

Antecedent Modification

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Implementing Behavioral Strategies

Purpose:

This set of behavioral strategies was developed for classroom teachers to use with students who may require academic and/or behavioral support. The strategies are intended to support teachers working with students with primary academic deficits and challenging behaviors. For students with more intensive behaviors, potential intensification strategies also are included.

Structure:

Each strategy includes a description of the (a) purpose and overview; (b) behavior(s) addressed; (c) implementation procedures and considerations; (d) sample scripts or formats; (e) potential intensification strategies; and (f) additional resources (where available).

Terminology and Definitions:

- 1. Reinforcement:** Actions to make a target behavior more likely to occur in the future.
 - **Positive Reinforcement:** Adding something pleasant or desirable (e.g., toy, food, attention) to make a target behavior more likely to occur.
 - **Negative Reinforcement:** Taking something unpleasant or undesired away (e.g., aspirin to relieve a migraine) to make a target behavior more likely to occur.
- 2. Reinforcers:** Incentives (either a reward or the removal of something undesired) that are given to students after they display an appropriate/expected behavior. Use of reinforcers should increase students' continued demonstration of the appropriate/expected behavior.
- 3. Punishment:** Strategies used to decrease or terminate students' demonstration of a challenging behavior, including time-out or loss of privileges.
- 4. Consequences:** Events that occur after the demonstration of any behavior. Consequences can be positive or negative.
- 5. Consequence Clause:** A clause that identifies specific consequences that will be delivered if students do not meet goals/success criteria.
- 6. Replacement Behavior:** An appropriate behavior that a student is taught to use to replace a challenging behavior. The replacement behavior should serve the same function as the challenging behavior.
- 7. Consequence Modification:** Strategies to encourage students' demonstration of an appropriate/expected behavior.

8. **Antecedent Modification:** Strategies to prevent students' demonstration of challenging behavior by clearly defining appropriate/expected behaviors.
9. **Schedule of Reinforcement:** Established rules or procedures that a teacher follows to deliver reinforcers.
10. **Intermittent Reinforcement:** Delivering reinforcers at random time intervals that do not follow a pattern.

Considerations for Successful Implementation:

- These strategies may coincide or be used along with other interventions/strategies (e.g., Check In Check Out).
- The strategies should be aligned with school- and class-wide expectations.
- The reinforcers should be aligned with the hypothesized function of student behavior (e.g., attention, escape, avoidance, sensory).
- When using behavior management systems that award students points for demonstration of appropriate/expected behavior, it is important not to take away points after students earn them. Taking away earned points diminishes their value and may cause students not to care about earning future points.
- When using consequence clauses that include a form of punishment (e.g., time-out, loss of privileges), it is important to accompany them with strategies to teach replacement behaviors and/or strategies that encourage student demonstration of appropriate/expected behavior.
- For students with more intensive behavior, individualize class-wide strategies (using the potential intensification strategies) and consult with a behavior specialist/team in the event that strategies are not resulting in progress.

Examples of Reinforcers

Tangible	Activity-Based	Social	Intangible
Tokens, stickers, posters, prize from a prize box, snack or favorite food item (if appropriate), coloring page, books	Extra time on computer, silent reading time, partner reading, allowed to be a leader, given a classroom job, assisting secretary or teacher	Tell a joke, lunch with teacher, positive phone call home, game with a friend, being a peer model for a younger student	Verbal praise, smiles, thumbs-up, giving eye contact, positive comments written on work

Antecedent Modification

Purpose and Overview:

The purpose of antecedent modification (also referred to as antecedent-based intervention) is to decrease the likelihood of problem student behavior by making adjustments to the learning environment *prior to* the occurrence of problem behavior and clearly defining appropriate/expected behaviors. Antecedent modifications are proactive and allow teachers to make environmental adjustments to *prevent* problem student behavior rather than *respond* to problem student behavior.

Behavior(s) Addressed:

Can be used to address a range of challenging behaviors, such as escape or frustration, which result from task demands being at a level higher than what the child is able to do

Setting:

Classrooms and transitional settings (e.g., lunch, recess, hallway)

Materials:

- Antecedent-Behavior-Consequence (A-B-C) Data Collection Chart and Guiding Questions

Implementation Procedure:

1. Conduct an observation to identify the problem behavior. During the observation, identify the problem behavior, or the “B” portion of an A-B-C chart. “B” refers to the student behavior (e.g., hiding under a desk). A helpful question may be, “*What is the student doing that is disruptive or undesired?*”
2. Identify the “triggers” for the problem behavior by filling in the “A” portion of an A-B-C chart. “A” refers to the antecedent or event that occurs prior to the student behavior, akin to a “trigger” for problem behavior (e.g., a teacher tells the target student to complete a mathematics task).
3. Consider the following questions during the observation when collecting data for “A”: “*What occurs right before the problem behavior? What are other individuals doing in the environment? Where is the student when the problem behavior occurs? Who is near the student when the problem behavior occurs?*”
4. Identify the “C” portion of the chart. “C” refers to the consequence of the student behavior, or anything that happens directly after the behavior occurs (e.g., the teacher

tells the student to sit in the student's seat). A helpful question to ask may be, "*What happens immediately after the undesired or problem student behavior?*" Be sure to identify both adult and student behaviors that follow the problem behavior.

5. Conduct enough observations until "A," "B," and "C" data provide clear patterns about how "A" can be changed to reduce problem behavior. Sometimes, patterns arise after only a few observations across settings. When problem behavior is particularly intensive, patterns may take longer to appear and require multiple observations be conducted in a variety of settings. Collecting sufficient amounts of data will provide clear information about what serves as an antecedent(s) to problem behavior and what the consequences are to problem behavior.
6. After observations are complete and patterns have emerged, consider how existing academic and behavioral demands for the target student impact the problem behavior. Focus on the current academic and behavioral demands for the target student when the problem behavior occurs. A helpful question for the teacher to consider is, "*When I ask the target student to do _____, what do I expect that student to be able to do?*"
7. Identify the target student's current independent level of academic and behavioral functioning in relation to the demand (from Item 3). A helpful question is, "*What can the student do on his or her own when this demand is placed on the student?*"
8. Clearly define the appropriate/expected behavior.
9. Adjust task demands (either academic or behavioral) so that they do not exceed the target student's current level of functioning. For example, if the target student is able to read independently at the second-grade level, ensure that academic tasks are at or below the second-grade level.
10. In addition to adjusting or revising task demands, determine how else the antecedent (i.e., the "trigger") will be modified by providing one of the following antecedent modifications:
 - Choices (e.g., read with a partner or read independently, choose the order of tasks)
 - Simplified pictorial, written, and/or verbal instructions
 - Teach/re-teach expectations, routines, and procedures
 - Prompts (e.g., warnings of upcoming changes to schedules or tasks)
 - Increased opportunities to respond (e.g., use of response cards, guided notes)
 - Different ways of engaging in tasks (e.g., written tasks become verbal tasks or vice versa)
 - Adjust the setting (e.g., change a student's seat, use proximity teaching, use small-group instruction)
11. Use the chosen antecedent modification(s) when problem behavior is likely to occur.
12. Reinforce neutral or desired behavior. One example of reinforcement is the use of verbal praise when the student shows alternative behavior. Another example is the provision of tangible reinforcers (e.g., stickers, tally marks, or access to preferred tasks).

13. Reduce attention to problem behavior by ensuring that any consequences from the “C” portion of the chart do not occur. This may include the use of planned ignoring, proximity control, or non-contingent reinforcement. For example, the A-B-C chart may show that the adult gives attention to the target student(s) when the problem behavior occurs. Adult attention is the consequence (“C” portion of the chart) and may increase that problem behavior. Examine “C” data to determine if attention is increasing problem behavior. Then, provide attention to the target student(s) when alternative behaviors occur.

Implementation Considerations:

- Antecedent modifications are adjustments made to the first step of the A-B-C sequence and support with identifying the behavioral “triggers.”
- Collect data on the frequency, intensity, and duration of the problem behavior.
- Antecedent modifications, like most behavioral interventions, often take time to produce the desired effect. Collect data to ensure you have accurate information about changes to the student’s problem behavior before, during, and after implementation.
- Modifications to antecedents may be integrated into class-wide teaching practices. For example, re-teaching behavioral expectations prior to classroom transitions may prevent future problem behavior.
- Continue to teach skills that are important for the target student to master but that are not yet at the student’s independent level. For example, if the student is reading at the second-grade level but is in a fourth-grade classroom, continue to provide effective instruction to improve the student’s academic performance.
- A-B-C data are often used to help determine the function of problem behavior for students with very challenging behavior. After functions of behavior are identified, behavior plans may identify antecedent modifications. Personnel with expertise in behavioral assessment and intervention may provide support for those teachers using A-B-C charts.

Sample A-B-C Data Collection Chart and Guiding Questions

A-B-C charts are completed by observing the target student, identifying A-B-C data, and analyzing the data for patterns. Another sample data collection form, with an appendix of function related interventions is available at: http://www.intensiveintervention.org/sites/default/files/Handout3c-ABC_Report_Form_0.pdf

Day		Time	Antecedent	Behavior	Consequence	Comments

Guiding Questions after an A-B-C Observation:

- *When I ask the target student to do _____, what do I expect that student to be able to do?*
- *What can the student do on his or her own when this demand is placed on the student?*

Sample Antecedent Modification: Choice Menu

When to Use the Choice Menu:

- Upon noticing that the student is demonstrating an identified problem behavior, based on data collected through an A-B-C chart
- Prior to a time when the problem behavior is likely to occur, based on patterns in data collected through an A-B-C chart

How to Reinforce the Usage of the Choice Menu:

The student will be prompted with a choice from the choice menu at the adult's discretion. The student will earn access to reinforcers based upon the student's compliance. The reinforcers should be aligned with the student's motivators (i.e., from a preference assessment or forced-choice reinforcement menu).

When to Use Reinforcers:

- When the student is performing a task in accordance with the expectations, reward the student by adding a sticker to the student's chart.
- When the student makes a choice and complies with the expectation, reward the student by adding a sticker to the student's chart.
- When the student identifies his or her emotion and the cause, reward the student by adding a sticker to the student's chart.
- When the student earns a specified amount of stickers based upon compliance (with or without use of choice menu), reward the student by delivering a reinforcer that aligns with the student's motivator (e.g., break time, work on the computer, consumable reward, peer time).

Additional Considerations:

In the beginning of using the choice menu and reward and reinforcement system, high frequency delivery or access to reinforcement is preferable. As the student is able to show compliance and is responding, challenge the student by delaying access to the reward or reinforcer (i.e., start with the student earning five stickers to earn a larger reward; as the student shows he or she is able to do this, challenge the student to get 10 stickers to earn the larger reward, and so on until the reward system can be faded while still allowing the student to be successful).

Sample Choice Menu Items:

Participating in activities

Choice 1: Participate with peer

Choice 2: Participate with adult

Choice 1: Try the activity for five minutes

Choice 2: Stay at your seat and do an activity

Going to specials

Choice 1: Go early to help special’s teacher set up for activity

Choice 2: Go with an adult who will stay with student until the student participates

Carpet activities

Choice 1: Sit with peers at the carpet

Choice 2: Sit at desk and listen quietly

Walking in the hallways

Choice 1: Walk with a peer

Choice 2: Walk with an adult

Working with an adult

Choice 1: Try the activity for five minutes

Choice 2: Invite a peer to join in the activity

Student engaging in disruptive behaviors

Choice 1: Stop the behavior, and student identifies his or her emotion and the cause

Choice 2: Stop the behavior, and student goes and sits quietly at his or her seat to reflect

Sticker Chart



					Reward
					Reward
					Reward
					Reward

Potential Intensification Strategies:

- Combine antecedent modifications. For example, when presenting a task(s) to a student with problem behavior, provide one to two choices *and* reteach behavioral expectations. Or, provide visual prompts to the target student *and* high levels of opportunities to respond.
- Modifying antecedents can be combined with other behavioral strategies (e.g., reinforcement, behavioral report cards, and behavior contracts).
- When modifying antecedents, some students may benefit from visuals that replace or supplement verbal explanations. For example, expectation charts or choice menus may be posted in the classroom or provided to the target student(s). These visuals serve as prompts for the student(s) to engage in the desired behavior.

Additional Resources:

- Intervention Brief on Antecedent Modifications: <http://ebi.missouri.edu/wp-content/uploads/2011/04/ECU-EBI-Social-Reinforced-Antecedent-Modifications.pdf>
- Evidence-Based Practice Brief: Antecedent-Based Interventions: <http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/imce/documents/ABI-complete-2010.pdf>
- Using FBA for Diagnostic Assessment in Behavior (DBI Training Series Module 6): <http://www.intensiveintervention.org/resource/using-fba-diagnostic-assessment-behavior-dbi-training-series-module-6>
- Problem Behavior Pathway – Analysis of the Problem Behavior: <https://www.pbis.org/resource/446/problem-behavior-pathway-%E2%80%93-analysis-of-the-problem-behavior>
- Alberto, P. A., & Troutman, A. C. (2009). *Applied behavioral analysis for teachers*. Columbus, OH: Pearson.

Other Sample Antecedent Modification Strategies Available on the National Center on Intensive Intervention Website:

<http://www.intensiveintervention.org/behavior-strategies-and-sample-resources>

1. Behavior Contracts
2. Classroom Conversations and Participation
3. The “You-Me” Game
4. Yes/No Learning Skills Chart

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