Innovation Configuration

Evidence-Based Practices for Classroom and Behavior Management: Tier 2 and Tier 3 Strategies

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Innovation Configuration for Evidence-Based Practices for Classroom and Behavior Management: Tier 2 and Tier 3 Strategies

This paper features an innovation configuration (IC) matrix that can guide teacher preparation professionals in the development of appropriate content for evidence-based practices (EBPs) for behavior management. This matrix appears in Appendix A.

An IC is a tool that identifies and describes the major components of a practice or innovation. With the implementation of any innovation comes a continuum of configurations of implementation from non-use to the ideal. ICs are organized around two dimensions: essential components and degree of implementation (Hall & Hord, 1987; Roy & Hord, 2004). Essential components of the IC—along with descriptors and examples to guide application of the criteria to course work, standards, and classroom practices—are listed in the rows of the far left column of the matrix. Several levels of implementation are defined in the top row of the matrix. For example, no mention of the essential component is the lowest level of implementation and would receive a score of zero. Increasing levels of implementation receive progressively higher scores.

ICs have been used in the development and implementation of educational innovations for at least 30 years (Hall & Hord, 2001; Hall, Loucks, Rutherford, & Newton, 1975; Hord, Rutherford, Huling-Austin, & Hall, 1987; Roy & Hord, 2004). Experts studying educational change in a national research center originally developed these tools, which are used for professional development (PD) in the Concerns-Based Adoption Model (CBAM). The tools have also been used for program evaluation (Hall & Hord, 2001; Roy & Hord, 2004).

Use of this tool to evaluate course syllabi can help teacher preparation leaders ensure that they emphasize proactive, preventative approaches instead of exclusive reliance on behavior reduction strategies. The IC included in Appendix A is designed for teacher preparation programs, although it can be modified as an observation tool for PD purposes.

The Collaboration for Effective Educator, Development, Accountability, and Reform (CEEDAR) Center ICs are extensions of the seven ICs originally created by the National Comprehensive Center for Teacher Quality (NCCTQ). NCCTQ professionals wrote the above description.
Behavior management is a critical skill that all teachers, particularly special education teachers, must employ to be successful. One framework for conceptualizing behavior management is Multi-Tiered System of Supports (MTSS). With MTSS, all students receive prevention strategies delivered at the school-wide and classroom levels (e.g., classroom management) while some students receive secondary (i.e., targeted) and tertiary (i.e., intensive) interventions to address school-based academic and behavioral concerns (Fuchs & Fuchs, 2006; Sugai & Horner, 2009). The behavioral MTSS framework is typically defined as School-Wide Positive Behavior Support (SWPBS); in this framework, all prevention and intervention strategies focus on (a) identifying socially appropriate replacement behavior, (b) explicitly teaching the replacement behavior, (c) using a continuum of consequence strategies to minimize reinforcement of a problem behavior, and (d) continually using data to assess progress (Sugai & Horner, 2002). The SWPBS framework has promising evidence of effectiveness, including positive student- and school-level impacts on academic achievement and behavior (Bradshaw, Leaf, Thornton, & Leaf, 2009; Horner et al., 2009).

SWPBS comprises three tiers of prevention and intervention: (a) primary, (b) secondary, and (c) tertiary. The primary level (i.e., Tier 1) is designed to support all students and includes the establishment of positively stated school-wide behavioral expectation (e.g., Be Safe, Be Respectful, Be Responsible) that are explicitly taught across settings (e.g., cafeteria, classroom, playground) and reinforced by a school-wide reinforcement system (e.g., token economy). Primary prevention at the classroom level includes efficient and effective classroom management practices, including high classroom structure, increased specific and contingent praise, prompting for expectations, and increased opportunities to respond (OTR; Scott, Anderson, & Alter, 2012). Primary prevention focuses on consistent monitoring of student behavior and
team-based decision making. Typically, school professionals assess implementation effectiveness and identification of students in need of additional intervention support using office discipline referrals (ODRs). Research suggests that (a) ODRs can be a reliable predictor of persistent behavior problems, and (b) students exhibiting two or more ODRs by October could benefit from additional intervention (McIntosh, Frank, & Spaulding, 2010).

Additional interventions are delivered at the secondary and tertiary levels based on (a) data indicating that students are at risk for continued behavior problems and (b) the topography and intensity of the behavior. Secondary interventions (defined below) are typically delivered for persistent school-wide and classroom problem behaviors that are low in intensity (e.g., off-task, non-compliant, disruptive behaviors). Tertiary interventions (defined below) are individualized interventions targeting the function of student behavior. Tertiary interventions are typically delivered based on (a) non-responsiveness to secondary interventions and (b) intensity of behavior (e.g., self-injurious behavior, severe aggression).

The task of delivering secondary (i.e., Tier 2) and tertiary (i.e., Tier 3) interventions often falls to special education teachers because they have the specialized instructional knowledge and training to effectively implement the strategies with fidelity (Simonsen et al., 2010). Therefore, special education teachers should be fluent with the critical features of evidence-based secondary and tertiary interventions.

The purpose of this IC was to describe the critical features of evidence-based secondary and tertiary interventions. First, the critical features and extent of support for evidence-based secondary interventions are described. Then, the evidence base for functional behavior assessment (FBA) interventions, the recommended approach for tertiary intervention development, is described.
Secondary Interventions

Secondary interventions are programs or strategies delivered at the individual or small-group levels to address the needs of students who do not respond to primary prevention at the school-wide or classroom levels (Hawken, Adolphson, MacLeod, & Schumann, 2009). Identification of students for secondary interventions should be based on data, such as frequency of ODRs, or teacher referral with supporting evidence of non-response to primary prevention.

To date, two literature reviews have identified targeted interventions delivered within an MTSS framework. Mitchell, Stormont, and Gage (2011) identified 13 studies of targeted interventions published between 2002 and 2009; the interventions were delivered to students who did not respond to primary prevention. The studies were grouped into three broad categories: (a) a standardized mentoring program, (b) social skills instructional groups, and (c) academic instructional groups. Bruhn, Lane, and Hirsch (2014) updated the review of secondary interventions and identified 28 studies examining the behavioral, social, and academic effects of targeted interventions on students identified as non-responsive to primary prevention. Bruhn and colleagues again identified the same three primary categories of group-based secondary interventions that Mitchell and colleagues (2011) identified.

Unlike prior reviews, the review for this IC restricted secondary interventions to replicable programs with clear and available implementation guidelines (e.g., manuals) that targeted social or behavioral outcomes. This approach excluded all of the social skills and academic interventions that Mitchell and colleagues (2011) and Bruhn and colleagues (2014) identified. Also, this review included secondary interventions recommended by the National Technical Assistance Center for Positive Behavior Supports (pbis.org), which also offers implementation guidelines. This approach was taken to ensure access to implementation guidelines for pre-service teacher preparation programs and inclusion of programs recommended
by a nationally recognized technical assistance (TA) center. Based on these criteria, three standardized secondary interventions were identified: (a) Check In/Check Out (CICO); (b) Check, Connect, and Expect (CCE); and (c) First Step to Success (FS).

**Check In/Check Out**

**Practice defined.** CICO, also known as the Behavior Education Program (BEP), is a secondary intervention for students at risk for developing severe problem behaviors (Crone, Hawken, & Horner, 2010). Students in CICO begin and end the day with an adult mentor who ensures that each student is prepared for the school day, sets daily goals with the student, and provides praise and tangible rewards when the student achieves goals. Additionally, the student checks in with teachers at the end of each class period (or another specified interval) to receive feedback and a rating on a daily progress report (DPR) about how well he or she met behavioral expectations. Because CICO is not resource intensive, it can be quickly implemented with groups of students in need of more support than the universal system offers. CICO’s efficiency, practicality, and effectiveness make it a valuable intervention strategy with which teacher educators can equip their teacher candidates.

**Research summary.** CICO has a limited but developing evidence base, including several single-subject studies and two quasi-experiments. Two studies illustrate some of the important findings regarding CICO. Simonsen, Myers, and Briere (2011) conducted a quasi-experiment with 42 students with frequent behavior problems (27 treatment, 15 control) in an urban middle school that was already implementing the primary tier of SWPBS with high fidelity. Students who participated in CICO exhibited greater reductions in off-task behaviors than their comparison peers. Further, although teachers rated CICO’s effectiveness only slightly better than typical practice, they found BEP easier to implement.
McIntosh, Campbell, Carter, and Dickey (2009) also conducted a quasi-experiment, implementing CICO for 34 elementary school students. In this study, teachers used the Functional Assessment Checklist for Teachers and Staff (FACTS) to formulate a hypothesized function for each participating student’s problem behavior. Similar to previous findings (March & Horner, 2002), CICO’s effectiveness interacted with the problem behavior’s hypothesized function. Essentially, students assumed to have attention-maintained behavior \((n = 18)\) displayed significant improvements in problem behavior, pro-social behavior, and ODRs while students assumed to have escape-maintained behavior \((n = 16)\) did not exhibit such improvements. In light of this finding, behavioral function may be an important consideration while determining which students would benefit most from this secondary intervention.

In addition to these findings, several studies have demonstrated similar CICO effectiveness when implemented by district personnel with typical school resources and less researcher involvement (e.g., Filter et al., 2007; Todd, Campbell, Meyer, & Horner, 2008). In these studies, school professionals implemented the critical components of CICO with fidelity and elicited positive responses from their students, indicating that CICO is a feasible secondary intervention for school professionals to incorporate.

**Implications for application.** CICO involves several daily steps.

**Step 1.** Each morning, participating students meet with their adult mentors for a few minutes. Mentors encourage the students, review their previous day’s performance, remind the students of their behavioral goals, and give the students their DPRs.

**Step 2.** Students give the DPRs to their teachers at the start of each class period. At the end of the period, teachers meet with the students to provide feedback and rate the students’ behaviors using the DPRs.
**Step 3.** At the end of the day, students meet with their mentor teachers for a few minutes to receive reinforcement and determine if they met their daily point goals.

**Step 4.** The students take home copies of their DPRs to check in with their parents and obtain signatures.

In addition to these steps, a CICO team meets regularly to analyze DPR data to ensure that students are making adequate progress and determine any needed changes to the intervention.

**Check, Connect, and Expect**

**Practice defined.** CCE is a Tier 2 intervention program designed to improve the social behaviors of students who are at risk for school failure and prevent them from developing emotional and behavioral disabilities (Cheney et al., 2009). A coach—often a trained paraprofessional—works with identified students, meeting with them at the beginning and end of the school day to provide support and reinforcement. During the day, students carry a behavioral report card that allows their teachers to provide frequent, positive feedback. When necessary, the coach meets with individuals or small groups of students to provide behavioral instruction (e.g., social skills).

Coaches and teachers have found CCE to be easy to learn and use, and they appreciate the program and have seen positive results with the majority of students who participate. Because CCE is practical for teachers and effective for students, the program is a valuable Tier 2 intervention to disseminate to pre-service teachers.

**Research summary.** Although built upon other practices with an array of empirical evidence, including Check and Connect (Sinclair, Christenson, Evelo, & Hurley, 1998); BEP (Crone et al., 2010); and DPRs (Davies & McLaughlin, 1989), CCE is a practice with limited evidence. A randomized controlled trial has provided some evidence of the program’s
effectiveness (Cheney et al., 2009). Cheney and colleagues (2009) implemented CCE for 2 years in 18 urban elementary schools that were matched and randomly assigned to treatment or comparison conditions. During the CCE program, 207 students (121 treatment, 86 comparison) in Grades 1-3 were identified using the Systematic Screening for Behavior Disorders (SSBD). Sixty percent of the treatment students graduated from CCE, demonstrating improved social skills and making more significant decreases in problem behaviors than their non-graduating and comparison peers.

**Implications for application.** CCE has several essential components, including (a) a well-trained coach implementing the program; (b) an emphasis on positive interactions and relationships among the coach, students, and teachers; (c) systematic, data-based monitoring of students’ behavioral performance; (d) problem solving and social-skills instruction; (e) frequent, positive reinforcement from the coach and teachers when students achieve goals; and (f) involvement of parents through the daily report card.

In the CCE program, a trained coach provides support for a group of 20 to 25 students within a school. The coach meets with students for 2 to 3 min each morning to (a) ensure that they are prepared for class, (b) review their daily goals, and (c) give them their DPRs. The DPR includes several clearly defined, school-wide behavioral expectations. Teachers use the DPR to rate the students on a 4-point Likert scale for each expectation at intervals (e.g., class periods) throughout the day. Teachers review the DPR with the students at the end of each interval, using this opportunity to provide positive and corrective feedback and encouragement. At the end of the day, students meet again with the coach to review their overall DPR score, receive reinforcement, and set goals for the next day. Students take the DPR home to receive a signature and planned reinforcement from their parents. The coach regularly analyzes the DPR data to
determine how to best support students and meets with students who are having difficulty reaching their daily goals to provide 15-min problem-solving and social-skills instruction. Students who successfully meet their goals for 8 weeks progress into a self-monitoring stage before graduating from the program.

First Step to Success

**Practice defined.** FS is an early intervention program that aims to give at-risk students a strong beginning to their education, strengthening their engagement and involving their parents in a collaborative relationship with their schools (Walker et al., 1998). FS targets students in Grades K-3 who enter school with patterns of challenging behaviors. The program comprises three core components: (a) universal screening, (b) classroom intervention, and (c) in-home parent training. One feature of the program is that it harnesses the influence of three key social agents who can have the greatest impact on a child’s development. Parents, teachers, and peers all have clear roles in the intervention process to support social and academic success for an at-risk child.

Early intervention efforts are critical for the success of students who begin school already at risk for chronic behavior problems. FS leverages important relationships for students, equipping parents, teachers, and peers to make a positive impact. Pre-service teachers, in particular, may benefit from understanding the advantages of early intervention and may learn about how they can participate in FS to improve the social and academic outcomes of their students.

**Research summary.** There is an extensive evidence base supporting the benefits of FS, including single-subject studies, quasi-experimental designs, and multiple randomized controlled trials (e.g., Diken, Cavkeytar, Batu, Bozkurt, & Kurtyilmaz, 2010; Walker et al., 1998; Walker et al., 2009) that have shown positive effects on students’ behaviors, social skills, and academic
engagement. Walker, Severson, and colleagues (2014) provided a thorough review of the studies completed to date.

One large-scale national effectiveness study of FS was conducted across five states and 48 schools (Sumi et al., 2013). The schools were randomly assigned to intervention or control conditions (142 intervention students, 144 comparison students). Other than providing initial training, the researchers had limited involvement in implementing FS. Although implementation fidelity was somewhat lower than in previous studies in which researchers were more heavily involved, students in the intervention group still exhibited significant gains in their pro-social behaviors and academic engagement and decreases in their problem behaviors compared to their peers in the control group. Further, both teachers and parents were satisfied with the program and student outcomes.

**Implications for application.** Implementation of FS includes screening, intervention, and parent training. Initially, schools must conduct a universal screening of kindergarten students using one of the multiple screening options to identify students with emerging anti-social behaviors. Next, a behavioral coach coordinates classroom interventions. During the first 5 program days, the coach implements the program in the classroom before handing it off and providing support to the primary teacher for the next 25 program days. The student receives points and praise for appropriate behavior on a frequent interval during instruction (e.g., every 30 s) along with group and home contingencies. If the student receives enough points, the whole class receives a reward, and the student receives a reinforcer at home, leveraging peer and parent influence. When the student successfully completes 20 program days, the contingencies are faded for the final 10 days. Additionally, during 6 weeks of the program, the coach provides weekly, in-home instruction to the parents about fostering various school success skills,
including communication and sharing in school, cooperation, limit setting, problem solving, friendship making, and confidence building. In addition to teaching these skills, the in-home component emphasizes establishing a strong, positive relationship between the school and parents.

**Tertiary Interventions**

Tertiary interventions are intensive interventions designed to meet the individual needs of students who are non-responsive to primary prevention and secondary interventions. Two critical features of tertiary interventions are that they are individualized, meaning that they are designed to meet the unique needs of the student within a particular setting (e.g., large group math instruction), and (b) the intervention addresses the function of the behavior.

Unlike primary prevention strategies (e.g., classroom management) and secondary interventions, tertiary interventions are directly based on an assessment, not a prescribed strategy or program. As such, the interventions described below are assessment-to-intervention processes resulting in an intervention tailored to the unique needs of the student and the context. First, the critical features of FBA-based interventions, the most widely advocated approach to tertiary intervention development, are described (Scott, Anderson, Mancil, & Alter, 2009). In addition, Prevent-Teach-Reinforce (PTR), an evidence-based, structured functional assessment process with available implementation guidelines, is reviewed.

**Functional Behavior Assessment Interventions**

**Practice defined.** FBA is a systematic process for gathering information to identify the function of a serious behavior or behavior that has been non-responsive to prior prevention and intervention efforts (Cooper, Heron, & Heward, 2007; O’Neil, Albin, Storey, Horner, & Sprague, 2015). Typically, FBA is conducted by an expert well versed in applied behavior analysis (ABA; e.g., behavioral specialist, school psychologist, trained special education teacher). FBA
is an assessment process that leads to the development of a behavior intervention plan (BIP);

FBA is not an intervention (Cooper et al., 2007).

At its core, FBA assesses the relationship between behavior and the environment. Specifically, FBA attempts to identify the function, or purpose, of the behavior. The function of a behavior is the type and source of reinforcement that is maintaining the occurrence and recurrence of the problem behavior (Cooper et al., 2007). There are two primary functions of problem behavior: (a) to get something or (b) escape something (Umbreit, Ferro, Liaupsin, & Lane, 2007). For example, a student may become verbally aggressive with his or her teacher to escape an academic task demand or because he or she wants the social attention. The goal of FBA is the development of a BIP, based on the function of the behavior, to reduce the occurrence of a challenging behavior and increase the occurrence of an alternative, or replacement, behavior that results in the same or similar outcomes (Conroy & Stichter, 2003).

The logic of FBA is based on principles of ABA—specifically, the functional relationships between antecedent stimuli, a behavior, and its maintaining consequence (Lewis, Lewis-Palmer, Newcomer, & Stichter, 2004). FBA is an assessment procedure for identifying both antecedent stimuli (i.e., environmental triggers) and maintaining consequences to develop interventions to reduce or increase the likelihood that a target behavior occurs and teach a new alternative behavior for access to the desired consequence.

**Research summary.** FBA has been well researched for more than 30 years, resulting in a large body of empirical research. However, most of the evidence is based on single-subject research. Three meta-analyses have been conducted synthesizing the FBA-based intervention empirical literature. Carr and colleagues (1999) synthesized FBA-based interventions for
individuals with developmental disabilities. Their review included studies published between 1985 and 1996 and identified 109 single-subject research studies conducted with individuals with cognitive impairment and/or autism. The 109 studies included 230 participants, with the majority exhibiting self-injurious behaviors. Overall, the authors found an effect size of 3.0, with stronger effects found for individuals with higher IQs.

Goh and Bambara (2010) conducted a meta-analysis of FBA-based interventions in school settings. They identified 83 single-subject studies with 145 participants with and without disabilities, including autism, cognitive impairment, and emotional and/or behavioral disorders. Overall, they found an effect size of 88% based on percentage of non-overlapping data points. The results were consistent across student characteristics, including disability status.

Gage, Lewis, and Stichter (2012) conducted a meta-analysis of FBA-based interventions conducted in schools with students receiving special education services for emotional and/or behavioral disorders or related disabilities (e.g., attention deficit hyperactivity disorder [ADHD]). Sixty-eight single-subject studies were identified, and a total of 148 students were included. Students exhibited some problem behaviors, including off-task behavior, classroom disruptions, physical aggression, and verbal aggression. Overall, the meta-analysis found an effect size of 2.98. More specifically, FBA-based interventions reduced problem behaviors by an average of 70.5%.

**Implications for application.** Although there is some variation, FBA generally consists of seven steps (Alberto & Troutman, 2012; Sugai, Lewis-Palmer, & Hagan-Burke, 2000). First, information is collected via interviews, rating scales, and archival reviews. This initial information is used to develop summary statements about the behavior and the environment. The summary statement is a summary and hypothesis that includes four components:
(a) definition of the problem behavior, (b) triggering antecedent, (c) maintaining consequences, and (d) setting events. Next, formal direct observations are conducted to confirm the hypotheses in the summary statements. Then, competing pathways are developed to identify (a) a desired replacement behavior (i.e., behavioral objective); (b) an alternative replacement behavior that functions like the problem behavior; and (c) the consequences available in the environment. Then, based on the competing pathways summary, an individualized BIP (also called behavior support plan or positive behavior support plan) is developed. The BIP must include procedures for teaching the desired behavior and alternative replacement behavior and procedures for manipulating antecedents and consequences. Once the BIP is developed, clear procedures for full implementation of the plan should be developed. Last, the BIP should be monitored, including the fidelity of implementation of the procedures and student behavior, to evaluate the effectiveness of the behavior support plan to address the problem behavior.

Many different behavior management interventions can be used in BIPs. One such intervention is behavior contracting (Bowman-Perrott, Burke, de Marin, Zhang, & Davis, 2015), which involves (a) clearly stated behavioral expectations, (b) clear reward for meeting expectation, and (c) consequences for not meeting the expectation. Another intervention that can be used in BIPs is the use of differential reinforcement of alternative behavior; with this intervention, one behavior is placed on extinction, and another behavior is reinforced (Vollmer & Iwata, 1992). It is beyond the scope of this review to describe the myriad interventions that can be used in BIPs. Nonetheless, the key is that the intervention is directly tied to the function of the behavior.

**Prevent-Teach-Reinforce**

**Practice defined.** PTR is a standardized, collaborative model for providing intensive, tertiary support for students with chronic challenging behaviors (Dunlap et al., 2010). School
personnel have tended to use reactive and punitive behavior support strategies, which are ineffective and may reinforce problem behaviors; however, PTR includes a step-by-step process to guide a team of teachers through the development of positive, function-based interventions. The team assesses the function of the problem behavior and then develops individualized BIPs that include manipulating behavioral antecedents (i.e., Prevent); teaching replacement behavior (i.e., Teach); and arranging consequences (i.e., Reinforce) to improve the probability that students will successfully improve their behavior.

Although schools are complex environments that present teachers with many challenges, PTR is a manualized method that improves the likelihood that school professionals will develop effective behavior supports for the students who need them most. As such, knowledge of PTR implementation is a valuable skill that pre-service teachers can bring with them into any school.

**Research summary.** PTR is a relatively new model for tertiary behavior support; therefore, it currently has a limited evidence base. To date, two studies—one randomized controlled trial (Iovannone et al., 2009) and one single-subject study (Strain, Wilson, & Dunlap, 2011)—have been published, demonstrating the model’s effectiveness with students with challenging behavior in Grades K-8. Iovannone and colleagues (2009) worked with 65 schools across five school districts and two states, identifying 231 students (126 treatment, 105 comparison) with significant problem behaviors. After 2½ months in the PTR treatment, students had significantly less problem behavior and improved social skills and academic engagement compared to their control-group peers. Strain and colleagues (2011) studied the effects of the PTR model on three elementary school students with autism who were selected from the randomized controlled trial. Each of the students exhibited rapid improvements with reduced problem behavior and increased task engagement.
Implications for application. Researchers have created a manual (Dunlap et al., 2010) to guide school teams through the process of implementing PTR. PTR involves five sequential steps: (a) teaming, (b) goal setting, (c) assessment, (d) intervention, and (e) evaluation.

Step 1. Initially, schools form teams that include the target student’s primary teachers, a behavioral consultant, and other involved parties (e.g., administrators, parents, counselors). Team members should understand the PTR process and agree upon their individual responsibilities.

Step 2. The team clearly defines social, behavioral, and academic goals for the student, including targets for reduction (i.e., problem behaviors) and instruction (i.e., pro-social or pro-academic behaviors). They also establish a feasible method for daily measurement of the student’s progress.

Step 3. Each team member participates in an assessment (i.e., a form of FBA) for each identified problem behavior. A 20-question checklist attends to antecedent variables, function and replacement variables, and consequence variables related to the problem behavior.

Step 4. After synthesizing the results of their assessments, team members develop a BIP using menus of strategies that target each PTR core components (i.e., Prevent, Teach, and Reinforce). The behavioral consultant provides training and support to help the primary teacher implement the planned strategies.

Step 5. Team members use data obtained from daily measurement to determine the effectiveness of the intervention plan and make changes as needed to ensure student success.

Conclusion

The goals of this IC were to (a) identify empirically supported intervention strategies at the secondary (i.e., Tier 2) and tertiary (i.e., Tier 3) levels within an MTSS framework and (b) provide an overview of the critical features of each identified intervention. The interventions
all met at least limited evidence-based standards to be included. Overall, three secondary interventions and two tertiary assessment-to-intervention strategies were discussed. All five interventions have established empirical evidence of effectiveness and available implementation guidelines.

Although the interventions included in this IC represent the best available approaches for addressing social and behavioral non-response within an MTSS framework, there are other approaches that are described and evaluated in the professional literature that were excluded due to limited research support or lack of utility for teachers. For example, cognitive-behavioral interventions were excluded because no available research describes school-based implementation within an MTSS framework, and community or school-based mental health experts, not general or special education teachers, often implement these interventions. Interventions with limited evidence bases, such as restorative justice and exclusionary discipline strategies (e.g., alternative placements), were also excluded.

Teachers, particularly special education teachers, must efficiently and effectively address school-wide or classroom behavior problems to ensure student engagement and safety. Using an MTSS framework for identifying students in need of intervention and implementing interventions along a continuum of intensity can increase the likelihood that all students are successful and increase efficiency of intervention delivery. The strategies described are not exhaustive, but they are EBPs that teachers can implement to reduce problem behaviors and increase student performance.
References


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Appendix A

Innovation Configuration for Evidence-Based Practices for Classroom and Behavior Management: Tier 2 and Tier 3 Strategies

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<th>Essential Components</th>
<th>Implementation Levels</th>
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<td>Level 0</td>
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<td>There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.</td>
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1.0 Functional Behavior Assessment-Based Interventions

1.1 - Define target behavior and replacement behavior.

1.2 - Conduct interviews and create checklists.

1.3 - Observe and summarize behaviors.

1.4 - Develop hypothesis of function.

1.5 - Build behavior support plan/intervention from functional behavior assessment (FBA) information.

1.6 - Implement and evaluate behavior support plan/intervention.
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2.0 Prevent-Teach-Reinforce (Manualized Functional Behavior Assessment)

2.1 - Form a Prevent-Teach-Reinforce (PRT) team.
2.2 - Set goals.
2.3 - Asses.
   • Antecedents (i.e., prevent).
   • Function of problem behavior (i.e., teach).
   • Consequences following behavior (i.e., reinforce).
2.4 - Develop and implement intervention.
2.5 - Evaluate intervention.
### Essential Components

Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.

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### 3.0 Check, Connect, and Expect

3.1 - A well-trained, full-time Check, Connect, and Expect (CCE) coach supports about 20 to 25 students at a time in a school or district.

3.2 - Prioritize daily positive interactions among the coach, students, and teachers.

3.3 - Systematically supervise and monitor students’ social performance.

3.4 - Direct social-skill instruction.

3.5 - Positively reinforce students meeting daily and weekly goals.

3.6 - Involve parents through daily home notes.
## Essential Components

Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.

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### 4.0 The Behavior Education Program/Check In, Check Out

4.1 - Five-step intervention.
- Participating student checks in with adult mentor each morning to review student’s performance from the day before; adult mentor reminds student of behavioral goals and gives student a daily progress report (DPR).
- Student gives the DPR to his/her teacher at the beginning of each designated time interval.
- At the end of the designated time interval, teacher fills out the DPR and provides feedback and positive praise for appropriate behavior.
- At the end of the day, student turns the DPR into adult mentor who calculates total DPR points and delivers award contingent on point goal.
- Student brings the DPR home for parent acknowledgement and signature.
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<th>Essential Components</th>
<th>Implementation Levels</th>
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<td><strong>Instructions:</strong> Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.</td>
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<td>There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.</td>
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### 5.0 First Step To Success

5.1 - Manualized classroom-based intervention with three components: (a) universal screening, (b) classroom intervention, and (c) parent training.

5.2 - Screening.
- Identify students who meet pre-determined eligibility criteria for program participation.

5.3 - Classroom intervention.
- Classroom intervention is coordinated in school by a behavioral coach.
- Intervention is based on group-dependent contingencies.
- Behavioral coach conducts the first 5 days of classroom intervention; the teacher takes over on Day 6.
- Classroom intervention lasts 30 days.

5.4 - Parent training
- Parent consents to participate.
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5.0 First Step To Success

- Parent defines home-based rewards.
- Parent delivers home-based award contingent on student school-based performance.
Appendix B

Levels of Support for Evidence-Based Practices for Classroom and Behavior Management: Tier 2 and Tier 3 Strategies

<table>
<thead>
<tr>
<th>Essential Components</th>
<th>CEEDAR Level of Evidence</th>
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<tbody>
<tr>
<td><strong>Tier 3 (Tertiary)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.0 Functional Behavior Assessment-Based Interventions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 - Define target behavior and replacement behavior.</td>
<td>Strong</td>
<td>Carr et al., 1999; Gage et al., 2012; Goh &amp; Bambara, 2012</td>
</tr>
<tr>
<td>1.2 - Conduct interviews and create checklists.</td>
<td></td>
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<tr>
<td>1.3 - Observe and summarize behaviors.</td>
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<tr>
<td>1.4 - Develop hypothesis of function.</td>
<td></td>
<td></td>
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<tr>
<td>1.5 - Build behavior support plan/intervention from functional behavior assessment (FBA) information.</td>
<td></td>
<td></td>
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<tr>
<td>1.6 - Implement and evaluate behavior support plan/intervention.</td>
<td></td>
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<tr>
<td><strong>2.0 Prevent-Teach-Reinforce (Manualized Functional Behavior Assessment)</strong></td>
<td></td>
<td>Iovannone et al., 2009; Strain et al., 2011</td>
</tr>
<tr>
<td>2.1 - Form a Prevent-Teach-Reinforce (PRT) team.</td>
<td>Limited</td>
<td></td>
</tr>
<tr>
<td>2.2 - Set goals.</td>
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| 2.3 - Assess.  
  - Antecedents (i.e., prevent).  
  - Function of problem behavior (i.e., teach).  
  - Consequences following behavior (i.e., reinforce). | | |
<p>| 2.4 - Develop and implement intervention. | | |
| 2.5 - Evaluate intervention. | | |
| 2.5 - Interpret trends on graphs and make decisions. | | |</p>
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<tr>
<td><strong>Tier 2 (Secondary)</strong></td>
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<td>Cheney et al., 2010; Cheney et al., 2009</td>
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<tr>
<td><strong>3.0 Check, Connect, and Expect</strong></td>
<td></td>
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<tr>
<td>3.1 - A well-trained, full-time Check, Connect, and Expect (CCE) coach supports about 20 to 25 students at a time in a school or district.</td>
<td>Limited</td>
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<tr>
<td>3.2 - Prioritize daily positive interactions among the coach, students, and teachers.</td>
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<tr>
<td>3.3 - Systematically supervise and monitor students’ social performance.</td>
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<td>3.4 - Direct social-skill instruction.</td>
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<td>3.5 - Positively reinforce students meeting daily and weekly goals.</td>
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<td>3.6 - Involve parents through daily home notes.</td>
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### Essential Components

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#### CEEDAR Level of Evidence

Limited

#### Supportive Research

Campbell & Anderson, 2008; Filter et al., 2007; Hawken & Horner, 2003; Hawken et al., 2007; McIntosh et al., 2009; Simonsen et al., 2011; Todd et al., 2008
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<td><strong>5.0 First Step to Success</strong></td>
<td>Strong</td>
<td>Diken et al., 2010; Sprague &amp; Perkins, 2009; Walker et al., 1998; Walker et al., 2009; Walker, Small, et al., 2014</td>
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