MEASURING FIDELITY OF CORE FEATURES OF TIER 2 SYSTEMS AND PRACTICES IN SCHOOLS

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Purpose
Even when schools are implementing Tier 1 systems and practices with high fidelity, some students need more targeted and systematic support. Tier 2 practices provide students with an additional layer of rapid and efficient behavior support. However, school teams will need to regularly measure the fidelity of both core features of these Tier 2 practices and the Tier 2 systems supporting those practices. This brief describes the core features of Tier 2 systems and practices and provides examples of researcher-developed measures used to assess them.
Importance of Tier 2 PBIS

Effective Tier 1 schoolwide systems and practices are defining elements of Positive Behavioral Interventions and Supports (PBIS). Yet even when Tier 1 is in place with fidelity, some students will need more support to be successful. Research indicates that many students do not require intensive Tier 3 individualized supports and can be successful with lower-intensity Tier 2 options (Hawken et al., 2015; Wolfe et al., 2016).

When done well, Tier 2 supports can provide proactive intervention that prevents more severe challenging behavior and improves the effectiveness and efficiency of Tier 1 and Tier 3 support efforts. However, many school and district teams struggle to implement Tier 2 supports with efficiency (Kittelman et al., 2018).

The purposes of this brief are to (a) describe the core features of Tier 2 organizational systems and practices, (b) provide examples of measures teams can use to assess implementation of Tier 2 core features, (c) offer considerations for timing and frequency for measuring Tier 2 systems and practices, and (d) provide guidance for school teams on how to use fidelity data (both for systems and practices) for continuous improvement.

Our emphasis here is on the central role of efficient fidelity measures for Tier 2 efforts. Other resources outline specific Tier 2 strategies and support options (see Check In Check Out: A Targeted Intervention, Social Skills Instruction at Tier 2, and Classroom Integrated Academics and Behavior Brief). Regardless of the Tier 2 approach adopted, regular assessment of fidelity is important for effective and equitable implementation.

Key Takeaways

- Identifying core features of Tier 2 systems and practices can help school teams to evaluate whether they are implementing them with fidelity.
- School teams can use the Tiered Fidelity Inventory (TFI; Algozzine et al., 2014) to measure core features of Tier 2 systems and identify specific measures for measuring core features of Tier 2 practices.
- Tier 2 practices require greater frequency of measurement and adjustments than Tier 2 systems.

Core Features of Tier 2 Organizational Systems

The PBIS framework emphasizes the “core features” of school culture that are most helpful for students (Horner & Sugai, 2015). A hallmark of PBIS is attention to the organizational systems needed for sustained implementation of effective practices (Horner & Sugai, 2015). Similar to the advantages of having Tier 1 practices in place prior to adopting Tier 2 practices, the implementation of Tier 2 organizational systems benefits from the organizational systems installed at Tier 1 (Kittelman et al., 2022). For example, Tier 1 organizational systems ensure that there is administrative support for PBIS, a schoolwide team established and trained, professional development on Tier 1 practices for all school personnel is provided, and schoolwide teams collect and use data for data-based decision making. It is common for teams (e.g.,
state, district) to assess whether schools are meeting readiness criteria for the implementation of Tier 2 systems prior to implementing (Kittelman et al., 2022). Although they vary across U.S. states, many readiness criteria include schools (a) having Tier 1 systems and practices already in place (school-wide and classroom), (b) implementing Tier 1 with fidelity, and (c) demonstrating improved outcomes through Tier 1 implementation (Kittelman et al., 2022). Building from these Tier 1 organizational systems, Tier 2 organizational systems are designed to improve the effectiveness of Tier 2 behavior practices. These Tier 2 organizational systems include:

1. **Student identification systems**: For students to receive Tier 2 practices, school personnel will need systems in place for identifying students through data-based decisions and teacher requests for assistance. It is critical that all school personnel understand which students would be most likely to benefit from Tier 2 supports and the process for referring students for support. The school team may then collect additional data (e.g., discipline data review, a brief behavioral assessment interview with referring staff) to determine if the student would benefit from Tier 2 supports, which Tier 2 practice is the best fit, or whether Tier 3 supports are needed.

2. **Tier 2 or Tier 2/3 team**: Implementing Tier 2 behavior support requires dedicated time for coordination and team decision making. These teams may include a standalone Tier 2 or a combined Tier 2/3 team (Kittelman et al., 2021). The specifics differ across Tier 2 intervention options, but a central message is that Tier 2 supports are not likely to be effective if they are an add-on task for overloaded personnel. Effective Tier 2 supports typically require a coordinator and a team that meets on a regular schedule using effective team operating protocols (see PBIS Forum 2021: Overview & Logic of District-wide Implementation and PBIS Forum 2021: Essential Features of Tier 2 Supports & Reflections from District-wide Implementation).

3. **Data system**: Tier 2 supports include data systems for monitoring (a) fidelity, (b) student success, and (c) level of use in the school. The data generated by these efforts guides team decision-making about improving implementation and adapting Tier 2 supports (including adding Tier 3 supports).

4. **Data-based decision making**: Tier 2 practices within PBIS include the collection of data about fidelity of implementation (are we doing what we proposed?) and student social-emotional-behavioral outcomes (is it working?). These data are used to ensure high-fidelity implementation and adjust Tier 2 supports to meet student needs. At Tier 2, these teams are trained to regularly review student-level data and having conversations around data-based decision making (Kittel et al., 2018).

5. **Professional development for Tier 2 practices**: Because it is possible for 5-10% of students in a school to be receiving a Tier 2 practice, it is critical that all school personnel are trained in their role of how to participate in implementing Tier 2 practices. For example, it is common for all school personnel to receive initial training at the beginning of the school year and then also receive a brief refresher or reminder of their responsibilities prior to a student participating in a Tier 2 practice in their classroom.

6. **Fading procedures**: Teams will need to establish procedures in place for systematically fading Tier 2 support as students begin to master their behavioral goals (Horner et al., 2021). Prior to
making individual student level decisions for fading strategies (see p. 6), teams will want to establish general guidelines for when (e.g., after 8-12 weeks of students receiving 80% or more of their points for meeting daily behavioral expectations) and how (e.g., decrease dosage of lessons, practice sessions or student-teacher check-ins, increase student self-monitoring) to fade Tier 2 practices from students.

7. **Coordinated with Tier 1 and Tier 3:** Tier 2 practices assume that Tier 1 procedures are in place and will be available to support gains developed through Tier 2 strategies. Similarly, Tier 2 practices may prove insufficient for some students, who will require more individualized and intensive supports (Tier 3).

### Core Features of Tier 2 Practices

Similar to the advantages of having Tier 1 systems in place prior to installing Tier 2 systems, at Tier 1 these features include familiar practices such as (a) defining and teaching schoolwide behavior expectations, (b) regularly acknowledging desired behavior, and (c) using instructional responses to unwanted behavior (e.g., differential reinforcement of alternative behavior, nonverbal/verbal reminder; Leach & Helf, 2016). Tier 2 practices have a similar set of core features that build on the assumption that a school is invested in PBIS and has already established solid Tier 1 practices and systems. Schools can select from a variety of Tier 2 practices, such as social skills groups, tutoring on academic and organizational skills, and variations on Check-In Check-Out (CICO; Hawken et al., 2021; Nese et al., 2021), but the central logic of investing in Tier 2 supports lies in improving the speed and efficiency with which behavior support is delivered to students with modest behavior support needs (see Tiered Decision Guidelines for Social, Behavioral, and Academic Behavior: Guidance for Establishing Data-Based Teams Across the Tiers and PBIS Forum 2021: Small Group Social Skills Instruction & Self-management). When selecting Tier 2 practices, it is important for teams to note that Tier 2 practices are most effective when they include the following core features:

1. **Continuously available:** Tier 2 supports are programs that are organized to be used similarly across many students (in scheduled sets of groups [e.g., social skills small groups] or individually). They are continuously available, meaning (a) all school staff have received training on the Tier 2 referral process and (b) schools have the staffing and management systems (e.g., Tier 2 team members who receive referrals for and meet regularly to coordinate support) in place that allow for rapid access for new students who require targeted support.

2. **Function based:** A key decision for any Tier 2 team is to determine if a student is likely to benefit from Tier 2 support given the level of social-emotional-behavioral support needs and the perceived function of unwanted behavior. For example, a student who engages in attention seeking behavior may be a good fit for CICO, which provides additional opportunities to receive positive adult feedback throughout the school day, whereas a student whose challenging behavior is maintained by escape from difficult academic demands may benefit more from Tier 2 academic support and opportunities to take scheduled breaks.

3. **Explicit instruction:** Tier 2 practices include teaching (or re-teaching) expected and desirable behavior. The distinction for Tier 2 supports is that students receive instructional support around
behavior expectations of greatest value for them. This often includes not just instructional sessions but embedding prompts throughout the day that encourage pro-social behavior, and in some cases increased opportunities to practice appropriate responses.

4. **Repeated feedback:** Tier 2 practices will include a strategy for increasing the rate and precision of positive recognition that a student receives for expected behavior (e.g., daily feedback on meeting school-wide behavior expectations and individual behavior goals). All feedback should be linked to schoolwide expectations (e.g., Respect, Responsibility, and Resourcefulness).

5. **Corrective consequences:** Tier 2 practices include strategies for (a) identifying challenging behavior, (b) redirecting that behavior, and (c) minimizing the likelihood that challenging behaviors will be inadvertently reinforced (by peers or adults).

6. **School-family communication:** Tier 2 practices are designed to strengthen school and family partnerships by including family members in the intervention process when their child is receiving a Tier 2 practice. For example, family members may help Tier 2 or Tier 2/3 team members with setting individual student behavior goals for their child, providing additional feedback to their child on their behavior goals after school, and receiving regular feedback from the school on their child's participation in a Tier 2.

7. **Fading strategies:** Tier 2 practices are intended to be implemented over a relatively short time period (e.g., 8-12 weeks) and provide students with the skills they need to be successful with Tier 1 supports. As such, effective Tier 2 practices include clear criteria and a process for gradually reducing the level of support intensity over time (fading), using individual student data as a guide. Effective fading strategies acknowledge that removal of behavior support is seldom a linear process, and both increases and decreases in supports may be required over time to maintain and build on student progress.

### Check-In/Check-Out (CICO) as an Exemplar

To illustrate the importance of measuring critical features of Tier 2 systems and practices, we provide examples from two ongoing projects funded by the Institute of Education Sciences (IES) focused on implementing CICO in schools for students at risk for emotional and behavioral disorders (EBD; PI: Tim Lewis; [R324A190046](#)) and for students in high schools (PI: K. Brigid Flannery; [R305A180015](#)). Although these projects differ in their targeted student groups, both stress the importance of (a) building and installing organizational systems prior to implementing CICO and (b) conducting frequent progress monitoring of CICO implementation fidelity.

CICO is the most widely implemented Tier 2 CICO behavior practice in U.S. schools (Nese et al., 2021; over 3,500 schools using CICO-SWIS during the 2022-23 school year; Educational and Community Supports, PBISApps, 2021). CICO is a multicomponent practice designed to be delivered within 8-12 weeks, with the goal of teaching students the skills needed to successful with support at Tier 1. Within CICO, students (a) participate in daily morning check-ins and with coordinators/facilitators to review behavioral expectations and receive a daily point card, (b) use the daily point card to receive written and verbal feedback on behavioral expectations from their teachers, (c)
complete check-outs with their coordinator/facilitator at the end of the day to discuss their performance, and (d) provide their parents/guardians with a daily progress summary for additional feedback (Hawken et al., 2021).

**Measuring Fidelity of CICO Organizational Systems and Practices**

Table 1 provides a summary of systems implementation fidelity measures and Table 2 provides a summary of practice-level implementation fidelity measures used across the Lewis et al. and Flannery et al. projects focused on CICO. In schools implementing PBIS, teams use tools such as the Tiered Fidelity Inventory (Algozzine et al., 2014) to regularly assess core features of systems at Tier 1 (e.g., school-wide team in place, administrator support, data systems, teams using data for decision-making, ongoing professional development) and organizational systems at advanced tiers (Tiers 2 and 3). For example, teams can use the Tier 2 scale of the TFI to assess implementation of systems-level features such as teaming structures, nomination systems for students needing Tier 2 supports, and data systems for progress monitoring at Tier 2. Teams can also use measures to assess implementation of specific Tier 2 practices (e.g., CICO Fidelity of Implementation Measure [FIM]; Hawken et al., 2021; MO SW-PBS, 2018). For example, the CICO-Secondary Intervention Development Checklist, adapted from the MO SW-PBS Tier 2 team workbook (MO SW-PBS, 2018), has specific items assessing strategies for providing explicit instruction to school personnel and students on CICO procedures and decision rules and documented procedures for fading students from CICO.

**Table 1. Review of Measures Assessing Tier 1 and 2 Organizational Systems Fidelity for CICO**

<table>
<thead>
<tr>
<th>Core Feature</th>
<th>TFI Tier 1</th>
<th>TFI Tier 2</th>
<th>CICO-Secondary Intervention Development Checklist</th>
<th>CICO Fidelity of Implementation Measure (CICO-FIM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nomination protocol</td>
<td></td>
<td>●</td>
<td>⋅</td>
<td>⋅</td>
</tr>
<tr>
<td>Tier 2 team</td>
<td></td>
<td>●</td>
<td>⋅</td>
<td>⋅</td>
</tr>
<tr>
<td>Data system</td>
<td>●</td>
<td></td>
<td>⋅</td>
<td>⋅</td>
</tr>
<tr>
<td>Data decision-making</td>
<td>●</td>
<td>●</td>
<td>⋅</td>
<td>⋅</td>
</tr>
<tr>
<td>Professional development</td>
<td>●</td>
<td>●</td>
<td>⋅</td>
<td>⋅</td>
</tr>
<tr>
<td>Fading procedures</td>
<td></td>
<td></td>
<td></td>
<td>⋅</td>
</tr>
<tr>
<td>Coordinated with Tiers 1 and 3</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2 also shows how specific measures that can be used to assess fidelity of core CICO components that occur daily during student participation. During interactions between facilitators/coordinators and students, both measures focus on (a) assessing positive interactions between school personnel and students, (b) providing explicit instruction on behavior expectations, (c) providing student with their daily point card, and (d) ensuring students are ready to participate. Similarly, both measures to assess key components between students and teachers that include (a) prompting teachers to complete the daily point card, (b) teachers (and students for CICO-Secondary) completing the point card, and (c) teachers providing verbal feedback to students. During the check-out component, measures focus on assessing (a) positive interactions between the coordinators/facilitators and students, (b) reviewing daily teacher ratings, and (c) providing feedback to the student. For families/guardians of elementary students, there is a built-in fidelity measure, as students return copies of their progress reports signed by family members daily. For older students this may be in the form of an electronic progress report sent to family members bi-weekly or weekly.

**Recommendations for Practice**

**Timing and Frequency of Measuring Tier 2 Fidelity**

Effective and sustained use of Tier 2 systems and practices requires regular measurement by school teams of the core features of Tier 2 systems and practices. This measurement should be simple (as part of normal team meetings), quick (15-30 min), and immediately useful for the school teams. Measuring implementation fidelity of Tier 2 systems can occur

<table>
<thead>
<tr>
<th>Core Feature</th>
<th>Check-In Facilitator/Coordinator Fidelity Checklist</th>
<th>Check-Out Facilitator/Coordinator Fidelity Checklist</th>
<th>Teacher/Student Fidelity Checklist or Electronic Point Card</th>
<th>CICO Fidelity of Implementation Measure (CICO-FIM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuously available</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Function based</td>
<td></td>
<td></td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Explicit instruction</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Iterative feedback</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Corrective consequences</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Family-school communication</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Fading procedures</td>
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at different times of the school year depending on the needs of a school. For example, at the beginning of the school year, PBIS teams typically prioritize evaluating the status of their Tier 1 and 2 systems. Formal assessment may occur annually, or every 2-3 months (Kittelman et al., 2018). However, after initial assessment, systems components targeted for action planning should be regularly assessed by team members, at least informally, during monthly or bi-monthly meetings.

In contrast, measuring implementation of a specific Tier 2 practices begins when students start participating in a specific Tier 2 intervention and continue throughout. As students participate, there is a high priority placed on measuring implementation fidelity of core features in the early stages of intervention (e.g., first week of participating) to ensure the intervention is being implemented consistently and as designed. This more frequent measurement allows Tier 2 team members to make quick adjustments during the implementation process. For example, if initial fidelity scores are low, personnel may retrain students on specific components of the intervention. Additionally, depending on the Tier 2 intervention being used, fidelity data may need to be collected across multiple staff, as well as students. For example, with CICO, implementation should be assessed at the level of the CICO coordinator, the student’s teachers, and the student to ensure all components of the intervention are being implemented as designed. Throughout intervention, the Tier 2 team during regular team meetings (e.g., bi-weekly) can monitor student practice fidelity data and make adjustments to implementation as needed.

**Improving Implementation of Tier 2 Systems**

Once PBIS teams have conducted their first assessment of Tier 1 and 2 PBIS systems for the school year, teams can then develop an action plan to target 2-3 areas for ongoing improvement. Action plans should include:

- Identified area for improvement
- Plan for improving the Tier 2 system(s)
- Timeline for improvement
- Who will be responsible for making the improvements
- Needed professional development for Tier 2 leads and all school staff
- Access to technical assistance to problem solve

To guide improvement efforts, teams can develop action plans designed to improve Tier 2 systems scored low (e.g., “not implemented” or “partially implemented”) on the Tier 2 implementation fidelity measure. For example, if the team determines they lack a formal process for nominating students for Tier 2 services (scored a “0” on TFI item 2.3e), the team could develop an action plan to establish a system so that school personnel and families have a written process for requesting Tier 2 support for their student or child. Members of the Tier 2 team could then identify a process for creating this referral system and notifying school personnel and families how on request assistance. During the next assessment of their Tier 2 systems, the team would then (a) evaluate whether implementation fidelity has improved and (b) identify additional areas for continuous improvement.
Improving Implementation of Tier 2 Practices

For improving implementation of Tier 2 practices, adjustments and adaptations will need to happen more quickly (e.g., same day or week) and with less formality (plan change documented vs. action plan developed). One key benefit of regular (e.g., daily, bi-weekly) collection of practice fidelity data is that decisions on whether changes are needed will not be delayed. For example, a core feature of CICO is students checking in with their assigned CICO coordinator (or facilitator) at the beginning and end of each day to review teachers’ ratings of the student’s daily behavior expectations and receive explicit instruction and feedback. If a CICO coordinator (or facilitator) notes that a student often forgets to check in with their coordinator, the coordinator can troubleshoot with the student prior to the next school day (e.g., remind student to check-in before first period and help the student set a reminder on their cell phone). For CICO coordinators to make quick adjustments to student participation, it will depend on how well their Tier 2 systems include:

- A data system that records and summarizes Tier 2 practice fidelity data efficiently and daily
- A list of strategies implementers can select from to improve student participation (e.g., peer support, re-training student or school personnel on procedures)
- Decision rules (e.g., number of days, level or percent of fidelity needed for implementation of core features) to evaluate whether planned changes were effective at improving implementation

Conclusion

School teams need tools for measuring implementation of the core features of Tier 2 systems and practices. The TFI is useful for measuring the core features of Tier 2 systems and more practice-specific measures (e.g., CICO Fidelity of Implementation Measure) are useful for measuring additional Tier 2 systems supporting specific Tier 2 practices (see Table 1). For measuring daily fidelity in Tier 2 practices, teams will want to identify measures that can assess daily staff implementation and student participation in the core features of the Tier 2 practice. The purpose of this brief was to (a) identify the core features of both Tier 2 systems and practices, (b) review measures used for assessing these core features from two ongoing Tier 2 projects, and (c) offer recommendations for school teams on how use fidelity data action planning and progress monitoring.
References


Embedded Hyperlinks


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