DOCUMENT RESUME

ED 117 927 EC 081 451

AUTHOR Dolly, John P.; Pittman, Bettie R.
TITLE Behaviorally Oriented Programs for Learning Disabled Children.
NOTE 16p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage
DESCRIPTORS Behavior; *Behavior Change; *Educational Accountability; *Educational Methods; Educational Trends; Elementary Secondary Education; Exceptional Child Research; Individualized Instruction; *Learning Disabilities; Operant Conditioning; Research Reviews (Publications)

ABSTRACT

Considered in the paper are the contributions of behaviorally and accountability based instruction and therapy approaches to the education of learning disabled students. Pointed out in a section on individualized instruction are advantages (such as shared knowledge of learning goals and ease of evaluation) as well as disadvantages (including neglect of the students' affective behavior and undue stress on overt behavior). An honest and open relationship in behavior modification programs between the modifier and those involved in the behavior change process is encouraged. Shortcomings of the traditional "medical model" approach are reviewed, and the implications of such recent trends as B. Bloom's "Mastery Learning" model and the attention research of D. Zeaman and B. House are discussed. (CL)

Behaviorally Oriented Programs for Learning Disabled Children

by

John P. Dolly
University of South Carolina

and

Bettie R. Pittman
Mississippi State University

Abstract

This paper attempts to point out how several approaches to instruction and therapy based on a behavioral model offer the learning disabled child the individualized attention and support necessary for his educational and emotional development. The new emphasis both in education and therapy on accountability should be supported by those professionals dealing with these children. Such approaches place greater emphasis on assessment of individual needs and would tend to provide greater support for individualized programs to help overcome any disabilities a child may have. Most of these approaches are more positive about what a child can do. They assume that given the proper individualized program and the necessary support to participate that any child can learn and develop both cognitive and affective skills necessary for adjustment in our society.

BEHAVIORALLY ORIENTED PROGRAMS FOR LEARNING DISABLED CHILDREN

Introduction

There is a great deal of emphasis today on new approaches to instruction and therapy. Many of these approaches are based on research in the learning area and in particular on behavioral theory. For the first time therapists and teachers are being told that they will be held accountable for their work. Most of the new approaches in therapy have been all classified under the label of behavior modification. In the area of instruction the popular term seems to be individualized instruction. More general terms such as competency-based and performance-based education are also riding the waves of popularity. Not only are our therapy and instructional models changing but there are new models of evaluation that deal only with overt behavior change as a criteria to be evaluated (Popham, 1968).

In this paper we assume that this trend toward behaviorally oriented systems of therapy and instruction will continue. There appears to be a need for more professionals, who work with learning disabled children, to be aware of these changes and the impact these changes may have upon the children we deal with. The authors contend that these new approaches offer the learning disabled child the one thing he often needs, a truly individualized program of self-development. Most new approaches especially in education make the committment that each child be educated to his full potential. Combined with this noble philosophy is a trend toward ungraded schools and classrooms. These trends offer us a golden opportunity to make far better use of available educational facilities in our communities. This trend takes the pressure off the child. He is no longer labelled by age or grade level. In these programs it is possible for a child to be functioning at five different levels in five different areas. The

child with a particular learning problem will be able to spend more time adequately learning basic skills in some areas while being allowed to advance at a normal rate in others.

These new approaches deserve our support. The tendency in the past seems to have been to emphasize diagnosis. We as professionals were concerned with determining the causes of learning disabilities and with labelling these causes. Somehow, we believed that if we could just discover the causes we could prevent the problem from occuring. This approach has not helped us to deal with the immediate problem. What do we do to help the child who already has a learning disability? Today's new approaches are based on "doing" not "looking back". They are concerned with getting the child, under the direction of a teacher or therapist, actively engaged in a learning process in which his behavior will be modified. These approaches are almost without exception positive about what the child can do. They all assume that given certain basic skills and enough time combined with an individualized program of instruction that each and every child can learn. That the child can learn not only cognitive skills but that he can also learn and develop affective behaviors. According to Bloom (1968) a student who develops his cognitive skills will also tend to develop more favorable attitudes toward himself and will develop a healthy positive self-concept.

Individualized Instruction

Instruction is the one area where many new approaches have come about. Almost all new approaches assume that prior to instructing the child behaviorally stated goals or objectives are being used. In addition to the use of objectives almost all new models of instruction rely heavily on the use of positive reinforcement and immediate feedback of

results. A good example of this type of approach is the one developed by Keller (1968) typically referred to as a "Personalized System of Instruction." Keller bases his approach on the assumption that the learning a child is supposed to acquire in the classroom can be greatly facilitated by the use of immediate reinforcement. To accomplish this students work under the direction of other students or tutors. Everything the student does is observed so he can be helped when he needs it and reinforced when he engages in appropriate behaviors previously defined. This concept is really similar to Bloom's (1968) notion of providing every student with a good tutor. In both cases, contrary to the expectations of some cynics, the educational process actually becomes more humanized. The student is no longer one in a mob of thirty but is an individual with a unique learning program who receives constant attention and encouragement. Such a positive approach can't help but change certain negative attitudes found in many students toward educators and education.

Some of the advantages in individualized approaches based on a behavioral model are obvious. Most learning outcomes are easily measured and evaluated. Both the student and the teacher know exactly what the goals of instruction are and how they will try to reach these goals. It also allows us to reorganize schools and do away with graded classes tied to chronological age.

We are not so blind, however, that we don't also see some valid criticisms and possible drawbacks to individualized approaches. In many schools where there has been a new emphasis on "performance-based education" there has been such a preoccupation with trying to write and operationally define goals that the learner has come to take second

place in the process, behind the curriculum planners. There is a growing tendency among many of these educators to measure in great detail meaningless cognitive behaviors while avoiding even mentioning affective behaviors due to the difficulty in defining and measuring them (Bloom, Hastings & Madaus, 1971). This is a problem of extreme importance to those of us who do work with learning disabled children. These youngsters are especially more likely to have need for individualized programs that incorporate affective change. Many of these children have emotional problems and require more support in this area when compared to the so called "normal" school age child.

One of the major themes of behaviorally oriented models is the emphasis on overt activity. The child must actively behave so he can be reinforced. This approach is very effective with overtly demonstrated behavior but it does not necessarily account for learning that is strictly cognitive with no overt performance. In other words, a behaviorist agrees that learning takes place after the student demonstrates some performance or skill that represents learning. This stress on overt behavior may place the learning disabled child at a disadvantage in such a model. All models of instruction and teaching make some assumptions that may not be valid for certain students. Almost all models assume that the child is basically physiologically normal and his intelligence is within a normal range. Most models of instruction do not take into account the student's emotional state prior to teaching but talk about changes in the affective domain resulting from instruction. Although many programs of behavior modification do deal with these problems they are often not offered in conjunction with instructional programs. With the problems displayed by most learning disabled children it may be a more realistic suggestion that their behavior be modified prior to instruction in order to facilitate the

learning process.

The fact that some behavior modifiers and some instructional theories and models are not taking the learning disabled child into account is reason for some concern. We should not turn our back on these approaches especially when they have demonstrated their success in a wide variety of settings. Instead we need to get actively involved so when these programs are implemented they take into account the problems that we now deal with.

In the area of instruction one of the most positive characteristics of the behavioral approach is its emphasis on preassessment. Prior to any learning sequence the student is evaluated on his skills that are considered pre-requisites for the learning sequence. This assessment of entry behavior prevents students who have not mastered basic skills from attempting more complex ones that are beyond their current level of ability. This prevents students from continually entering into learning situations where they are doomed to failure. One of the major problems in working with learning disabled children is the early identification of these children so they can be helped. The use of pre-tests to assess entry behaviors at all levels of instruction could easily be used as one tool for identifying children with learning problems.

The Use of Behavior Modification

Most parents are masters of behavior modification techniques. These people are simply unaware of their own ability. One way to define behavior modification is simply "changing behavior by rewarding the kind you want to encourage and ignoring or disapproving the kind you want to discourage" (Madsen & Madsen, 1971). Most parents teach very basic social skills by using behavior modification. Take for example toilet

training. The parent is faced with the task of modifying not only simple behavior but a complex set of natural reflexes. Yet most parents succeed. Some do a better job than others but the point is that by working with the child and shaping his behavior parents are able to modify a normal set of bodily functions in order to conform to social mores. The fact that they can modify such a complex set of behaviors should be a clue to parents that other behaviors can also be modified.

Many of us still find it hard to accept that behavior can be easily modified. What probably bothers most people is the fact that anybody can do it. The basic skills necessary are within the reach of most people. One must simply be able to accurately observe behavior and know when to reinforce and not to reinforce behaviors. The fact that parents and teachers modify behavior constantly should have been a clue to researchers long ago to see how they did control and change a child's behavior. Only recently have therapists, teachers and parents begun to realize that behavioral principles can be applied so easily and the use of behavior modification techniques is growing. There are many people who think there is something wrong or unethical about purposefully changing a child's behavior. Such changes of behavior have often been the goal of therapists and educators over the years. Today's behavior modifiers are probably a lot more open and honest about their techniques and procedures than many of the other approaches taken in therapy. In most if not all behavior modification programs there is an element of honesty and openness between the modifier and the person having his behavior altered. The behaviors to be extinguished and altered are freely discussed and agreed upon mutually. When a child is involved parents are involved totally in the behavior change process. In this situation both the modifier and the client or student

knows exactly what the goals are and what procedures will be used to achieve them. Such an open approach to behavior change is a welcome change to the old approach of keeping everything secret from the client. If we are doing our jobs correctly and honestly we should have nothing to hide. This open and honest approach should help weed out those few people who are doing more harm then good in their dealings with children and keep the rest of us a little more aware of our own behaviors.

The Traditional Approach

Many of the people who work with learning disabled children often fall into the trap of looking for causes and reasons for the particular disorder a student demonstrates. This view and approach to problems is similar to the "medical model" of behavior described by Ackerman (1971). In this model the therapist or teacher assumes that if the cause of a particular behavior can be discovered that the behavior will then be brought under control by simply making the person aware of its origins. The problem with this approach is the tendency to keep looking for causes in the past history of the person and a tendency to avoid working with the symptoms. In fact it is the symptoms that interfere with the individual's functioning. What caused the symptom is irrelevant so long as we deal with the immediate problem and solve it. For example, a retarded child who, can not attend to stimuli for even short periods of time, will have difficulty in learning. To look at his past life history, to search for the causes of inattention will provide doctors and therapists with some insights into the disorder. But, the history and background information does not solve the child's problem. He has no attention span regardless of what caused it. Our task is to help the child develop his attention span so he can attend to stimuli and learn. Unless the medical people

and therapists help us develop a training program to instruct this child their efforts are of no value to the child's instructor.

One obvious danger here is the tendency to disregard medical or physiological causes that if discovered could be controlled. Here again it is up to professional people who have an interest in the child to see that mistakes are not made by an oversimplified view of the problem. To search for causes so we can directly help the child is certainly a legitimate objective. What we are against is the search for causes in the past and then using these causes as an excuse for the child's inability to learn.

Recent Trends

Since Bloom (1968) published his article on "Mastery Learning" there has been a great deal of excitement within the educational community about the possibility of educating every child. In fact Bloom states that all children except those severely retarded or suffering from extreme emotional problems (5% of the school population) can be taught all we have to teach. Bloom does not label himself a behaviorist, but in his "mastery model" he makes many of the same assumptions that behaviorists make. Bloom assumes that we start instruction after we have behaviorally defined our goals. This must be done so we can evaluate our learning outcomes. Bloom's concern is with how we evaluate children. He hypothesizes that our current methods of labelling children are really harmful. He proposes that each child be given all the time he needs to learn. To support the child, Bloom suggests a wide variety of instructional procedures he tried until the one that suits the individual is found. The key to mastery learning is allowing each child as much time as he or she requires in order to master certain skills. Bloom's approach is extremely

optimistic with 95% of the students supposedly capable of A grades. It also stresses the current popular notion of totally individualized programs to fit each student's particular needs and learning styles.

This has been a model that most of us would like to use but have been reluctant, due to the time factor. Even Bloom (1968) in the original article mentioned that for some children the time may be so great that it simply would not be worth the investment. New research, however, would seem to indicate that Bloom's original optimism may be justified. That given the proper conditions any child can learn and the time needed would be within reasonable limits.

Anderson (1973) has an interesting hypothesis about school learning. He says that most children do learn most basic skills to mastery. Some children do take longer but eventually they master the skills. Anderson sees the biggest objection to a mastery approach or any individualized approach, being the length of time it is going to take the slow child to learn. The problem becomes one of time. Can we reduce the time it takes for learning to occur with a learning disabled child? According to Anderson "in analyzing standard achievement norms in both primary and secondary grades one sees that an achievement level reached by approximately one-forth of the students in a particular year is attained by approximately three-fourths of the students in two additional years." Every child can learn, now our task is to reduce the time so schools and educators will attempt to use individualized models of instruction.

In his research Anderson found some interesting points. He found that the most important component in learning was the time the student actually spent on the learning task. He found the

difference between fast and slow learners was directly related to the amount of time each student spent working at a particular task. Time is important only because some students are not spending it on the learning task. Instead they are daydreaming or doodling or distracting themselves from the learning situation. Apparently, once we can get the slow child to spend his time on the learning task we will have eliminated much of the time lag between fast and slow learners. It may take the slow learner a little longer to learn basic skills but once these are learned his learning rate should pick up so he will eventually keep pace with the faster learner. In other words at grade three the fast learner is doing third grade work while the slow learner may be completing first grade skills. By the time the fast learner is in the seventh grade the slow learner should be in the fifth.

This type of research and approach to teaching was emphasized by Zeaman and House (1963) when they demonstrated that the problem with retarded youngsters is a problem in attention not one of learning. Their research demonstrated that initial learning is a function of attention. The reason retarded children did not learn was their inability to attend to relevant stimuli. They too found that ability to attend is initially related to intelligence. However, once basic skills are mastered by teaching the child how to attend the variability displayed early in a learning sequence between fast and slow learners begins to disappear. In their research they demonstrate how positive reinforcement can be used to develop skills in attending to stimuli.

As mentioned previously we are so busy describing, labelling, and diagnosing that we forget to look for ways to help teach learning

disabled youngsters. Yet many of us put the blame for their ineffective behavior on some inability to learn. This appears not to be the case according to the research quoted. Most learning disabled children need to learn two things; first, how to attend to relevant stimulus situations and second, how to respond appropriately to various aspects of that stimulus situation. Too often in these models of behavior change, we concentrate solely on the response. Little emphasis is given to the stimulus or to stimulus control procedures. Most state that the learning environment should be structured to prevent unwanted distractions. Some models (Silverman, 1968) provide for making the stimulus component more distinctive to make it easier to attend to. But most stop here and turn their attention to reinforcing overtbehavior and then after the behavior is learned pairing it with a stimulus.

Most of us dealing with learning disabled children are not at the level of behavior where we can deal with reinforced overt behavior. Our task is first to teach the child how to attend to stimuli, a far more basic and more difficult step. We must reinforce and teach attending behavior before attempting to teach basic skills and information. The fact that this has not been done may be one of the reasons behavioral approaches in the past have not been as successful with learning disabled children as with so called "normal" children. In many children we must first provide a strong enough stimulus to capture their attention and then try and elicit a response to the stimulus event. Such an approach would be needed only in the initial stages. Once the child had developed basic skills in attending to stimuli he could be placed in a normal sequence of a behavioral model.

Again the fault in applying the behavioral model may be our own. Those interested in children with specific disorders need to get involved in these programs. They need to push for research on effective ways of changing behaviors of specific problem youngsters.

The trend toward behavioral approaches is no longer a trend but is a reality. Those of us with a vested interest in working with the learning disabled child must make sure that new programs being instituted provide for these children. Individualized instruction becomes meaningless unless proper assessment of a child's abilities and limitations are made. As mentioned previously unless we as professionals help devise techniques of evaluation for these children in some programs they may be overlooked. To help change this trend a greater emphasis should be put on programs in colleges and univeristies to have students enroll in courses on behavior modification, instructional design and evaluation. In schools where new approaches are being implemented we need to be aware of what changes will be brought about in existing programs and services for learning disabled children. We should not stand in the way of change especially when it is positive. But, we do need to protect the interests and well being of a large number of children with learning disabilities. Those of us who become knowledgeable of these new trends and procedures will be in a better position to protect the interests of these children and of the communities in which we serve.

References

Ackerman, J.M. Operant conditioning techniques for the classroom teacher. New York: Scott Foresman, 1971.

Anderson, L. Time and school learning. Unpublished doctoral dissertation. University of Chicago, 1973.

Bloom, B.S. Learning for mastery. Evaluation Comment, 1, no. 2 (1968).

Bloom, B.S., Hastings, J.T., and Madaus, G.F. Handbook on the Formative and Summative Evaluation of Student Learning. New York: McGraw Hill, 1971.

Keller, F.S. Goodbye teacher. Journal of Applied Behavioral Analysis, 1, 1968, pp. 79-89.

Madsen, C.K., and Madsen, C.H. You are already using behavior modification. Instructor, 2, 71, October 1971, pp. 47-56.

Popham, W.J. Objectives and instruction. American Educational Research Association Monograph Series on Curriculum Evaluation, No. 3 Instructional Objectives. Chicago: Rand McNally, 1969, pp. 32-64.

Silverman, R.E. Using the S-R reinforcement model. Educational Technology 1968. Reprint.

Zeaman, D., and House, Betty J. The role of attention in retardate discrimination learning. In Norman R. Ellis (Ed.) Handbook of mental deficiency. New York: McGraw Hill, 1963, pp. 159-223.