

calls to all new customers). In the same way, 5 percent of the course grade might not be a big enough reinforcer to cause chronically absent students to come to class, and a professor's complaints in class might not be a big enough negative reinforcer to get some students to participate in class discussions (and by doing so, stop the professor from complaining).

USING REINFORCEMENT APPROPRIATELY In general, positive reinforcement is better for employees, managers, and the organization as a whole than negative reinforcement. Negative reinforcement often has unintended side effects and makes for an unpleasant work environment. For example, a supervisor who continually complains may be resented and disliked. Even if positive reinforcement and negative reinforcement are equally successful in encouraging desired behaviors, the person or organization providing the reinforcement is likely to be viewed much more positively when positive reinforcement is consistently used.

When using reinforcement to promote the learning of desired behaviors in organizations, managers need to exercise some caution: When certain behaviors receive extensive reinforcement and others do not, employees may tend to focus on the former and ignore the latter. For example, if salespeople are paid solely on a commission basis, they may focus on making quick sales, and in doing so, may not perform the behaviors necessary for building long-term customer satisfaction (like making follow-up calls and service reminders, for example). Similarly, managers have to be careful to identify the right behaviors to reinforce.

REINFORCEMENT SCHEDULES Managers using reinforcement to encourage the learning and performance of desired behaviors must choose whether to use continuous or partial reinforcement. When reinforcement is *continuous*, a behavior is reinforced every time it occurs. When reinforcement is *partial*, a behavior is reinforced intermittently. Continuous reinforcement can result in faster learning than can partial reinforcement. But if the reinforcement for some reason is curtailed, continuously reinforced behaviors will stop occurring more quickly than partially reinforced behaviors.

Practical considerations often dictate whether reinforcement should be continuous or partial. A manager who is trying to encourage employees to use safety equipment, for example, may find continuous reinforcement infeasible: If she has to continually monitor her subordinates' use of safety equipment, she will never be able to get any work done.

Managers who decide to use partial reinforcement can choose from four schedules of partial reinforcement.²⁶ With a *fixed-interval schedule*, the period of time between the occurrence of each instance of reinforcement is fixed or set. An insurance agent whose supervisor takes him out to lunch at a fancy restaurant on the last Friday of the month if he has written a large number of policies during that month is being reinforced on a fixed-interval schedule. Once the supervisor has taken the agent out to lunch, a month will pass before the supervisor takes him out again for performing well. If in any given month, the agent writes only a few policies, the supervisor does not treat him to lunch.

With a *variable-interval schedule*, the amount of time between reinforcements varies around a constant average. The owner of a car wash company who every so often watches each employee work on a car and praises those who do a good job is following a variable-interval schedule. The owner may watch and reinforce a given employee once a week, once every three weeks, or once a month, but over a six-month period the average amount of time between reinforcements is two weeks.

With a *fixed-ratio schedule*, a certain number of desired behaviors must occur before reinforcement is provided. Employees who are paid \$5 for every three circuit boards they assemble are being reinforced on a fixed-ratio schedule. Many piece-rate pay plans currently in use at companies such as Lincoln Electric follow a fixed-ratio schedule.²⁷

With a *variable-ratio schedule*, the number of desired behaviors that must occur before reinforcement varies around a constant average. A manager who allows an employee to leave early after she has stayed late for several evenings is following a variable-ratio schedule of reinforcement. Sometimes the manager allows the employee to leave early after working two late evenings, at other times after four late evenings, but over time the average is three evenings.

The choice of a schedule of partial reinforcement often depends on practical considerations: the particular behavior encouraged, the type of reinforcer used, or the nature of the employee's job. The specific type of schedule chosen is not as important as the fact that reinforcement is based on the performance of desired behaviors: Learning takes place only when the provision of a reinforcer depends on performance of a desired behavior.