Excerpt from Chapter 6 of *Responding to Problem Behavior in Schools: The Behavior Education Program, Second Edition*. Crone, Hawken & Horner (2010).

**EFFECTIVE REINFORCEMENT SYSTEMS WITHIN CICO**

**Assessing Reinforcer Preference**

When the behavior support team develops the CICO to fit the culture of their school, there is some preliminary development of the reinforcement system. For example, the team typically determines the percentage of points that students must earn in order to receive a reinforcer. The team may also consider the different types of reinforcers that students can earn. It is important, particularly for middle or high school students, to choose rewards that are perceived as truly reinforcing by the students themselves.

A *positive reinforcer* is defined as an event or stimulus that follows some behavior and increases the likelihood that the behavior will occur again in the future (Alberto & Troutman, 2006). In other words, whether or not a reward is reinforcing is determined by its impact on the student’s behavior, not by whether or not we expect it to have high value to the student. For example, we might consider extra time on the computer to be an effective (and relatively cheap) reinforcer for middle school students. However, if earning extra computer time is not desired by the students, and if it does not cause the student to continue to follow behavioral expectations, then it is not a reinforcer for that student. Indeed, for a student who struggles with keyboarding skills, extra computer time could actually be perceived as a punishment. The team determines whether or not a reward is reinforcing by examining its impact on the student’s behavior. If, after receiving a reward for meeting his or her goal, the student continues to meet his or her goal or demonstrates an improvement in his or her behavior, the team can assume that they have chosen an effective reinforcer for that student.

School staff often choose “rewards” for students but in the end discover these rewards are not very reinforcing. That is, the rewards do not have the intended impact on the students’ future behavior. As an example, one school provided school supplies (pencils, erasers, etc.) as rewards for students who met their daily point goal. Many of the students complained that they already had enough supplies and would be more interested in earning a snack or extra recess time. Once the school allowed the students to choose rewards for which they were willing to work (i.e., activities or items that were actually reinforcing), students’ progress on CICO improved.

One way to assess reinforcer preference is for students to complete a reinforcer checklist. The reinforcer checklist is typically used to assess students’ interest in earning different types of long-term reinforcers rather than daily reinforcers. It should be noted that this is just one example of different reinforcers that students may be interested in earning. We recommend that the behavior support team collaborate with school staff to generate a list of inexpensive or free reinforcers that are available in their school setting. Every school has teachers with certain talents that may be willing to share or special activities that are already a part of the schoolwide reward system that can be used with CICO. For example, in one school we worked with a teacher who was a former semiprofessional soccer player. Students on CICO could earn a one-on-one soccer lesson from this teacher for meeting their goals for a certain number of days. In another school, the janitor was willing to provide guitar lessons as a reinforcer for students receiving CICO support.

**Reinforcers for Checking In and Checking Out**

The primary reinforcer for students checking in and out should be the personal connection with the CICO coordinator. However, we have noticed that sometimes when students have a rough day and do not meet their daily point goal, they are less likely to check out at the end of the day. To increase the incentive for checking out some schools have instituted a “lottery system.” Students receive a lottery ticket for checking in on time in the morning and receive a second lottery ticket for checking out at the end of the day.

At the end of the week, a drawing is held for students on CICO. The more times a student checks in and checks out, the more chances he or she has to win. The prizes for the drawings are small (e.g., coupon to school store or snack bar), but students typically enjoy this extra opportunity to earn reinforcers. To make the drawing more exciting, some schools employ a “mystery motivator” format and allow the student to select from one of three potential prizes that are placed in sealed envelopes. To provide further reinforcement and encouragement, the weekly prizewinners’ names are posted for other students on the CICO to see. This public posting should not be accessible to all students in the school as this could create issues related to other students wanting to be on the intervention.

Some of our schools feel it is unnecessary to have a lottery system because the students really enjoy participating in the program. The lottery system is a component that can be added if a school is experiencing problems with students consistently checking in and checking out. Your school may want to start without a lottery system and add it only if it becomes necessary.

**Reinforcers for Meeting Daily Point Goals**

For CICO to be effective, students should receive reinforcement for meeting their daily point goals. One of the biggest mistakes schools make when first implementing CICO is misunderstanding the importance of frequent reinforcement during the first 2 weeks of the intervention. If a student does not meet his or her goal within the first 2 weeks on CICO, the goal is set too high. The student’s interest in CICO and willingness to actively participate will rapidly wane.

Collecting baseline data is critical to setting achievable daily point goals. For the sake of efficiency, we have recommended using the same daily point goal for all students. Occasionally, however, students will need a lower goal to achieve initial success. Baseline data will help identify these students.

One way to motivate students to achieve consistent success on CICO is to reward the student for meeting his or her point goal for a specified number of days. Behavior support teams will often set a consecutive criterion (e.g., student must earn 80% of points of 5 *consecutive* school days) rather than a cumulative criterion (e.g., after a *total* of 5 school days of earning 80% of points, the student can earn the reinforcer). We recommend using a cumulative

criterion. Students on the CICO will have difficult days and therefore a cumulative goal is more achievable and reinforcing than a consecutive goal.

*Daily/Short-Term Reinforcers*: Some type of small, daily reinforcement if often effective in maintaining students’ consistent engagement in the intervention. Although we recommend avoiding the use of edible reinforcers, many schools have found that a piece of candy or a small snack is highly valued by students at the end of the day. We encourage schools to choose healthy snacks, if food is to be used as a reinforcer. While the use of daily reinforcers for meeting point goals is helpful, it is not required. The behavior support team should consider the cost of daily reinforcers and the financial resources budgeted for the CICO intervention.

One creative approach to daily reinforcers is the “Spin the Wheel” game. This game gives students a random chance of receiving one out of a variety of rewards. This approach to daily reinforcement is more effective in elementary school settings than in middle or high school settings. On the spinning wheel, the wider sections of the wheel include social rewards, such as a “high five” or a secret handshake. It is preferable for students to work for social reinforcement over tangible reinforcers. The narrower sections of the wheel (thus, lower chances of winning) included a piece of candy, a gumball, or a sticker. Two schoolwide rewards have been included on the wheel. One is a “Lion’s Pride 5” ticket, which is a token used for schoolwide rewards. The other is a “Lion’s Loot” dollar which goes back to the student’s classroom to be put into a classroom bank. At the example school, the “dollar” is associated with a schoolwide social skills intervention. The student on CICO has the chance to earn dollars for the entire class to engage in an activity.

*Long-Term Reinforcers*: Many schools provide opportunities for students on CICO to earn long-term reinforcers. Long-term reinforcers typically require students to meet their daily point goal across several days or even several weeks. These rewards are typically identified using the reinforcer checklist as items individual students are interested in earning.

To manage a long-term reinforcer system, some schools use a “credit card” scheme to tally points. Other schools call this a “savings card” or “point card.” Regardless of its name, the aim is to give the student a choice between using points to receive smaller reinforcers or saving points to earn larger, long-term reinforcers. The CICO credit card system allows students to earn more points for better performance on their daily progress report (DPR). Here is an example of how one school outlined points that students can earn:

* >70% on DPR=1 point on credit card
* >80% on DPR=2 points on credit card
* >90% on DPR=3 points on credit card
* 100% on DPR=4 points on credit card

The CICO Coordinator (older students can self-manage this process) marks the number of points earned by the student by highlighting or placing a checkmark in each box on the “credit card.” We recommend against using a special stamp or hole-punch as it would be fairly time- consuming to do this for up to 30 students per day. The credit card system requires that the school develop a menu of reinforcers with different point values. Once a student earns enough points for the reinforcer he or she desires, the points are exchanged with the CICO Coordinator. The credit card is marked to show that the student has spent those points.

**Who Provides the Reinforcement?**

Typically, the CICO Coordinator [or Mentor] manages the CICO reinforcement system. If a student earns additional computer time, the CICO Coordinator [or Mentor] provides the time or collaborates with one of the student’s teachers to provide the time. Members of the behavior support team are also often involved in delivering reinforcement. School counselors and school psychologist typically have more flexibility in their day than teacher to provide time-based reinforcers such as extra gym time, extra computer time, or even an extra recess.

When designing CICO to fit your school culture, the issue of how to manage the reinforcement system must be addressed. CICO will be less effective if students do not receive reinforcement soon after they have earned it. Imagine if a student has earned basketball time, but the school counselor is unable to play basketball with the student until 3 weeks after the reinforcer is earned. Extended delays in delivery of reinforcement will result in student frustration and reduced commitment to the intervention.

**Reinforcement for the Teachers**

Reinforcement for active and successful participation in the CICO intervention should not be limited to participating students. Teachers should receive reinforcement as well. Effective teacher participation is the backbone of an effective CICO intervention. Teachers must provide ratings of student behavior on a regular basis and ensure that the student understands how to meet the behavioral expectations.

Teachers complete the DPR on a daily basis but may not know how the student is progressing overall. One way to reinforce teacher participation is to share their student’s DPR data graph with them. Additional strategies can be used to reward teachers for implementing CICO with fidelity. Some schools encourage CICO students to nominate their teachers for a “Supportive Teacher Award.” Once a month, a different teacher is acknowledged based on student nomination. Other schools examine the positive teacher comments written on the DPR and recognize a teacher for being a positive participant in the CICO intervention. Whatever approach is chosen, it is important to recognize teachers’ efforts and support in helping students achieve success on CICO.

**Reinforcer Budget**

The behavior support team will likely have to grapple with the costs or reinforcers against the backdrop of budgetary constraints. School budgets are often tight, and CICO should be implemented in a cost-effective manner. The following list provides recommendations for keeping expenses low, while still implementing an effective reinforcement system.

* Solicit donations from the community. All donations to a school are tax-deductible, and the school can publicly acknowledge the business or community agency as a supporter of the school.
* Choose rewards that involve use of time rather than the purchase of tangible items. Some of our favorite examples include time with a preferred adult, time with a socially competent peer, time to read a favorite comic book or novel, or extra gym, recess, art, computer, or library time.
* Students will work to earn opportunities for leadership or other positions of status.  
  These include first in line for lunch, leading the class in a lesson, library helper, computer helper, broadcasting morning announcements, leading social skill lessons with the support of counselor.
* Students will work to avoid activities that the student perceives as aversive. With teacher permission, the following can be used as reinforcers: one free homework pass, one free assignment pass, skipping problems on an assignment, being excuse from homeroom to do a preferred activity.
* When purchasing games or toys, choose items that are reusable. Schools have purchased board games, remote-controlled cars, Game Boy or Nintendo DS. All of these items involved an initial investment up front, but could be used over and over again.

**Summary**

The following is a summary of recommendations for developing reinforcement systems for CICO:

* Assess student preferences for long-term reinforcers
* Use baseline data to assess if the standard daily point goal is appropriate for the student
* Consider implementing an incentive system for checking in and checking out
* Determine if there will be both short-term and long-term reinforcers
* Identify a system to manage long-term rewards, such as the credit card system
* Determine who will deliver the reinforcers. Avoid lengthy delays in reinforcer delivery as

this results in frustration and reduced student commitment

* Develop a system to provide reinforcement to teachers who actively support CICO