

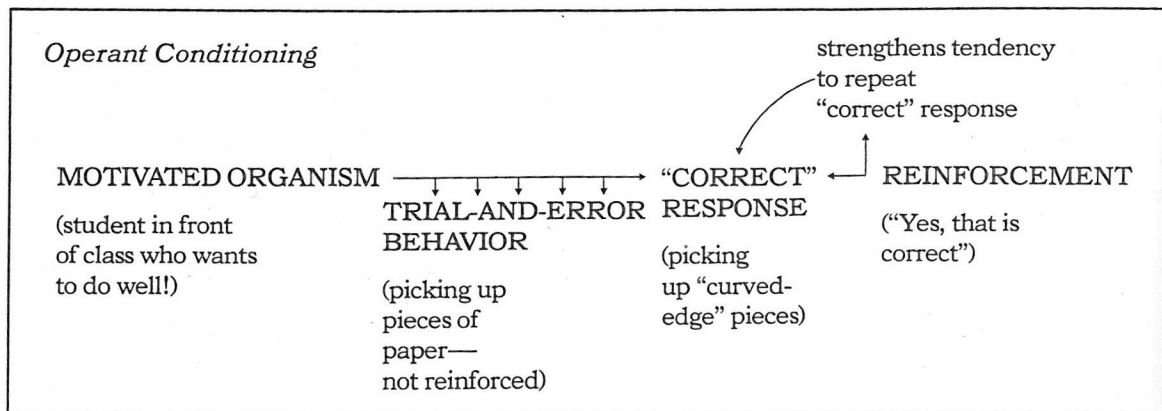
ACTIVITY 24

OPERANT CONDITIONING DEMONSTRATION

Patricia Keith-Spiegel

Concept

This classroom demonstration is a simple way to illustrate the process of operant (instrumental) conditioning with a human being. (It has never failed in 14 years, although some volunteers take longer than others to "learn.")



Instructions

Cut out approximately 40 pieces of paper 2 inches \times 2 inches. Then cut these 2-inch squares into a variety of shapes. Twenty of the pieces should have only straight edges, and 20 pieces should have at least one curved side each. (Save them in an envelope for repeated use.) Mix up the paper shapes and spread them out on a desk or table top. Ask for a student volunteer. Tell the volunteer to start picking up the pieces of paper one at a time and place them in a box. Each time the student picks one of the pieces that has a curve on it, say "Yes, that is correct." Each time the student picks up a completely straight-edged piece, give no reinforcement at all. Usually within 10 to 15 draws, the student will "learn" what has been defined as the "correct response" and will swiftly continue picking up pieces until all of the curved pieces are gone. (The students observing usually begin to approvingly giggle as the volunteer receives rapid positive reinforcements.)

Discussion

Ask the student to tell the class what she or he has learned. Be sure to point out to the class that the *only* input given the student (aside from the initial direction to pick up pieces) was in the form of Positive Reinforcement. Nothing was said about shapes or any other facet of the task. Ask the student to relate to the class what went through his or her mind during the learning process. Various trial-and-error strategies often emerge here (e.g., "At first I thought it was the larger pieces that were correct because the first big one I picked up was correct.") The basic operant-conditioning diagram provided here is helpful in summarizing for the class what they have just witnessed.

Suggested Background Readings

- Keller, F. S. *Learning: Reinforcement theory* (2nd ed.). New York: Random House, 1969.
- Krech, D., Crutchfield, R. S., Livson, N., & Krech, H. *Psychology: A basic course*. New York: Knopf, 1976. (chap. 3)
- Smith, W. I. *Conditioning and instrumental learning* (2nd ed.). New York: McGraw-Hill, 1978.

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