


PBIS Strategies for Low Incidence Populations

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Behavior



- Behavior occurs because it is effective - the student is able to get needs or wants met through use of the behavior

Function

- Consider that behavior serves a purpose for the student that addresses a need or want
- Functions of behavior
 1. to gain/get something
 2. to reject/escape something
 3. sensory/physiological




Function

- For Communication:
 - Limited or no oral communication skills
 - Limited listening comprehension skills
 - Limited social understanding which inhibits the student's ability to use language effectively




Behavior is learned...

- Effective - I do it because it works
- Efficient - It works well and quickly
- Relevant - It is meaningful to me



Behavior is learned...



Activity

- Turn to the person next to you
 - Identify an adaptive behavior that gets reinforced naturally
 - Identify a maladaptive behavior that gets reinforced inadvertently
- We will share

The behavior must be made to be:

- Ineffective - Behavior no longer works
- Inefficient - Behavior does not accomplish it's goal quickly
- Irrelevant - Behavior is no longer relevant or meaningful to the individual



Behavior becomes ineffective:

- when it no longer accomplishes its purpose or function
- when it no longer produces the same results
- *** Teach an alternate behavior that produces the same effect as the maladaptive or undesired behavior
- *** The student must consistently achieve the same effect as with the undesired behavior

Behavior becomes inefficient:

- when it does not have the same result in the same amount of time
- when the alternate behavior accomplishes the goal faster and with less effort (efficiently) for the individual



Behavior becomes irrelevant:

- when it is no longer a meaningful way for the student to get needs/wants met
- when the alternate behavior makes better sense to use (from the student's perspective)



First Steps

- Before focusing on student behavior, consider:
 - Communication
 - Classroom environment
 - Instruction



First Steps: Communication

Determine if there is a:

- Communication system that is:
 - Adequate to meet student's communication needs
 - Frequently trained and reinforced
 - Easily accessible
 - Implemented for every communication opportunity
 - Student managed

First Steps: Classroom Environment

Are there:

- Established routines
- Visual schedules
- Transition procedures



First Steps: Classroom Environment

Are there:



- Reduced opportunities to engage in maladaptive behavior
- Organization
- Staff that moves among the students

First Steps: Instruction

Determine if there is:

- Variability in tasks



Is instruction more like a soda machine or a slot machine?



First Steps: Instruction

Determine if there is/are:

- Tasks that do not exceed the length in minutes of the cognitive development of a student in years
- Tasks that are appropriate in difficulty for the student - consider:
 - Level of independence
 - Frustration tolerance
 - Level of adult support



First Steps: Instruction

Is there:

- Alternating seat work/fine motor tasks with gross motor activities that incorporate movement
- Alternating between preferred tasks and more difficult tasks
- Active teaching and supervision
- Alternating staff among students

Establishing Instructional Control:
A two-step process


- Step 1: analyze the problem
- Step 2: Determine the teaching methods that will maintain a positive, productive teaching situation

Establishing Instructional Control

- Step 1: Identify
 - how the student learned the problem behavior
 - how the behavior is perpetuated during instruction
 - what are the initial steps to overcoming the behavior

Establishing Instructional Control

Identify how the student learned the problem behavior



Establishing Instructional Control

Identify how the behavior is perpetuated during instruction



Establishing Instructional Control

What are the initial steps to overcoming the behavior?



Overcoming Problem Behavior During Instruction

- Identify strong reinforcers
- Staff should pair themselves with the child's positive reinforcers
- Do not interrupt the child's reinforcers to present demands during this process

Step 1

Overcoming Problem Behavior During Instruction

- The teaching situation should be the place the child goes to receive reinforcement not the place where reinforcement is removed



Step 1

Overcoming Problem Behavior During Instruction

- Begin requiring easy and infrequent demands that result in immediate reinforcement



Step 1

Activity

- Turn to the person next to you
- Take 2 minutes to:
 - Create 3 simple tasks that are easy to perform and can be immediately reinforced. You do not need supplies.
- We will share

Establishing Instructional Control

- Step 2:
 - What are the teaching methods that will maintain a positive learning relationship?



Increasing the Number/Rate of Responses During Instruction

- Pair teaching environments with reinforcement - use competing reinforcers:
 - Teachers should pair themselves with valuable reinforcers which effectively compete with the reinforcement of escaping demands

Step 2

Increasing the Number/Rate of Responses During Instruction

- Correlate the appearance of the teacher/materials/setting with more valuable and a higher frequency of reinforcement than that previously available before the appearance of the teacher

Step 2

Increasing the Number/Rate of Responses During Direct Instruction



- The instructional setting becomes a conditioned reinforcer as opposed to a conditioned aversive stimulus

Step 2

Increasing the Number/Rate of Responses During Direct Instruction



- The child's behavior is now targeted toward continuing or maintaining the improved set of conditions that the teacher and instruction now represent

Step 2

Increasing the Number/Rate of Responses During Direct Instruction

- Mix and vary instructional demands:
 - Present instructional demands so that task stimulus and response requirements vary from trial to trial



Step 2

Increasing the Number/Rate of Responses During Instruction

- Reduce learner errors:
 - Reduce student errors through teaching methods that insure high levels of correct responding



Step 2

Increasing the Number/Rate of Responses During Instruction

- Reduce learner errors:
 - Errorless learning methods may transform difficult tasks to easy tasks and therefore reduce the value of escape as a reinforcer. Subsequently the instructional stimuli/tasks are more likely to evoke correct responding and not problem behavior

Step 2

Increasing the Number/Rate of Responses During Instruction

- Reduce learner errors continued:
 - Error correction procedure - for unavoidable incorrect responses include immediate representation of task demand and immediate prompt.

Step 2

Increasing the Number/Rate of Responses During Direct Instruction

- Fade in number of demands:
 - Present low frequency of demands and then increase response ratio requirements
 - Low frequency demands should be short and easy to perform
 - Increase in demands should initially include easy to perform tasks to be later replaced by tasks of higher difficulty

Step 2

Increasing the Number/Rate of Responses During Direct Instruction

- Fade in number of demands:
 - The value of escape will always exist
 - Teaching effectiveness will be enhanced by delivering extinction for problem behaviors which are not "abolished" by the fading in of the frequency of demands.



Step 2

Increasing the Number/Rate of Responses During Direct Instruction

- Fade in effort/difficulty of tasks
- Immediately deliver reinforcement
- Pace instruction properly:
 - Instruction which is delivered in a fast paced manner can reduce problem behavior and student errors by lowering the value of escape as a reinforcer relative to the same demands when presented slowly

Step 2

Increasing the Number/Rate of Responses During Direct Instruction

- Intersperse easy and difficult demands:
 - Reduces problem behavior
 - Insures that instructional demands are associated with mostly improving conditions relative to the value of other reinforcers



Step 2

Increasing the Number/Rate of Responses During Direct Instruction

- Intersperse easy and difficult demands:
 - Each demand becomes a "promise" of reinforcers to follow instead of a "threat" of no reinforcement
 - A high number of "easy" tasks increases the density of responding to instructional demands



Step 2

Increasing the Number/Rate of Responses During Direct Instruction



- Intersperse easy and difficult demands:
 - Response persistence occurs with "difficult" tasks as a result of the increased rate of responding and rate of reinforcement

Step 2

Reinforcement

- Reinforcement must be valuable to the student
- Immediately reinforce approximations of desired behavior
- Keep reinforcers novel to avoid satiation
- If cost of reinforcer is too high the student will lose motivation to perform

Shaping



- Shaping is the systematic, immediate reinforcement of successive approximations of the target behavior until the behavior is established

Shaping

- Shaping is generally used to teach and encourage a new behavior that is not currently in the student's set of skills
- Shaping can also be used to increase behaviors infrequently exhibited



Shaping



- Only reinforce those approximations of the behavior that most resemble the target behavior

Shaping

Determine when the student is ready to be held to a closer approximation of the target behavior

- If the student is asked to go too quickly he/she will get frustrated
- If the student goes too slowly the approximated behavior can become a permanent behavior

Chaining



- A behavior chain is a series of separate behaviors that are linked by their relationship to achievement of a desired reinforcer or outcome

Chaining



- The behavior chain is often exhibited by an individual in order to obtain a specific reinforcer

Chaining



- Usually the individual receives reinforcement only when the final step in the chain is performed

Establishing a Chain



- The activity must be task analyzed to determine the individual steps in order for the task to be successfully completed

Establishing a Chain



- Teach the steps in order to the student using prompting and reinforcement until the behavior chain functions as a cohesive unit of behavior for the student

Establishing a Chain

- Initially, the last component is reinforced on completion creating a conditioned reinforcer that increases the likelihood that the previous step will occur

Establishing a Chain



- Eventually, each component of the chain becomes a conditioned reinforcer for the previous step as the relationship between the links is established

Establishing a Chain

- Chains may be affected in three different ways:
 - the chain may include only appropriate responses linked together
 - appropriate and inappropriate responses may get mixed into the chain
 - the chain may contain only inappropriate responses or steps

Establishing a Chain

- Differential reinforcement is an integral part of teaching and maintaining a behavior chain
- When teaching a new chain, only behaviors that are part of the chain should be reinforced



Establishing a Chain

- The behaviors in the chain should only be reinforced when they occur in the correct sequence of the chain
- Each link in the chain becomes a reinforcer for the previous link as each step is associated with reinforcement at the end of the chain



Chaining

- There are three types of procedures most commonly used for teaching chaining sequences:
 - backward chaining
 - forward chaining
 - total task presentation



Backward Chaining

- The final step in the sequence is taught first and then reinforced
- All of the steps in the chain are taught in backward order beginning with the final step
- Reinforcement is given as soon as the final step is completed

Forward Chaining

- The first link in the series is taught and reinforced
- As the student demonstrates mastery on the first step, the next link is taught
- The child only receives reinforcement after the final step of those that have been taught is completed

Total Task Presentation

- All of the steps in the chain are taught in sequence at each trial - each link is not taught independently of the others
- Reinforcement occurs only when the last step is completed
- The sequence of steps is taught as a whole until the entire sequence is completed

Changing the Chain

- Behavior chains may be altered or broken by changes in the environment where the behavior occurs or changes to the reinforcement



Changing the Chain

- Effects of the use of extinction of the reinforcer on behavior chains suggest that earlier links in the chain persisted longer than behaviors closest to the reinforcer
- Earlier responses in the chain have been shown to be more easily disrupted than those later in the chain

Behavior Systems

- Interventions should be, to the greatest extent possible:
 - Tangible
 - Visual
 - Sturdy
 - Set up for immediate reinforcement

Questions?



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