

Applications of Operant Conditioning

Mastery Learning

Define: An approach to instruction in which students must learn on a lesson well, i.e., master the content, before proceeding on to the next lesson.

Mastery learning is based primarily on the operant conditioning of *shaping*.

Shaping: a relatively simple response is reinforced until it is emitted frequently, i.e., mastered, then a slightly more difficult response is reinforced, and so on until eventually the desired terminal behavior is acquired.

Components of Mastery Learning

Small, discrete units

Ex. Course content is frequently broken-up into smaller, separate units or lessons, with each unit covering a small amount of material.

Logical Sequence

Units should be sequenced so that the earlier units form the foundation for the later units to be built upon. Hence, the sequence should go from most basic to increasingly more complex. In order to determine the appropriate order of the units, you must perform a "task analysis" first.

Demonstration of Mastery upon completion of each Unit

Before progressing on to the next unit(s), the individual must demonstrate a desired level of mastery of the current unit. In class rooms, this is usually done by giving a unit exam/test. In training an animal or person, it can be demonstrated in a wide variety of ways depending on what exactly you are wanting to individual to learn.

Concrete, observable criterion for Mastery of each Unit

Mastery of any given area must be strictly defined by very specific concrete, i.e., measurable, terms.

"Remedial" activities for those who don't keep up with the desired pace of learning

Because individuals don't always demonstrate mastery of learning on first tries, occasionally, additional help may be needed. Often what you will find is that a different approach may be needed for some individuals to learn certain parts of a given unit.

Contingency Contracts

Define: An agreement between a student and a teacher specifying what the expectations for the student (terminal behavior) and the consequences of the student's meeting or not meeting those expectations (reinforcer / punishment).

See "Guidelines for Writing Contingency Contracts"

Applied Behavioral Analysis

See next section in lecture notes "Applied Behavioral Analysis"