check-out (CICO) is a program that your child's school currently uses to help students be more successful at school. The CICO program usually works best with students who engage in problem behavior in order to get attention from adults. It been has proven effective for students who are highly motivated by adult attention; this intervention is less effective for students who engage in problem behaviors maintained by escape or avoidance from academic activities, tasks, or assignments.

The Breaks are Better Intervention (BrB) is a modified version of CICO which incorporates opportunities for students to request a limited number of brief breaks during academic times while keeping other features of CICO consistent.

This intervention is best suited for students who engage in problem behaviors which are maintained by escape or avoidance from academic activities, tasks, or assignments and may (or may not) have academic skill deficits.

Expectations & Rewards

Develop Expectations

In the BRB program, students work towards goals that are tied to school-wide expectations. Students on the BRB program have academic as well as behavior difficulties, therefore the school-wide expectations have been defined specifically in terms of academic behaviors.

3. The school-wide expectations for your child's school are:
    1. _____
    2. _____
    3. _____
    4. _____
    5. _____

4. The daily goals that your child will work towards are:
    1._____

2._____
3._____
4._____
5._____

5. Here are some examples and non-examples for each goal:

a. _____
Examples:

Non-Examples

b. _____
Examples:

Non-Examples:

c. _____
Examples:

Non-Examples:

d. _____
Examples:

Non-Examples:

e. _____
Examples:

Non-Examples:

Rewards for Meeting Point Goals
Earning positive recognition and rewards for reaching goals is an important piece of BrB program that allows students to feel motivated and successful. Students on the BrB program will earn a reward

when they have met their weekly goal. Students will be able to choose a reward from a list that has been generated by the school's behavior support team to be especially rewarding for students on the BrB program. For example, a student may earn 3-5 extra minutes of a fun activity such as recess or computer time.

BRB Daily Cycle

The BRB program has five main components that will happen each day: 1) morning check-in, 2) point delivery and feedback, 3) brief breaks when requested, 4) afternoon check-out, and 5) home component.

- *Morning Check-in***:**
  - Each morning, your child will check in with the BRB coordinator. First, they will return the previous day's signed point card and will get a new daily point card.
  - Next, the coordinator will provide them with a break timer and ask them to think of one time during the day when they might choose to take a break.
  - Finally, the coordinator will provide your child with some positive encouragement ("Have a great day!") and send them off to class.

- *Daily Point Card*
  - Each day, your child will have a point card where they can earn points for meeting their daily goals (see sample).
  - Students can earn up to 2 points for meeting each goal in each class period.
  - Also, there will be a "break column" for students to mark off when they took a break and a column for the teacher to mark a "Y" or "N" to indicate if the student "took their breaks the right way if they needed or wanted to".

- Break Requests:
  - A key piece of the BrB program is that students are taught that they can choose to take brief (2-minute) breaks to do something other than what the class room task is. For example, if the class is working on a math work sheet, your child can choose to take a break to look at book or

draw for 2 minutes. After their short break, they are required to get back to work.
    - On your child's BrB card there is a break column. The "break column" will contain 3 circles for each period of the student's academic day. These circles indicate the number of breaks a student can request (i.e., 3) during any academic period. Once a student has taken a break, the student will put a slash or line through one of the circles. In addition to the "break column" there will be a column for the student's teacher to indicate if the student took their breaks in the right way if they needed or wanted to by circling "Y" (yes) or "N" (no).

- *Afternoon Check-out:*
    - Your child will briefly check out with the BrB coordinator each afternoon. The coordinator will review their point card and determine if they have met their daily goal of earning 80% of possible points. If students have met their goal, the coordinator will give them positive verbal feedback ("Great job! I can tell you worked really hard today.") If the school is using small daily rewards for students on CICO, they may use them for students on BrB also.
    - If your child has not met their goal, the coordinator will give them brief neutral feedback ("Let's try harder tomorrow.")
    - Each week, students who have met their goal on 4 out of 5 days can earn a weekly reward. Students can choose a reward from a list that the coordinator has developed.
    - At the end of the check-out, the coordinator will remind your child to have you sign their point card so that they can bring it back with them to school the next day.
    - The coordinator will end the check-out with positive encouragement such as "Have a great evening, see you tomorrow!"

- *Home Component:*
    - Each day after school, your child will show you their daily point card. If they don't offer to show you, you should ask to see it.

- Check to see if your child has met their goal for that day. If they have, go ahead and give them some positive encouragement. You can say something like “Great job! I’m proud of you” or do a secret handshake that only the two of you know.
- If your child has not met their goal, you can just give them some brief neutral feedback. You can say something like “I bet you can try harder tomorrow.”
- Make sure that you sign the point card before your child heads to school the next day.

Now that you know all about the BrB program, you are ready to help your child succeed on this program. You child will begin the BRB program on _____.

The BRB Coordinator, _____ will available to answer any questions you may have.

You can also feel free to contact the Project Coordinator at any time with any questions or concerns you may have along the way.

Contact Information

BRB Coordinator: **Email:** **Phone:**	**Project Coordinator:** **Justin Boyd** **Email: rboyd@uoregon.edu** **Phone: 541.653.7093**

Sample BRB Daily Point Card

(Front of Card)

Name:_____ Date: _____

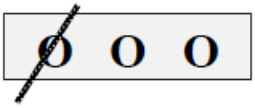
3 = great job 2 = OK – try again 1 = hard time

	Safe	Responsible	Respectful	Breaks are Better	
	Stay in my seat when I'm supposed to	Mind the Teacher	Ask for Help Appropriately If I Needed It	2-Minute Breaks I can Take	Take Breaks In The Right Way If I Need or Want To
Check In	0 1 2	0 1 2	0 1 2		
Morning Routine/ Core Reading	0 1 2	0 1 2	0 1 2	O O O	Y N
Core Reading	0 1 2	0 1 2	0 1 2	O O O	Y N
Writing	0 1 2	0 1 2	0 1 2	O O O	Y N
Library/Computer Lab/ Spanish	0 1 2	0 1 2	0 1 2	O O O	Y N
Math	0 1 2	0 1 2	0 1 2	O O O	Y N
Read Aloud	0 1 2	0 1 2	0 1 2	O O O	Y N
Check out	0 1 2	0 1 2	0 1 2		

Today's goal: 38 points	Today's total points: _____ / 48	Number of Breaks Used:

Parent Signature: _____

(Back of Card)

How I Take my Break	When I Might Ask for a Break
(1) hold up hand with an "#1" signal  (2) wait for teacher to give me the "thumbs up" signal or say "not right now"  (3) after the "thumbs up", cross out one of the break circles on the BRB card  (4) start my break timer for 2-minutes   (5) take my break appropriately (i.e., the way I'm supposed to) until the timer goes off  (6) when the timer goes off, I end the break and return to the ongoing activity or get back to work 	When I want to stop working for a few minutes When I'm having a hard time keeping my eyes on the teacher When I want to get out of my seat If I get frustrated or want to take a break from my work
	If my teacher doesn't give me the "Thumbs Up"
	If you hold up your hand to ask for a break & the teacher says "not right now", this means that you can't take a break right now. Instead, you can set your timer for 2 minutes and when it goes off, you can ask for a break again. While you wait, try your best to do the right thing and keep working to earn your BrB points!
	My Break Option Choice for Today 

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