This chapter begins by defining learning and what it means to various theoretical groups. The focus then shifts to one of those groups—the behaviorists. Woolfolk explores four specific behavioral learning processes: classical conditioning, contiguity, operant conditioning, and observational learning. The author also takes a pragmatic approach and examines the pros and cons of using applied behavior analysis in the classroom.

I. Understanding Learning

A. Learning – “Process through which experience causes permanent change in knowledge or behavior.”

B. Behaviorism is concerned with environment stimuli in the learning process and focuses on observable responses to that learning.

C. Four behavioral learning process: classical conditioning, contiguity learning, operant conditioning, and observational learning.

II. Early Explanations of Learning: Contiguity and Classical Conditioning

A. Ivan Pavlov discovered that he could get a neutral stimulus to eventually evoke a physiological response by repeated pairings with a stimulus.

B. Contiguity – “Association of two events because of repeated pairing.”

C. Stimulus – “Event that activates behavior.”

D. Response – “Observable reaction to stimulus.”

E. Classical Conditioning – “Association of automatic responses with new stimuli.”

F. Respondents – “Responses (generally automatic or involuntary) elicited by specific stimuli.”

G. Neutral Stimulus – “Stimulus not connected to a response.”

H. Unconditioned Stimulus (US) – “Stimulus that automatically produces an emotional response.”

I. Unconditioned Response (UR) – “Naturally occurring emotional or physiological response.”
J. Conditional Stimulus (CS) – “Stimulus that evokes an emotional or physiological response.”

K. Conditional Response (CR) – “Learned response to a previously neutral stimulus.”

III. Operant Conditioning: Trying New Responses

A. Confusing Terms

1. Consequences – “Events that follow an action.”
   a. Reinforcement – “Consequences that strengthen behavior.”
   b. Punisher – “Consequences that weaken behavior.”

2. Negative Reinforcement vs. Punishment
   a. Negative Reinforcement – “Strengthens behavior by removing an averse stimuli when behavior occurs.” Think of the annoying chime that goes off until you put your seatbelt on.
   b. Punishment – “A behavior followed by a punishment would be less like to happen in the future.” Think a child getting spanked.

3. Prompt vs. Cue
   a. Cue – “Provides a stimulus that ‘sets up’ a desirable behavior.”
   b. Prompt – “A reminder that follows a cue to make sure the person reacts to the cue.”

B. Encouraging Persistence in a Behavior

1. Ratio schedules encourage higher rate of response.

2. Variable schedules persist longer (less likely to go extinct).

C. Operants – “Voluntary (and generally goal-directed) behaviors emitted by a person or animal.

D. Operant Conditioning – “Learning in which voluntary behavior is strengthened or weakened by consequences or antecedents.

E. Antecedents – “Events that precede an action.”

F. Reinforcer – “Any event that follows a behavior and increases the chances that the behavior will occur again.”

G. Positive Reinforcement – “Strengthening behavior by presenting a desired stimulus after the behavior.”
H. Presentation Punishment (Type I) – “Decreasing the chances that a behavior will occur again by presenting an aversive stimulus following the behavior.”

I. Removal Punishment (Type II) – “Decreasing the chance that a behavior will occur again by removing a pleasant stimulus following the behavior.”

J. Continuous Reinforcement Schedule – “Presenting a reinforcer after every appropriate response.”

K. Intermittent Reinforcement Schedule – “Presenting a reinforcer after some but not all responses.

L. Extinction – “The disappearance of learned responses.”

M. Stimulus Control – “Capacity for the presence or absence of antecedents to cause behaviors.

IV. Applied Behavior Analysis

A. Steps In Behavior analysis:
   1. Specify the behavior to be changed and determine current level.
   2. Determine an intervention using your antecedents and consequences.
   3. Monitor the results and modify as necessary.

B. Use Premack to identify reinforcers

C. Use Shaping for complex task developing a little at a time.

D. Punishment does not lead to positive behavior, but decreases negative behavior. Use in conjunction with positive reinforcement.

E. Applied Behavioral Analysis – “The application of behavioral learning principles to understand and change behavior.”

F. Behavior Modification – “Systematic application of antecedents and consequences to change behavior

G. Premack Principle – “Principle stating that more-preferred activity can serve as a reinforcer for a less-preferred activity.

H. Shaping – “Reinforcing each small step of progress toward a desired goal.”

I. Successive Approximations – “Small components that make up a complex behavior.”

J. Tasks Analysis – “System for breaking down a task hierarchically.”

K. Positive Practice – “Practicing correct responses immediately after errors.”
L. Satiation – “Requiring a person to repeat a problem behavior past the point of interest or motivation.”

M. Response Cost – “Punishment by loss of reinforcers.”

N. Social Isolation – “Removal of a disruptive student for 5 to 10 minutes.”

O. Time Out – “Technically, the removal of all reinforcement. In practice, isolation of a student from the rest of the class for a brief time.”

P. Positive Behavioral Supports (PBS) – “Interventions designed to replace problem behaviors with new actions that serve the same purpose for the student.”

Q. Functional Behavioral Assessment (FBA) – Procedures used to obtain information about antecedents, behaviors, and consequences to determine the reason or function of the behavior.

V. Behavioral Approaches to Teaching and Management

A. Three Common Approaches:

1. Group Consequences – “Rewards or punishments given to a class as a whole for adhering to or violating rules of conduct.”

   a. Good Behavior Game – Often used with group consequences. It is defined as “Arrangement where a class is divided into teams and each team receives demerit points for breaking agreed-upon rules of good behavior.”

2. Contingency Contract – “A contract between the teacher and a student specifying what the student must do to earn a particular reward or privilege.”

3. Token Reinforcement System – “System in which tokens earned for academic work and positive classroom behavior can be exchanged for some desired reward.”

VI. Observational Learning and Cognitive Behavior Modification: Thinking About Behavior

A. Social Learning Theory – Bandura’s Bobo doll experiment demonstrated that seeing another person rewarded or punished can have similar effects as it actually happening in the observer.

B. Enactive vs. Vicarious

1. Enacted learning happens by engaging in the activity yourself and experiencing the consequences.

2. Vicarious learning happens when observing others in order to imitate.

C. Self Management – “Using behavioral learning principles to change behavior.”
1. Setting goals

2. Monitoring and Evaluating

3. Self-Reinforcement

D. Social Cognitive Theory – “Theory that adds concern with cognitive factors such as beliefs, self-perceptions, and expectations to social learning theory.”

E. Observational Learning – “Learning done by observation and imitation of others.”

F. Vicarious Reinforcement – “Increasing the chances that we will repeat a behavior by observing another person being reinforced for that behavior.”

G. Ripple Effect – “Contagious spreading behavior through imitation.”

H. Modeling – “Changes in behavior, thinking, or emotions that occur through observing another person—a model.”

I. Cognitive Behavior Modification – “Procedures based on both behavioral and cognitive learning principles for changing your own behavior by using self-talk and self-instruction.”

J. Self-Instruction – “Talking oneself through the steps of a task.”

VII. Problems and Issues

A. Criticisms of Behavioral Methods

1. Some experts fear that rewarding students for learning will undermine their desire to learn in the future.

2. Can it encourage other children to be bad to be included in the reward program?

B. Ethical Issues

1. Goals – It could be dangerous to use behaviorism just to get children to be compliant.

2. Strategies – The punishment strategy is troubling to some experts that fear that it serves as a model for aggressive behavior.

Personal Reflection

Behaviorism is alive and well in education and this chapter is proof of that. In the past several decades behaviorism has taken a pounding from the cognativist, but behaviorism has a place. The research demonstrates that behaviorist principles are
often effective in the classroom, especially among younger children. The author gives a good overview of behaviorism while at the same time emphasizing the practical applications that can be used. Because these methods are so powerful they must be used with careful consideration as to the future consequences of conditioning that is done. It would be interesting to see some longitudinal studies showing the long-term impact external rewards has towards intrinsic motivation. In other words, are children who are strongly reinforced towards an activity less likely to engage in it once the rewards stop?