The emphasis of this research report was on modification of classroom behavior. After a brief introduction, the two main learning theories of Gestalt-field psychology and stimulus-response association were investigated. The importance of the individual in modifying his own behavior was stressed in Gestalt-field psychology. The importance of conditioning the individual was focused upon in stimulus-response association. Of classical and instrumental conditioning, the latter was emphasized because of its modification of response through either positive or negative reinforcement. The application of punishment as a negative reinforcement to achieve extinction of patterned behavior was viewed in an unfavorable light. Instead, positive reinforcement schedules were stressed. Some principles to guide the teacher in the execution of these theories were presented. Classroom control was discussed in terms of setting both course of study and classroom goals. The influence of the teacher as a model of behavior was also stressed. It is recommended that total control or domination be avoided. A two-page bibliography was included. (ERB)
MODIFICATION OF BEHAVIOR:
APPLICATION IN CLASSROOM MANAGEMENT

by

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INTRODUCTION: VIEWS OF BEHAVIOR

Modification of behavior, an attempt to change undesirable behavior to desirable is not as simple and clear cut as it may appear to be upon cursory examination. Behavior itself is difficult to define adequately. Since we are considering modification of behavior in a school setting, we are concerned with another broad category, learning theories.

Human behavior may be observed from the point of view of the behaver himself, referred to as "perceptual," "personal," or "phenomenological" frame of reference. Or behavior may be observed from the outside, a so called "objective," or "external" frame of reference. The perceptual viewpoint attempts to understand individual behavior in terms of how things "seem" to the behaver himself. The objective view attempts to explain behavior in terms of the individual and the situations in which we have seen him operate.¹

Both views are somewhat limited and somewhat subjective even in their attempts to be objective. For even to say, from the so called objective point of view, "this individual did this in this situation," may not explain the behavior. If the observer did not see the details and nuances of the situation to which the behaver reacted, he will not have an accurate picture. On the other hand, the perceptual field of another person is admittedly an inference. No one can be certain that what the observer thinks and feels that the behaver perceives is altogether precise. So both views, to a certain extent, rely upon the keenness and sensitiveness of the observer.

THEORIES OF LEARNING

Two main theories of learning prevail today, 1) Gestalt-field psychology and 2) Stimulus-Response Association. There is considerable diversity within each theory. Morris L. Bigge compares this situation to politics in which many persons gravitate toward one or the other political party, but, inspite of common interests, exhibit a wide
range of views.²

1) Gestalt-field Psychology Views of Learning

The "field-concept" was developed by scientists to deal with events that behave predictable, even though scientists may be ignorant of the cause. For example, no one has seen electricity nor are we entirely certain just what it is or exactly how it works, but by assuming the existence of an electrical field scientists and engineers have been able to predict and control electric currents and to build devices using its properties.

When this field concept is applied to learning theory it is referred to as the perceptual field and is defined as that more or less fluid organization of meanings existing for every individual at any instant. By the perceptual field is meant the entire universe, including the person himself, as it is experienced by the individual at the instant of action. It is each individual's personal and unique field of awareness, the field of perception responsible for his every behavior.³


Thus Gestalt-field psychologists refer to learning as a process of developing new insights or of modifying old ones. Insight may be described as a sense of, or feeling for, patterns or relationships. It occurs when an individual, in striving for his goals, sees new ways of using the elements of his environment. It is not to be considered necessarily an accurate description of the objective situation, but as an interpretation of one's perceived environment on the basis of which subsequent action can be designed.

Learning is very personal in this sense, insight belongs to the individual. It is true that it may be his, only in the sense of adoption, but it is his if he understands its significance for him. A student can learn a teacher's insight but he has a choice to accept or reject it. 4

To the Gestalt-field psychologist, a change in behavior is referred to as differentiation. As a person constantly searches his field for details that will

4 Bigge, op. cit., pp. 102-105.
better enable him to satisfy his need, his perceptual field changes. From the point of view of the behaver, this process is one of increasing awareness of details. So from the viewpoint of the behaver himself, behavior is caused. Behavior always has a reason and is purposeful, but reason and purpose may be vague and confused. "But at the instant of behaving, each person's actions seem to him to be the best and most effective acts he can perform under the circumstances...If, at that instant he knew how to behave more effectively, he would do so."5

So it follows that if one could set before a person a more desirable and self-fulfilling way of acting, he would adopt it, and thus modification or change in behavior would occur.

2) Stimulus Response Association: Views of Learning

In the eye of the Stimulus-Response Associationist, learning is more or less a permanent change of behavior which occurs as a result of practice. The key concepts in this theory are stimulus, that excitement which is

5Combs, op. cit., p. 17
provided by an environment, and response, that reaction which is made by an organism in response to the stimulus. Hence, the problem of the nature of the learning process is centered in a study of the relationships of the flow of stimuli and responses.

An important aspect in this theory is conditioning. It is so called because it results in the formation of conditioned responses. A conditioned response is one which is evoked by, or associated with, a familiar stimulus. It implies a principle of adhesion which means that one stimulus or response is attached to another in such a way that the first evokes the second.

There are basically two types of conditioning, classical conditioning or stimulus substitution and instrumental conditioning. Classical conditioning or stimulus substitution occurs when an organism learns to respond to a new unconditioned stimulus in a manner similar to his response to the old, unconditioned stimulus. Instrumental conditioning is a modification of response, not stimulus, and it is
accomplished by several means. In the case of classical conditioning one should call to mind the experiments with dogs, conducted by Pavlov, in which the sound of the bell became the new conditioned stimulus which evoked the old, unconditioned response—salivation. Instrumental conditioning is accomplished by reinforcement.  

Mention should be made here of the primary and secondary reinforcement concepts. A primary reinforcement refers to the satisfaction of basic biological needs or drives; a secondary reinforcement is one which has acquired its power indirectly through learning (such as tokens or poker chips used as rewards).  

Many reinforcement learning theorists distinguish two types of human behavior: 1) operant or voluntary,  

6Bigge, op. cit., pp. 94-96.  


7bRobert L. Hamblin et. al., "Changing the Game from 'Get the Teacher' to 'Learn,'" Transaction, Vol. 6 (Jan. '69), pp. 20-31.
and 2) respondent or nonvoluntary. They distinguish two types of reinforcers, positive and negative. A positive reinforcer is any stimulus which strengthens the behavior upon which it is made contingent. A negative reinforcer is any stimulus which upon being withdrawn strengthens that behavior. The latter is based upon two important assumptions: first, that a habit pattern has been established, and secondly, that the pattern will discontinue after the reinforcement to it has ceased. Bigge takes special care to point out that negative reinforcement and punishment are not the same thing. Punishment is application of an unpleasant stimulus or the withdrawal of a pleasant reward in an attempt to weaken a response pattern. It is held in unfavorable light today, particularly because of its unpredictable effects.

Whereas reinforcement can be controlled to good advantage, in the long run punishment works to the disadvantage of both the punished organism and the punishing agency. Its results are:

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neither predictable nor dependable... Through reward, behavior may be stamped in; but the converse, that through punishment it can be stamped out is not true... Extinction -- permitting a behavior to die out by not reinforcing it -- and not punishment is the appropriate process for breaking habits.

But is should be noted that although punishment does not speed the extinction process, it does reduce the incidence of the undesired behavior, and it may keep undesirable behavior from attaining a position of a strong habit pattern. And, with the incidence of the undesirable response reduced, an opportunity is provided to encourage desirable behavior and that may ultimately replace the negative behavior because it is more rewarding.

In general, we know that when we engage in behavior which no longer "pays off," we find ourselves less inclined to behave in that way again. This behavior might be described in more technical terms by saying that when reinforcement is no longer forthcoming, a response becomes

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9 Bigge, op. cit., p. 130.

10 Brown, 1971, op. cit., pp. 6, 16.
less and less frequent. However, even after a prolonged interval, a familiar stimulus may provoke the old familiar response for a short time. This is described as spontaneous recovery. Also, we might bring out that failure to reinforce a particular activity may result in its extinction, but generate frustration. Extinction curves often show cyclic oscillation as the emotional response builds up, disappears, and builds up again." It should be noted too that extinction does not usually occur quickly and that it is greatly protracted when there has been a long history of reinforcement. Note the difference between forgetting a habit through a long period of disuse, and extinction which is the withdrawal of reinforcement. Disuse of the habit and the passing of time seem to have little effect on the habit, if the habit had been reinforced until the time of its disuse.

A final thing to remember in discussing extinction is that intermittent reinforcements can undo the extinction

\[11\] Bigge, op. cit., p. 132.
process. So there is no simple relation between the number of reinforcements and the number of undesired responses necessary for extinction.\textsuperscript{12}

After one has carefully considered and decided that a particular behavior should be submitted to the extinction process, he should first of all determine, as carefully as possible, how often a particular undesirable behavior is occurring (establish a baserate); secondly, he should observe the behavior carefully, to determine the reinforcer; thirdly, he should set up a program so that the reinforcer does not follow the behavior; fourthly, he should from time to time, take samples of the behavior to ensure that extinction is occurring. Simultaneously with the above, he should select a desirable competing behavior and use the original reinforcer, or another more desirable reinforcer, to strengthen the new behavior.\textsuperscript{13}

\textsuperscript{12}Bigge, op. cit., pp. 132-133.

Reinforcement schedules are very important in developing positive behavior patterns. Studies by Fester and Skinner involve three broad categories. One category is labeled as fixed interval reinforcement. This schedule is based upon a time unit for its reward response (our present report cards might be categorized here.) Another category is fixed ratio, that is, the ratio between the response and the reward depends entirely upon the goals of an outside person. The last category is variable reinforcement, in which the response of reward is varied so that no pattern can be established. This proves to be the most successful, probably because it more closely resembles the life situation. A child with a constant environment knows that if he persists in certain types of behavior he will be rewarded eventually. This is similar to the intermittent reinforcement mentioned above.14

PRACTICAL APPLICATIONS

Perhaps it would be wise now to consider some principles that should be helpful in working with students.

1. In determining rewards and punishments, the safest approach is to review each individual as unique. What is one student's reward may be another's punishment and vice versa.

2. The teacher should strive to develop a sound relationship with each child in his class, in order to enhance his potential for influencing a student's behavior, for he is in a prime position to do so, a position which will be increased or decreased according to his actions.

3. Since a student may not behave in exactly the same way each time he encounters a similar situation, it is often difficult to determine when a response has been extinguished.

4. The teacher is only one of a group of people who serve as reinforcing agents in the student's life and he
may have to enlist the support of one or more of these people in the change process.

5. A student needs to be reinforced in desirable behavior, otherwise undesirable behavior may dominate and be used to obtain reinforcement.

6. Since reward (though not necessarily tangible reward) is the basic unit for changing behavior, the teacher should learn to use it effectively. Punishment on the other hand is highly ineffective and should be used only rarely and only as a means of repressing undesirable behavior, not as a way of developing new behavior.

7. The teacher should be careful to assess the total situation in determining whether this or that behavior fits the goals the student has for himself.

8. Consideration should be given to both teacher and student characteristics, the behavior patterns of each, the physical and psychological traits each brings to the classroom.

9. The teacher should learn to assess the impact he is making on the students and also, the impact the
the family and peers are making upon the students.15

Next we should discuss the problem of establishing and maintaining classroom control. Goodlad says that classroom climate is dependent upon the interoperation of factors which can be modified. Each teacher must develop a framework for organizing and interpreting data pertinent to the guidance of the learning processes. Plans should be made which include these factors. Besides familiarity with the content of the instruction and preparation of materials, consideration should be given to the learners and the process through which they learn, moreover the teachers must consider his own inner sense of direction, and the view he has of himself as a person and as a teacher.16

Equally as important as setting clear goals for the instruction is the setting of clear limits for the classroom.


Smith calls this "grooving the children." Coopersmith describes setting limits in the home, which could apply to school as well. These limits are the basis upon which the student is able to evaluate his present performance; they indicate areas of safety and hazard; they point out means of attaining goals; and they underscore landmarks that others use to gauge success and failure, in short, the limits define the expectations of others.

Brown suggests that teachers strive to keep the students guessing both in terms of their teaching method and their personal actions. Also, students should be occupied in some way. It seems beneficial, too, if the teacher maintains a certain psychological distance from the students. This helps teacher and student keep things in proper perspective.

The continuity of a culture appears to be maintained by imitative behavior, and the reinforcement it obtains.

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If an adult's behavior is imitated by the child, it is maintained by reinforcement. His behavior will more likely be modeled if the child associates him with pleasant outcomes of previous behavior.21 Some researchers, Peterson for one, distinguish between initiative behavior or modeling, and what is termed observational learning.22

The other reinforcing persons besides the teacher are parents, counselor, psychologist, and social worker. These roles vary from one locality to another and from one school to another. And even in the instance in which the roles are defined, there is bound to be some overlapping and therefore some tension. Brown and Pruett in a survey of the attitudes of teachers found that most teachers see the need for the counselor. They also agree that teachers often need help in identifying the problem.

21 Brown, op. cit., p. 56.

specifically and in dealing with a child after the problem has been identified.24

SUMMARY

In discussing behavioral modification we should first of all be aware of the different views of behavior; as it looks from without and from within. Stimulus-Response theorists, viewing from the outside, underscore the principle of reinforcement. The uncertainty of the effect of punishment makes it largely ineffective, and extinction is a more successful path if handled correctly. And, since the sequence of reinforcement is important too, one should be careful not to establish too rigid patterns so as to cause the reinforcements to lose their effectiveness. One should keep in mind the uniqueness of each individual. Each student, as well as each teacher, brings past experience to the classroom; and what may be a reinforcer for one student may not be for another.

Though the teacher has an influential role, students have powerful peer relationships and they model peer behavior as well as teacher behavior. Moreover the clear

establishment and enforcement of limits rank high on the list of effective classroom control. If outside help is needed to clarify and maintain these limits, it should be sought, many times from the parents but possibly from the school counselor, or psychologist, or social worker.

A WORD OF CAUTION

One thing to be avoided in this approach to teaching is the desire to totally control another in the domineering sense of the word. Gallegno in his book, "What We Owe Children: The Subordination Of Teaching To Learning" states:

In a perspective (of teaching) that views man as persons, results can be achieved by obtaining an individual's consent, cooperation, and collaboration in working, toward certain ends. Promise of spoils or reward may suffice to obtain such an alliance. 25

Meacham and Wiesen too, note that Precision Teaching, as they call the approach, could be a powerful weapon in the hands of the would be tyrant or director and, that it is up to educators to see that this approach is used in an ethical manner or its results might backfire. 26


26 Meacham and Wiesen, op. cit, p. 109.
and others stress that good pedagogy must involve presenting the child with situations in which he himself experiments, in the broadest sense of the term; that he tries things out to see what happens; manipulates things and symbols that stand for things; that he poses questions and seeks his own answers; that he compares what he finds one time, with what he finds at another, and with the findings of other children. In other words, he intimates that a child to a great extent, is in charge of his own destiny, and that in maturing, he is coming more and more in control of it. This is as it should be, for maturation or learning, or a combination of the two, is the means by which change in students occur.

Maturation is a developmental process within which a person manifests different traits from time to time, the origin of which has been within his cells from the moment of conception. Learning includes those changes which are not due to genetic—changes in insight, behavior,

perception, or motivation or a combination of these.28
In short, learning influences our lives at every turn,
accounting in part for the best and worst in each of
us. It is hoped that by careful consideration of these
ideas, we might all open up effective avenues of learning
through modification of behavior.

28Bigge, op. cit., p. 1.

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