I. REINFORCEMENT PROGRAM
Reinforcement - any stimulus that maintains or increases behavior exhibited immediately prior to
the presentation of the stimulus. Reinforcement increases target behavior.
A. Positive reinforcement - presentation of a stimulus
B. Negative reinforcement - removal of a stimulus (not the quality of the stimulus).

Effective use of reinforcers
. Immediacy of reinforcement . Combining verbal praise
. Schedule of reinforcement . Type of reinforcement
. Quality/quantity of reinforcement

Types of reinforcement
1. Primary reinforcers - stimuli that are naturally reinforcing to individuals, such as food, warmth, etc.
2. Secondary reinforcers - stimuli that are not naturally reinforcing - their value has been learned or conditioned-
such as pairing verbal praise with a reward snack.
3. Socially valid reinforcers - in sync with the student's social setting (age, culture, relationship, etc.)
4. Identifying reinforcers - high preference most effective
5. Preference and reinforcer assessment - assess what is most preferred and what is the influence on behavior
6. Satiation - students become satiated when the same reinforcer is used too frequently

II. ESTABLISHING A REINFORCEMENT PROGRAM
1. Establish clear rules and guidelines - which behavior is acceptable and which is not -
effectsations in specific and observable terms - state in positive terms - taught through direct
instruction - reinforced
2. Set the example - teachers need to follow the rules, too
3. Delivery of reinforcers - immediate, fresh (not satiated), and by a significant adult

III. SCHEDULE OF REINFORCEMENT
Refers to frequency or timing of the delivery of reinforcement following behavior.
A. Ratio reinforcement schedules - based on established number of occurrences of target behavior
   1. Fixed ratio schedule - every time the target behavior occurs
   2. Variable ratio schedule - average number of occurrences
B. Interval reinforcement schedules - based on established interval
   of time, contingent on target behavior occurring
   1. Fixed interval schedule - reinforced after a specific interval of time
   2. Variable interval schedule - "average interval of time

SHAPING AND CHAINING NEW BEHAVIORS
A. Shaping - reinforcement of successive approximations of a terminal behavior - usually a new behavior
B. Chaining - performance of a series or sequence of behaviors rather than one independent behavior (behavior chain) - can be forward or backward chaining

TOKEN ECONOMY REINFORCEMENT PROGRAMS Token economy - symbolic reinforcement system
1. Identify the target behavior to be increased
2. Identify the medium of exchange
3. Identify the reinforcers the students will be able to buy with tokens earned
4. Identify price of each reinforcer
5. Pick time for exchange of tokens for reinforcers

CONTINGENCY CONTRACTING
Involves establishment of written behavioral contract between student and teacher regarding the performance of specific target behavior and the exchange of specific consequences
Communicate expectations clearly and provide students with good understanding of rewards and consequences available

VII. GENERALIZATION
Refers to degree to which a behavior change transfers to other setting, situations or behaviors

A. Stimulus generalization - describes degree of behavior change in settings or situations other than training setting
B. Response generalization - refers to degree to which a behavior change program influences other behaviors in addition to target behavior

PROMOTING GENERALIZATION
. Teach in natural setting - one in which behavior is most likely to occur
. Natural antecedents - events or situations that should act as natural prompts or cues for specific behavior (teacher reads - students stop talking) - can pair artificial prompts with natural stimuli and fade them as soon as possible (ring bell before reading)
. Teachers should employ natural consequences - fade artificial consequences (from tokens to praise)

PROMOTING MAINTENANCE OF BEHAVIOR CHANGE
. Teach where behavior is likely to occur (not pull-outs). Use variety of teachers across multiple settings
. Gradually shift from artificial stimulus controls to natural ones
. Shift from continuous to intermittent schedules of
reinforcement
. Phase out artificial reinforcers
. Introduce delays in the provision of reinforcers
. Keep reinforcing generalization and maintenance

COGNITIVE BEHAVIOR MODIFICATION - CBM - not a specific type of intervention - refers to a number of different but related interventions. It is a synthesis of cognitive psychology and behavior modification - foundation was Bandura’s social learning theory. All CBM interventions share 3 basic assumptions:
1. Behavior is mediated by cognitive events.
2. A change in cognitive mediating events results in a change in behavior.
3. All persons are active participants in their learning.

I. PROCEDURES OF COGNITIVE BEHAVIOR MODIFICATION
A. Self-Instructional Training - students are taught generic set of statements to say to themselves when confronted with various situations - personal verbal prompts - For example:
   Students ask themselves questions such as: a) What is my problem? b) What is my plan? c) Am I using my plan? d) How did I do? (see table 8.4, for Generic Self-Instruction Protocol)

B. Self-Managing Training - teach the students to manage his or her behavior
   1. Self-monitoring - students record the frequency of a particular behavior or behaviors (but first must be aware of the behavior that he or she is counting)(table 8.5)
   2. Self-evaluation - student compares behavior against a preset standard - must first learn how to self-monitor
   3. Self-reinforcement - student chooses a reinforcer and delivers it following appropriate behavior

C. Problem-Solving Training - form of self-instruction to teach procedures for systematically approaching, evaluating, and solving interpersonal problems.
   1. Teacher should directly teach concepts of problem solving
   2. Problem situations should be taken from students' real-life experiences whenever possible
   3. Problem solving training should include:
      a) recognizing the problem 
      b) defining the problem and the goal
      c) generating alternative solutions
      d) evaluating the solutions
      e) making a plan to solve the problem

   4. Provide numerous opportunities to practice
5. Teacher should be a model of effective problem solving

D. Anger-Control Training - student are taught to inhibit or control anger and aggressive behavior through self-instructions
   . Preparing for provocation
   . Impact and confrontation
   . Coping with arousal
   . Subsequent reflection - Conflict unresolved
   . Subsequent reflection - Conflict resolved

E. Alternative Response Training - student taught an alternate or competing response that interferes with opportunities for an undesirable response - example, relaxation training
E. Attribution Training - based on idea that individuals seek causes for events in their environment and that these perceived causes influence subsequent behavior

III. RATIONAL-EMOTIVE THERAPY (RET) - people who are disturbed are seen as disturbed, not by occurrences, but by their irrational beliefs about occurrences - result in maladaptive behavior. People do not get upset about events, but rather by their misinterpretation of events.

BEHAVIOR REDUCTION STRATEGIES - procedures implemented immediately after a target behavior reduce the future probability of the target behavior recurring.

TERMINOLOGY - challenging or inappropriate behavior targeted for reduction (not mutually exclusive)

DIFFERENTIAL REINFORCEMENT OF BEHAVIOR - to maintain for increase the occurrence of appropriate behavior
1) a behavior may be reinforced only when it is exhibited following an appropriate discriminative stimulus (ex. reinforce talking only when a question is asked)
2) reinforce one target behavior while ignoring other behaviors

DIFFERENTIAL REINFORCEMENT OF OTHER BEHAVIORS -
Reinforcement after the child has not exhibited a target behavior during a predetermined interval of time, regardless of other behaviors occurring during the interval.

DIFFERENTIAL REINFORCEMENT OF ALTERNATIVE BEHAVIORS -
Reinforcement of a more appropriate form of a targeted behavior (ask, instead of demand something).
DIFFERENTIAL REINFORCEMENT OF INCOMPATIBLE BEHAVIORS -
Reinforcement of behaviors that are incompatible with targeted inappropriate behaviors (ex. hands on desk incompatible with hitting).

DIFFERENTIAL REINFORCEMENT OF LOWER RATES OF BEHAVIOR-
Reinforcement of small decreases in the rate of target behavior

DIFFERENTIAL REINFORCEMENT OF BEHAVIOR OF HIGHER RATES OF
Reinforcement of small increases in the rate of target behavior

PREVENTIVE STRATEGIES
A. Interrupting the behavior chain
1. Proximity control - anticipate student's potential response and interrupting the usual sequence of behaviors by positioning one's body a certain way, remaining calm, and facilitating communication.
2. ** Injecting humor - often reduces the tension of an explosive situation
3. Instructional control - provide instructions on expected behaviors
4. Problem-solving facilitation - offer positive alternatives to inappropriate behavior
5. Stimulus change - modify environmental stimuli that might precipitate challenging behavior (seating arrangement)

B) PREVENTATIVE STRATEGIES FOR SCHOOL
1. Knowing variables related to school violence
2. Efforts to ensure security
3. Schoolwide prevention programs
4. Conflict resolution/Peer mediation
5. Block scheduling 6. School uniforms

PREVENTATIVE STRATEGIES FOR CLASSROOM
1. Inform students what is expected
2. Establish a positive learning climate
3. Provide meaningful learning experiences
4. Avoid threats
5. Demonstrate fairness
6. Build and exhibit self-confidence
7. Recognize positive student attributes
8. Use positive modeling
9. Physical arrangement of classroom is important
10. Limit downtime

SPECIFIC BEHAVIOR REDUCTION STRATEGIES
A) Extinction - gradually reduces the frequency or intensity of a target behavior by withholding reinforcement from behavior that was previously reinforces
B) Time-Out from Positive Reinforcement - contingent on inappropriate behavior. Can remove the student from the reinforcement or remove the reinforcement from the student
1) Nonexclusion time out - student not removed from the reinforcing environment, but attention and other forms of reinforcement are taken from the student for limited period of time:
   a) Planned ignoring - removal of social attention
   b) Removal of specific reinforcers - taking away things such as food, toys, etc. for limited time
   c) Time-out ribbon - good with young children - take ribbon, bracelet, etc. until behavior terminated
3) Exclusion time out - physical removal of student from a reinforcing environment or activity for period of time:
   a) Contingent observation time out - remove to sideline (ex. penalty box)
   b) Isolation time out - remove student totally (designated corner, for example)
   c) Seclusion time out - complete removal of student to separate room or cubicle

C) Response cost ~ systematic removal
(tokens, points, etc.) contingent on behavior - used with token economy often of reinforcers inappropriate

D) Restitution- return environment to state prior to behavior that changed it (ex. clean up your mess)
Overcorrecting - vastly improved environment (clean whole room)

E) Positive practice – practice an appropriate behavior as a consequence for inappropriate one

F) Medications

G) Physical Restraint contact - manual restraint – person to person
Mechanical restraint - use of some apparatus

H) Corporal Punishment - hitting with hand or object with intent to cause pain or injury

SPECIFIC BEHAVIOR CHALLENGES

A. Emotional/behavior disorders - characterized by problem behaviors that are demonstrated more frequently, intensely and of longer duration than those of peers - puts kids at risk of exclusion from typical school settings.

B. Disruptive Behavior - serves to disrupt the ongoing learning process in a classroom - functions include gaining positive or negative attention, escaping from work, and self-gratification. Examples:
Off-task talking, getting out of seat, making noises, playing with objects, throwing objects, climbing, etc.
Possible cause - feelings of frustration related to curriculum and strategies teachers use for instruction, lack of social skills
Consequence - students often reinforced for disruption (calling out answer, class clown, etc.)
Acceptable replacement behaviors - give attention for being on task, cooperating, etc.
Teach pro-social behavior and try to get students to manage their own behavior

C. Noncompliance - oppositional or resistant behavior - Types:
Passive noncompliance Direct defiance Simple refusal Negotiation
Noncompliance often results in power and control over situation or escape from tasks.
Most effective - self-management strategies based on positive reinforcement and punishing consequences.

C. Impulsivity - children who rarely think before they act, don't wait for directions, callout frequently, exhibit remorse, poor organizational skills - likely caused by multiple factors.
Impulsivity may be reduced by teaching students appropriate "waiting" behaviors, and by consistently reinforcing them by appropriate responding behavior. Students benefit from social skill training (self-control) and also relaxation techniques.

D. Inattention - inability to remain on task, easily distracted, poor listeners. Often paired with impulsivity and hyperactivity - condition known as Attention-Deficit Hyperactivity Disorder (ADHO).

E. Hyperactivity - excessive or developmentally inappropriate levels of activity such as out of seat, moving about without permission, playing with unrelated objects, talking out of turn, making vocal noises.
Function seems to be attention, escape from tasks, self-gratification.
Behaviors associated:
Problems in school, restlessness, childish or immature behavior, problems keeping friends, overasserts self, perfectionism Caused by multiple factors
Children respond best when rules are clearly established and consistently enforced and reinforced.

F. Aggressive behavior - meant to injure another ~ gain something for the aggressor, or result in both injury and extraneous gains. Instrumental aggression - aimed at securing extraneous rewards other than the victim's suffering
Hostile aggression - used to produce injurious outcomes Behaviors associated: Physical - Kicking, hitting, spitting~ biting, grabbing, fighting, throwing Verbal - Bossiness, tattling, nonconstructive criticism, picking on others, sarcastic remarks
Functions of the behavior - power and control, affiliation, escape, gaining attention and self-gratification

Developmental Perspective - harsh parental discipline and poor adult supervision result in child being "trained" to engage in aggressive behavior such as hitting. Thus, these children often find themselves rejected by peer group and experiencing academic failure.

Question - Are they aggressive because they are rejected or rejected because they are aggressive???

Media influence - theorized that children exposed to media violence become desensitized to violent and aggressive behavior. Aggressive children often prefer violent TV shows.

Peer reinforcement

Acceptable replacement behaviors - respecting self/others, using self-control, helping others, avoiding fights, and conflict resolution skills. Social skills training using a structured learning approach as well as cognitive behavior management intervention strategies work well with aggressive children.

Building positive relationships in a positive classroom environment effective.

G. Temper tantrums - noxious behavior demonstrated by children when their demands are not met or when they are tired. Cause - learning theory - adult's pattern of giving in Function - to gain attention

Decreased through use of extinction

H. Stereotypy - repetitious, invariant responses that occur at an excessively high rate and do not appear to have any adaptive function - include self-injurious (inflict harm to self) and self-stimulatory behavior (do not cause physical injury).

Causes - learned by positive reinforcement (attention from others) or negative reinforcement (withdrawal of parent/teacher abuse); attempt to increase or decrease sensory arousal; genetic anomalies or biochemical imbalances (very rare)

Functions (SIB) - social attention; tangible consequence (gain access to toy, etc.); escape from aversive situations; sensory consequences (feedback).

Functions (SSB) - exhibited within environments that are not enriched with activities, materials, toys.

Teaching sign language for communication of needs, etc. instead of SIB.

I. Depression - Behaviors: sadness and/or irritability; poor appetite or overeating; insomnia or hypersomnia; low energy or fatigue; low self-esteem; poor concentration/difficulty making decisions; feelings of hopelessness
Models of depression Figure 10.1

Combination of interventions - behavioral, pharmacological and psychological strategies