Implementing CICO in High Schools: Usability, Feasibility, & Effectiveness

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&

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Purpose

• Define and describe critical features of Tier 2

• Define critical features of CICO and process

• Describe contextual considerations and adaptations for implementing CICO in High Schools

• Provide data from initial studies implementing CICO-Secondary in high schools
Getting to Know You

Who is here today?

- Teachers?
- School Administrators?
- District Administrators?
- Support Staff (School Psychologists, Behavior Specialists, PBIS Coaches)?
- PBIS Team Members?
- Researchers?
- Who are we missing??
Getting to Know You

What is your level of familiarity with the implementation of Tier 2 supports in high schools?

1. Not Familiar
2. Somewhat Familiar
3. Very Familiar
Critical Features of Tier 2 Interventions & Systems
School-wide PBIS

Primary Prevention:
- School-wide and Classroom-wide systems for all students and all staff in all settings.

Secondary Prevention:
- Systems for targeted or group-based interventions for students needing additional support beyond the Universal or Tier I system.

Tertiary Prevention:
- System for students requiring more intensive and individualized supports for academic, social, or mental health services.
Tier 2 Intervention Critical Features

• Based on and integrated with school-wide systems

• Continuously available with rapid access  Everyone knows the intervention; get support in short time

• Provides additional instruction for student skill development

• Continuous progress monitoring & fidelity checks

• Low effort to implement
  • Generic intervention that supports multiple students
  • Allows students to move back into “green zone”
  • Efficient access to data collection and initial problem solving
Examples of Tier 2 Interventions

- Academic Support Groups
- Social Skills Groups
- Check and Connect
- Homework club
- Check-in Check-out
- ..........
Activity: Think, Pair

Share with a partner:

1) How many Tier 2 interventions is your school implementing?

2) Do they each include all the critical features of Tier 2?

- Integrated with schoolwide systems
- Continuously available
- Provides additional instruction
- Continuous progress monitoring & fidelity checks
- Low effort for staff & students
MTSS / PBIS Elements

- Supporting Staff Behavior
- Supporting Student Behavior
- Supporting Decision Making
- Social Competence & Academic Achievement

OUTCOMES

DATA

PRACTICES

SYSTEMS

EQUITY
Tier 2 Systems

• Teaming Systems
• Nomination & Referral Systems
• Data Systems
• Training and Coaching Systems
All Tier 2 teams need to consider ....

- Infrastructure/staffing
- Data collection
- Selection criteria & referral
- Training for teachers and students (and substitutes?)
- Decisions regarding parent communication
- Decision rules/process for intensifying the intervention
- Decision rules for fading the intervention
MTSS in High Schools: Additional Considerations

**Contextual Influences**

- Size
- Culture
- Developmental Level

**Key Foundational Systems**

- Leadership
- Data
- Communication

**Core Features of Implementation**

**Key HS Focus Areas**

- Social Behavior
- Academic Success
- Personalization / School Belonging
- Freshmen Support

Flannery & Kato, 2012
For More Information on Tier 2 Systems Components

### SWPBIS Tiered Fidelity Inventory

version 2.1

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**Citation for this Publication**


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### Tier 2: Targeted SWPBIS Features

**NOTE:** This section may be completed individually or with other tiers as part of the full Tiered Fidelity Inventory

<table>
<thead>
<tr>
<th>Feature</th>
<th>Possible Data Sources</th>
<th>Scoring Criteria</th>
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| **2.1 Team Composition:** Tier 2 for combined Tier 2 & 3 team includes a Tier 2 systems coordinator and individual able to provide (a) applied behavioral expertise, (b) administrative authority, (c) knowledge of students, and (d) knowledge about operation of school across grade levels and programs. | • School organizational chart  
• Tier 2 team meeting minutes | 0 = Tier 2 team does not include coordinator or all 4 core areas of Tier 2 team expertise  
1 = Tier 2 team does not include coordinator and all 4 core areas of Tier 2 team expertise OR attendance of these members is below 80%  
2 = Tier 2 team is comprised of coordinator and individuals with all 4 areas of expertise, AND attendance of these members is at or above 80% |

| **2.2 Team Operating Procedures:** Tier 2 team meets at least monthly and has (a) regular meeting format/agenda, (b) minutes, (c) defined meeting roles, and (d) a current action plan. | • Tier 2 team meeting agendas and minutes  
• Tier 2 meeting roles descriptions  
• Tier 2 action plan | 0 = Tier 2 team does not use regular meeting format/agenda, minutes, defined roles, or a current action plan  
1 = Tier 2 team has at least 2 but not all 4 features  
2 = Tier 2 team meets at least monthly and uses regular meeting format/agenda, minutes, defined roles, AND has a current action plan |

**Scoring Criteria:** 0 = Not implemented; 1 = Partially implemented; 2 = Fully implemented
Check-in Check-out

CICO
Getting to Know You

What is your level of experience with implementing CICO in secondary settings?

1. Beginning to learn about CICO
2. Training in CICO, but no experience using in HS
3. Have implemented CICO in HS
Essential Features of CICO

Tier 2 Interventions

• Based on and integrated with school-wide systems
• Continuously available ... everyone knows the intervention
• Rapid access to intervention
• Provides additional instruction for student skill development
• Continuous progress monitoring & fidelity checks
• Low effort to implement

CICO

• Provides a daily “check-in” and “check-out” with an adult with student support and problem solving as needed
• Prompts & Promotes positive adult-student interaction - each class period begins with a positive interaction with staff
• Increases the frequency of contingent positive & constructive feedback from adults – available each period
• Increases recognition for expected behavior
Research on CICO

• Widely researched in elementary, with growing body of research in middle schools

• Demonstrated effectiveness at reducing challenging behavior and improving academic outcomes

• Rated as practical, feasible, and effective by school staff and families

(Bruhn et al., 2014; Drevon et al., 2019; Hawken et al., 2014; Maggin et al., 2015; Mitchell et al., 2011; Wolfe et al, 2016)
CICO: Context impacts features

- Daily Student/Coordinator Cycle
- Daily Student/Teacher Cycle
- Team Cycle
Contextual Considerations for Implementing CICO in High Schools
Implementation of SWPBIS in Secondary Settings

HS Contextual Influences  Key Foundational Systems  Core Features of Implementation  Key HS Focus Areas

- Size
- Culture
- Developmental Level

Leadership  Data  Communication

SOCIAL BEHAVIOR
ACADEMIC SUCCESS
PERSONALIZATION / SCHOOL BELONGING
FRESHMEN SUPPORT

Flannery & Kato, 2012
Size & Complexity

- More students ... more teachers
  - Orientation/training for many teachers
  - Distribution of students across teachers
- Complex student schedules (A, B)
  - Examine data by A/B as well as periods
  - Changing expectations across periods
- Large schools/teacher and student populations
  - Where/how student will check-in/check-out
  - Time between class periods
Implementer Support Systems

CICO Coordinator:
- Organize process
- Manage data
- Instruct student
- Assist facilitators
- Train/support teachers

CICO Facilitators:
- Conduct daily CI/CO
- Train/support students
- Multiple locations
Organizational Culture

• Teachers see themselves and students in a different way at secondary
  • All staff training - Link to what they teach and the future
  • Individual teacher training
  • Boosters

• Consistency and explicitness about expectations vary across periods and within periods

• Teacher’s have less in-depth of knowledge of each student – can be difficult to develop connections
Developmental Level

• Students have more autonomy
  • Personal goals, ideas, preferences
  • Interventions must be a collaborative effort
  • Emphasis on self-regulation skills

• Behavior more driven by peer approval/attention than adult

• Don’t want to be viewed as different by peers

• Family involvement changes over time
CICO in High Schools

Survey Data
Kittelman, Monzalve, Flannery, & Hershfeldt (2018)
Survey and Demographics

Characteristics of the CICO survey

- Demographics
- General implementation patterns
- Contextual adaptations

18 high schools participated

- 8 states
- Majority of high schools implementing CICO for:
  - 1-2 years (n = 13)
  - 2-4 years (n = 2)
  - 5 or more years (n = 3)
- Average number of students on CICO was 44 (ranging from 0 – 233)
- 16/18 schools were using CICO for their freshmen and sophomore students
Majority of CICO coaches reported that their school:

- Had procedures in place to train coordinators to use CICO (n = 13/18)
- Used data for decision-making in selection of students suitable for CICO support (n = 16/18)
- Reached Tier I fidelity prior to implementing CICO (n = 12/18)

Believed it was worth their time/effort

- Strongly agree (8/18)
- Agree (8/18)
- Strongly disagree (2/18)

To what extent do staff support CICO implementation

- Strongly (1/18)
- Support (13/18)
- Do not support (3/18)
Adaptations

14/18 high schools made adjustments to traditional CICO process

Adaptations were made to:

- Fit within the high school culture
- Developmental level of the students

Specific adaptations include:

1. Check-in/outs with school staff
2. Incorporating academic supports
3. Use of daily point cards
4. Feedback home to parents
5. Student involvement
Daily Check-In/Check-Out Process

1. Check-in/out process varied
   - 15/18 coaches indicated that students typically check-in and out with classroom or SPED teachers
     - “Students don’t check in with a [assigned] coordinator, they check in with their first period teacher and check out with their last period teacher”
     - “Our support staff are so busy or work part time, they are not available [to meet with students] at the beginning and end [of the day].”

2. A majority of coaches included that academic supports were incorporated into students’ CICO plans
   - Academic goal setting strategies
   - Students who participant in CICO also participate in teacher-led study halls
   - Teachers discuss weekly grades with students during check-in/out
   - Students discuss academic needs when checking-in/out with students
3. Adjustments to point cards
   - Due to developmental age and stigma associated with carrying the card from class-to-class, several coaches indicated at getting students to carry the card is a struggle
   - Responses
     - “Students carrying [the daily point] cards does not happen.”
     - “Our students refuse to carry the cards from class to class”

To address this, some were using different strategies:
   - 8/18 coaches modified the point card so that media devices would be used to track and monitor students’ daily performance

Electronic systems used by some coordinators to communicate with students with limited time constraints and to increase fidelity of teacher data entry
   - Specific examples included
     - Using google docs, emails, I-pads
# Point Card Example

**Sample Student**

**Check-in/Check-out**

*Please enter points that accurately reflect performance on a daily basis.*

You can enter 0, 1, or 2. You can also enter absent, sub, nd (no data), blended, btw (behind the wheel).

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**Weekly Average**

#DIV/0!
Parent Feedback and Student Participation

4. Parent feedback
   • Some coaches were using alternative methods in conjunction with the standard paper point cards to receive parents’ feedback
   • Other methods
     • Email
     • Phone
     • Letter

5. Student Participation
   • 10/18 coaches stated that students participate in:
     • Creation and decision-making process
     • Review of the data
     • Selection of the potential incentive/acknowledgements
When asked challenges schools faced during the implementation

- Specific student challenges included
  - Carrying point cards
  - Follow-through
  - Getting students to participate
  - Students remembering to have teachers sign daily point cards
Activity: Think, Pair, Share

- How do you see contextual features of your school impacting CICO implementation?

- What adjustments/adaptations to CICO might need to occur for CICO to be effective?
CICO-Secondary
A Tier 2 Adaptation for High Schools
CICO-Secondary Key Adaptations

✓ Training for students and staff
✓ Data collection format
✓ Daily Check-in/Check-out
Training for Students & Staff

**Standard Implementation**
- Heavy emphasis on training staff
- Focus on process and adult behavior
- Adult driven goals with student input

**CICO Secondary**
- Greater emphasis on student driven goals and behavior
- Students- Explicit training and focus on self-regulation skills
- Staff- Training in student self-regulation process in addition to providing ratings and feedback
## Data Collection Format

### Standard Implementation
- Paper DPR
- Staff rate student behavior and provide feedback
- Self-monitoring/rating as a fading component

### CICO Secondary
- Electronic Daily Progress Report (eDPR) on handheld device or tablet
- Student and teacher rate student behavior and discuss agreement from the beginning
- eDPR automatically summarizes daily points, which can be sent to families by CICO coordinator
Daily Check-in/Check-out

**Standard Implementation**

- Student assessment is Teacher-directed
- Staff provide feedback at predetermined transitions
- Beginning and end of day check-ins/outs include verbal praise and corrective feedback

**CICO Secondary**

- Student assessment is self-guided
- Students rate their own behavior first, then self-recruit feedback from staff to assess agreement
- Beginning and end of day check-ins/outs include verbal praise and corrective feedback + feedback on self-directed goals
Daily Check-in/Check-out

Adapted Version of CICO for High School Context
(Kato, Kittelman, Lissman, & Flannery (Under Review))
Single-Case Experimental Evaluation of CICO-Secondary

Research Questions:
1. Can CICO-Secondary be implemented with fidelity?
2. Is there a functional relation between implementation of CICO-Secondary and improved student outcomes?
3. Do students and school personnel perceive CICO-Secondary to be socially acceptable?

Setting
• One public high school in the Pacific Northwest (1,391 students)

Participants
• Two 9th grade, white male students with IEPs, three classroom teachers, and three CICO-Secondary coordinators
  • John was observed in algebra (A day) and science (B day) classes
  • Dan was observed in history (A day) and science (B day) classes
Single-Case Study

Measures

1. **Fidelity**
   - Student greeting, self-rating, teacher rating per period

2. **Observation**
   - Academic engagement included behaviors that match ongoing instruction
   - Disruption included behaviors that interrupted academic instruction

3. **Acceptability**
   - Self-reported usability and acceptability of CICO-Secondary procedures
     - *CICO-Secondary procedures were worth my time and effort*
     - *CICO-Secondary eCard simple to use and understandable*

Interobserver Agreement

- IOA across data collectors was 94.7% (academic engagement) and 97.2% (disruption)

Design

- Non-concurrent multiple baseline design across students
1. Can CICO-Secondary be implemented with **fidelity**?
   - **Student Greet + Student Rate + Teacher Rate** Per Period

*Fidelity:* 76%

*Fidelity:* 87%
Results

1. Is there a functional relation between implementation of CICO-Secondary and **improved student outcomes**? No, but two basic effects so far..
   - **Academic engagement** = behaviors that match ongoing instruction
   - **Disruption** = behaviors that interrupted academic instruction

- **John**
  - Academic Engagement: 45% (Baseline) and 80% (Intervention)
  - Disruptive: 7% (Baseline) and 5% (Intervention)

- **Dan**
  - Academic Engagement: 45% (Baseline) and 80% (Intervention)
  - Disruptive: 7% (Baseline) and 5% (Intervention)

- **Academic Engagement**: 53% (Baseline) and 72% (Intervention)
- **Disruptive**: 10% (Baseline) and 7% (Intervention)
Results (Kittelman et al., in preparation)

Average Ratings (Points Earned) Across Teachers

Points Earned: 94%  Fidelity: 87%
John
3. Do students and school personnel perceive CICO-Secondary to be socially acceptable?

• Average ratings across CICO-Secondary components for students:
  • John was 5.78 (range 5-6)
  • Dan 5.67 (range 4-6)

• Average ratings across components for the three coordinators was 4.44 (range 2-6)

• Average ratings across components for teachers was 5.53 (range 3-6)
Summary

CICO-Secondary can be implemented with high fidelity, show promise for improving student outcomes, and is perceived to be socially acceptable.

Recommendations for Research
- Research is needed to confirm the basic effects of CICO-Secondary for improving academic engagement
- Replicate findings across students with different demographics

Recommendations for Practice
- Training for students and school personnel on the mobile application
- Training school personnel to monitoring fidelity throughout intervention
Strengths of CICO-Secondary

• Increased efficiency & focus on student developmental level

• More opportunities for positive connections with adults
  • Day begins with positive contact with CICO coordinator
  • Adult connection and feedback delivered each target period
  • Adult connection and debrief at end of day

• Organized to teach and prompt self-management
  • Students are taught to self-monitor performance/progress
  • Increased emphasis on self-regulation skills

• Link school and home support
  • Efficient/convenient format for family contact
Additional Resources

www.pbis.org

High schools (https://www.pbis.org/topics/high-school-pbis)

Tier 2 systems (https://www.pbis.org/pbis/tier-2)

Some Studies Evaluating CICO


Virtual PBIS Leadership Forum

October 26-28, 2021
11:00 am CT – 4:15 pm CT

Creating a Context for Every Student & Educator to be Successful

This three-day virtual forum is designed to support state, regional, and local educational leaders, together with community and family partners, to increase the effectiveness of school environments through PBIS. Sessions and topic-specific strands will provide guidance and tools for strengthening prevention-based systems that support the social, emotional, and behavioral needs of students to ensure engagement in learning. The voices and experiences of youth, teachers, and other educational leaders will be featured throughout the Forum.

The National PBIS Leadership Forum is a technical assistance activity of the Center on PBIS and provides an opportunity for the Center to share information on the latest applications of PBIS.

www.pbisforum.org
Thank you!

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