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This document provides summary descriptions of a dozen ESEA Title III programs using behavior control techniques on various populations of school-age youth, for different objectives. Each program summary gives the title, population served, approximate annual cost, procedures, a brief evaluation, and whom to contact for further information. (EM)

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STATEWIDE DISSEMINATION SERVICE

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A PROJECT TO IDENTIFY, EVALUATE, AND DISSEMINATE OUTSTANDING INNOVATIVE AND EXEMPLARY PROGRAMS IN MICHIGAN

PURPOSE: TO DEVELOP CRITERIA TO IDENTIFY OUT-
STANDING EDUCATIONAL PROGRAMS FOR
PURPOSES OF DISSEMINATION

OBJECTIVES: TO IDENTIFY OUTSTANDING EDUCATIONAL
PROGRAMS

To utilize the know-how of educational leaders in
establishing criteria for identifying promising prog-
rams.

To evaluate promising programs and to select those
worthy of diffusion.

TO DISSEMINATE INFORMATION ABOUT PRO-
GRAMS

To collect, record, and distribute basic infor-
mation.

To analyze outstanding programs and to com-
municate the outstanding features.

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NEW IDEAS IN MICHIGAN EDUCATION

BEHAVIOR MODIFICATION

A publication of the
STATEWIDE DISSEMINATION SERVICE

April, 1969

Wayne County Intermediate School District

Detroit, Michigan 48226

Leonard S. Demak
Coordinator

UD 009 160

Progress in education, as in virtually every other field, often is delayed simply because we too seldom know about the achievements of others.

If a superintendent or teacher only had brief information about a program being conducted in another part of the state, he often would be able to save invaluable time and effort in revising a program which he might be planning.

One of the primary goals of this publication is simple but can be extremely effective. It is to provide ideas about various programs in Michigan so that others may develop such programs if they are adaptable to their own areas.

This publication and STADIS, constitute an excellent example of state and local cooperation—cooperation to provide a service which hopefully will give valuable assistance in improving programs throughout Michigan.

Ira Polley
State Superintendent
of Public Instruction

Behavior Modification was developed with considerable consultation and assistance by:

Henry M. Boudin
William H. Butterfield
Joy J. Rogers
Timothy L. Walter
Todd W. Woolery

To the extent that this represents a useful contribution, they should be credited.

While the descriptions of programs presented here were based upon on-site visits, progress reports and other documents, only STADIS should be held responsible for errors of fact, omission, or interpretation.

Leonard S. Demak

Introduction

Every day, thousands of times every day, teachers throughout the country say such things as; "He's having trouble at school because of his home situation," "I think he's incapable of learning," "He's disrupting my classroom and shouldn't be there." In essence, these are ways of stating problems that place the causes of problems somewhere inside individual children.

Some teachers, however, are beginning to assert that in many cases a child's failure to learn is a failure on the part of the teacher or of the educational system. This booklet reports on a number of programs in which a child's failure to learn is viewed as the result of controllable environmental conditions.

In their search for ways to reach children who have not yet learned that intellectual attainment can be rewarding, these educators have successfully taken principles of learning from the psychological laboratory and applied them in the classroom. The basic premise behind this approach to learning is that, with proper incentives, almost every child can learn successfully in a regular school setting. Motivation, rather than a deficit in the child's learning ability, is considered the central problem.

A number of such approaches have been observed. Typical of teachers' statements about these techniques is that of Sister Helen Shipman who said, "Last year I was beginning to feel ill at the thought of having to teach this class next year. However, I have had such a peaceful year. Usually by this time of year I can hardly wait for June. I could never think of teaching any other way." It is hoped that this booklet will encourage others to investigate these techniques and to utilize them in their own school systems if they appropriate to their own needs.

Although the application of the techniques can become quite complex, the basic assumption common to all of the programs is quite simple. It is that each child must find sources of reward in the classroom if he is going to learn. For many children the acquisition of knowledge, teacher praise for a job well done, or a good grade is sufficiently rewarding to maintain acceptable progress in school. For

some children, however, this is not the case. Additional sources of reward must be found and utilized. This, in and of itself, is hardly an amazing finding. Teachers and parents have long recognized that things other than a love of learning motivate children to attend school. What is different about this approach is that rewards are systematically provided to students whenever they have successfully accomplished some appropriate school task. Such an approach has enabled some teachers to teach some of the "unteachable" and to do a better job of teaching "normal" children.

The programs reported are innovative or exemplary in one or more ways. Their success is the result of finding and systematically using appropriate sources of reward for each child in the programs. All of the programs report a classroom atmosphere where children seek knowledge and where pupil failure is virtually unknown. In addition, group and individual discipline problems have decreased. Thus, teachers can spend more time teaching and less time maintaining classroom control.

It is not our intention to suggest that the remedy for all educational problems can be found in what follows. Rather, this booklet has been prepared in the belief that educators have a need to know and do want to know, of important developments. We hope that educators will evaluate the philosophical bases of the teaching-learning models, will observe and question, and finally, will try those practices having promise for the education of children.

What is Behavior Modification?

Behavior, adaptive or maladaptive, is learned in a systematic manner. Knowledge of this principle has encouraged research about the relationships between the variables that control human learning. Consequently, a system which guides us in the prediction and influence of learning has been developed.

The basic concept is that behavior is a function of its consequences. The future probability that a behavior will occur depends upon its previous consequences. That is, if the consequences of the behavior are positive, it is likely that the performance of the behavior will be increased; if the consequences are negative, it is likely that the performance of the behavior will be decreased.

People are familiar with this concept. Teachers and parents use rewards and/or punishments as consequences of their children's behavior. Recently, the *systematic* use of rewards has proven to be an effective tool to modify human behavior.

Three components seem common: (1) individualization; (2) testing, and (3) specified contingencies for learning. Each of these components may include several elements:

—Individualization

—A detailed listing of stated instructional objectives.

—A systematic plan to achieve instructional objectives.

—Academic materials geared to each pupil so that he may work quite independently, i.e., with minimal direction from the teacher.

—Testing

—To evaluate the needs and levels of achievement of each student.

—Post tests to measure the achievement of objectives by each pupil.

—Specified Contingencies for Learning

—Immediate academic and/or social rewards as part of the classroom environment.

—Clear specification of rewards available for the performance of desired behaviors.

—Desired behaviors which students can perform so that it is possible for them to achieve the reward after a reasonable period of effort.

**Eastside Youth Project
Detroit, Michigan**

Population Served:

The participants are twelve to sixteen year old delinquent boys. There are presently four groups of seven youths each and additional groups are planned. All of the youths are from the inner city area and are not presently in any type of residential institution.

Approximate Annual Cost:

The program is funded for \$98,000 per year by a NIMH grant.

This program represents an attempt to develop positive academic and social behaviors which are incompatible with continued delinquency. Each of the groups operates with a token incentive system in which participants earn tokens for good school grades. The boys may also receive tokens for other constructive behaviors when they are given "merit slips" by their teachers and counselors.

Half of the tokens earned by each boy must be deposited in his group's "bank". Some credit can be deducted from the group's balance if any member is absent from or punished at school or if any member is arrested. The group can eventually divide the amount in their bank among themselves or use the money for an outing. The tokens used in the program are exchanged for money and participating boys usually earn between \$1.00 and \$10.00 per week based on their performance in school.

Good school achievement also allows the boys to go on outings and participate in work details. A boy may earn \$1.25 per hour on a work detail and may work up to ten hours per week. Pay for work and positive school achievement is emphasized in this program because such behaviors must be competitive with criminal behaviors-acts which seem to pay quite well for some youths.

This program was begun on January 27, 1969, but it is already expanding in several important areas. A half-way house will be opened soon and operated with a token economy. Plans have been developed to pay youths in this program for helping younger children to make similar changes in behavior. There are also plans to open a sheltered workshop in which production and pay would be contingent on group effort. Even staff of this program are paid on a contingency basis--that is, a staff member's income is increased as measured improvements occur in the behavior of the boys with whom he works.

For further information contact:

David Giles, Ph.D.
Eastside Youth Project
11206 Charlevoix
Detroit, Michigan 48214
Phone (313)822-8118

Detroit, Michigan

Population Served:

Approximately two thousand children in four inner-city elementary schools are served by this project.

Approximate Annual Cost:

The project costs about \$1200 per pupil per year. Primary source of funding is the Elementary and Secondary Education Act, Title III. Additional funds are provided under Title I of that act and by the Detroit Board of Education.

The purpose of this project is to improve the performance of participating children on standardized tests. In this first year of the

project, extensive pretest data have been collected on participating children as well as control groups of non-participating children. Class size has also been reduced this year.

The primary efforts of the project's staff this year have been directed toward training the 150 teachers who are a part of the project. These teachers are taught to write goals in terms of student behaviors and to developmentally organize instructional sequences. Programmed materials are used by the teachers in learning these skills. The teachers also learn to use Premack's principle to select behaviors that the teachers would like to increase in their students.

Although the program in teacher training stresses the development of oral language for the participating children, the project director states that the principles involved can be generalized to a wide variety of students and subject areas. These techniques are such that the children assume increasing responsibility for their own learning. Students will be expected to develop the skills required to write their own objectives, design their own learning sequences, and identify their own reinforcers. Student self-evaluation is an integral part of each step.

Considerable concern has been directed toward developing systematic methods of data collection. Computers will be used in the analysis of data for the evaluation of the project's effectiveness. Presently, the staff are trying out their learning materials on individual children. Work with whole classrooms is expected to begin May, 1969. Therefore, only limited data on the effectiveness of the materials are presently available.

For further information contact:

Mr. Sheldon Sofer	or	Dr. Hugh Scott
Detroit Public Schools		Region 8
5057 Woodward Avenue		15755 Bremen
Detroit, Michigan 48202		Detroit, Michigan 48224
Phone (313)833-7900, ext. 2250		Phone (313)886-7652

Child Development Center
Kalamazoo, Michigan

Population Served:

Thirty-six children between the ages of two and a half to four years are in the two classrooms of this program. Twenty-two of the children are described by the program's directors as disadvantaged and attend tuition free. The remainder of the students pay tuition and tend to be children of faculty and students of Western Michigan University.

Approximate Annual Cost:

Each classroom costs about \$50,000 per year to operate. This includes the cost of equipment, supplies, and salaries.

Evidence cited by the program's directors has shown that when children from the ghetto enter school, they are already academically behind. The purpose of this program is to develop skills in participant children that equal or exceed the expectation for the average child. It is further hoped that children so trained would be able to maintain this academic advantage throughout their school careers.

Training is provided in the prerequisite skills for successfully entering school. These include language development, appropriate peer interactions, child-adult interaction skills, and the behavior of attending to a task. Reading training is emphasized and some arithmetic and science instruction is also given.

Children are rewarded for desirable academic and social behaviors such as completing a puzzle or assisting another child. Hearty praise is accompanied by "Froot Loops" (a pre-sweetened cereal eaten dry as a candy). Another major form of reinforcement is

time which can be spent in an area where a live rabbit and several appealing toys are kept.

Supplementing the teachers and university students, high school students from the black community serve as aides in the nursery program. They are trained in behavioral techniques as part of a separate project designed to build leadership among the young adults of the community. They then apply their training in on-the-job experience at the Child Development Center.

Data are kept on the behavior and achievement of individual children, but since this is the first year of the program's operation, there are no data available on the success of the program in improving the children's level of achievement in their regular school years. Program staff note conspicuous academic gains among the participating children this year.

For further information contact:

Roger Ulrich, Ph.D.
Research Professor in Psychology
Western Michigan University
Kalamazoo, Michigan 49001
Phone (616)383-1825

School Adjustment Program
Kalamazoo, Michigan

Population Served:

Forty children from seven to sixteen years of age are included in the four school adjustment classrooms in the Intermediate School District. Children admitted to these classrooms show various behavior problems which could not be handled successfully if the child remained in the regular classroom. Several other children are served either by home visits if they have

been excluded from school or by cooperative work with their classroom teachers if they remain in regular classes. About three hundred teachers per year participate in in-service workshops conducted by the staff of this project.

Approximate Annual Cost:

\$10,000. This program is funded through state and local sources for special education programs.

Children admitted to this program are assigned to one of four classrooms on the basis of their age and level of academic development. Each of the classrooms is operated as a token economy. Tokens earned by the children can be used to purchase toys, snacks, school supplies, or "rental" time to use a slot car set. The economies of each classroom are varied to account for differences in age and interests of the children. For example, a teacher of the younger children sends daily report cards to the parents with instructions for praising the children. A teacher of junior high school age children has improved the status of her students among other children in school by making tokens available so that the other children can spend them on pleasant visits to this special classroom.

Data are available on the behavior changes of individual children. However, no program-wide data have been compiled. Children who have returned to regular classrooms seem to have made adequate adjustments.

For further information contact:

**Robert Hawkins, Ph.D.
Kalamazoo Valley Intermediate School District
508 East Dutton Street
Kalamazoo, Michigan 49003
Phone (616)342-0254**

**The "Clugie" Program
Sault Ste. Marie, Michigan**

Population Served:

The students in this program are twenty-nine fourth grade children in a parochial school classroom.

Approximate Annual Cost:

The program costs about \$3.00 per year per child. This money is obtained by contributions from the parents of the participating children.

Sister Helen Shipman's classroom is an exceptional one by almost any measure. The students' levels of motivation seem above those of many fourth grade children and academic achievement is well above the norm.

This teacher uses a point system in addition to praise and recognition as her primary means of reward. Points, which are called "clugies" can be used to purchase material goods such as candy, trinkets, and books or to purchase privileges such as talk time and listening to music over earphones. Sister Helen Shipman makes some interesting comments on the utilization of the points by the students.

- 1. The immature... spent their points nearly as fast as they earned them.**
- 2. Children from large, happy, secure families saved large quantities of points, rarely spending any.**
- 3. The more affluent and generally brighter children spent points for privileges rather than consumable goods. (Privileges are talk time, listening to music via earphones, etc.)**
- 4. Some of the children with well-developed insights would spend points to use the teaching tapes, or cyclo-teacher where they**

could earn two or three times as many points as they had spent initially to use the equipment.

Points are earned by the students for performing the learning tasks each student is expected to complete. In addition to the usual tasks, students who seek additional information about topics receive immediate recognition and reward. During transition between activities, "clugies" are given for orderly movement from one activity to another. Students can purchase the right to work on more advanced materials for which they also receive points. The students engage in a great deal of such work.

A teacher aide is available in the classroom to provide full and immediate contingency coverage to the children in the back of the classroom who are not as easily attended to by the teacher. So that the effects of the program will be clear, it operates only in the classroom and not when children are in other parts of the school. The program is so well developed that the teacher has time to spend with each child as an individual. The children's overall level of motivation is so high that, as the teacher reports, there have been some complaints from parents about children doing too much studying (voluntary, not required) and thus not enough playing.

What makes this classroom even more interesting is that prior to the development of these procedures, the class was a difficult one. In each of the first three grades, some of the children had been behavior problems both in class and on the playground. "Fighting, pushing, hitting, tattling, and other aggressive behaviors were common. Written work was usually incomplete and untidy." In short, the best efforts of the children's three previous teachers, all recognized as good teachers, had not developed acceptable classroom behavior in the children.

It should be pointed out that at the time Sister Helen Shipman started the present program, she had only the briefest exposure to the principles involved and yet she was able to utilize them most effectively in her classroom. Now other teachers have indicated an interest in using these techniques.

For further information contact:

Sister Helen Shipman
377 Maple Street
Sault Ste. Marie, Michigan 49783
Phone (906)635-5301

**Spontaneous Activity in Education
Sault Ste. Marie, Michigan**

Population Served:

The students in this program are forty second grade children in one parochial school classroom with one teacher and no aides. The students vary in intellectual and behavioral characteristics.

Approximate Annual Cost:

This program is operated within the limits of the materials that were already available in the classroom. There is no additional funding.

Here, behavior modification was originally created for one child who appeared unable to obtain recognition in constructive ways. It was later generalized to the entire class when it appeared that it could provide greater personal and academic freedom for all of the children than would otherwise have been possible in a class of this size.

The basic unit in the economy of this classroom is the "snirkle"—an oblong plastic object about three inches in length. The value of a "snirkle" lies in its close association with praise and positive achievement. It is further strengthened by recognition from the parents. Children take home reports of their total number of "snirkles" each week. Selection of children for special class and school activities is based on the number of "snirkles" accumulated over a given period of time.

A child may earn "snirkles" through good performance on individual or group tasks or by outstanding behavior. When some children are not behaving appropriately, the teacher recognizes the child or children who are doing the correct thing by giving them "snirkles." At the end of the school day, some children who are appointed as "bankers" tally "snirkles" and record them on each child's name card with a felt tip pen. The children seem to value "snirkles." They speak with pride about their daily and weekly totals.

The value of this program has not been assessed in any formal way. It can, however, be deduced from the amount of constructive activity in the classroom. Children who are not involved in an instructional group at any given time are free to do assignments, use reading laboratory materials, select from several teacher-made assignments, or even plan and do their own assignments. Each activity is rewarded according to the amount of effort expended by the child. None of the children remain idle and many either select or create their own homework assignments. The contingencies in this economy are constantly changing. For example, when many of the children began to abandon their recess to use the time for independent study, it became necessary to "charge" them a few "snirkles" for the privilege of remaining indoors. Such enthusiasm on the part of the children is a strong indicator that the goals of greater personal and academic freedom are indeed being achieved.

For further information contact:

Sister M. Johneda O.P.
1111 Minneapolis
St. Joseph's School
Sault Ste. Marie, Michigan 49783
Phone (906)632-6193

In-School Treatment Program Vicksburg, Michigan

Population Served:

This program serves all of the classes in one elementary school and has been extended to provide limited services at three other elementary schools within the system.

Approximate Annual Cost:

\$14,500. These funds were originally provided by a grant from the Michigan Department of Mental Health. However, this responsibility has now been assumed by the Vicksburg Community Schools and the Kalamazoo Mental Health Services Board.

This is a preventative, rather than treatment oriented, program. Its purpose is to equip teachers with behavior modification skills to help them develop students who are socially and academically adjusted. Primary reliance is placed on the methods and materials normally available to the teacher.

Projects are conducted either by teachers who have had in-service training in operant techniques or by university students. Typical activities include increasing the amount of time children spend studying or attending to the teacher and decreasing the amount of noise or disruptive behavior in a classroom. In keeping with the policy of using only materials normally available to teachers, typical reinforcers include extra time that the child may spend in a variety of activities from using the gymnasium to working as the janitor's helper.

Extensive data have been compiled on the results of work with individual children and classroom groups. A comprehensive report for the total project will be available in the Spring of 1969. As a measure of the program's success in the prevention of adjustment

disorders, project directors cite a steady decline in the number of child guidance clinic referrals from the participating school from 28 to 0 over a period of four years. School district financing of this project combined with its expansion to other schools would seem to suggest both program success and community acceptance.

For further information contact:

Roger Ulrich, Ph.D.
Research Professor in Psychology
Western Michigan University
Kalamazoo, Michigan 49001
Phone (616)383-1825

Van Buren Elementary
School Projects

Population Served:

Eight classrooms are now utilizing behavior modification techniques. It is expected that more classrooms will be utilizing the techniques next year. Those classrooms now using the techniques include the following: one first grade (heterogeneously grouped students); two second grades ("slow" students); two third grades (one "slow" and one "average"); two fifth grades (one "slow" and one with about half slow and half above average readers); and a sixth grade classroom with a heterogeneously grouped student population.

The classrooms are in four schools which are in the Van Buren school system.

Approximate Annual Cost:

The project is funded primarily through regular school funds. However, a Title I grant provides for seminars in behavioral psychology, some equipment, and a small amount for each classroom for rewards and supplies.

The project had its beginning in a Title I workshop during the summer of 1968. The workshop was convened to review the results of the 1967-68 Title I project in cross-grading and guidance and to determine direction for the 1968-69 Title I program.

It was felt that, although the cross-grading project had achieved some success, teachers needed still more effective means of motivating students toward more pro-social behavior, academic achievement, and self-responsibility.

The question then became: What components of educational practice could be employed to motivate the students? It was decided to introduce token economies in eight classrooms. For those participating, the following points were agreed upon:

1. The specific behavior that each individual teacher wished to modify must be measurable.
2. Each teacher would keep progress reports on behaviors they were attempting to modify.
3. Growth in student self-responsibility would be evaluated subjectively by each teacher.
4. Pre and post tests in reading would be given to students participating in the project.
5. Praise or other incentives could be substituted for tokens when the students' behavior indicated they were ready.

6. The results of the experiment would be disseminated to all Van Buren teachers.

7. Workshops concerning token economies and other behavior modification activities would meet monthly.

8. That, if possible a credit class through a local university would be arranged to further study the implications of behavior modification.

All of the above have been implemented since September, 1968.

Teachers used the following procedures to implement their token programs:

1. Each teacher chose a specific academic or social behavior of each of his students that merited priority attention.

2. This behavior was narrowed to a measurable component.

3. Base line data were gathered, by counting the frequency of disruptive behavior prior to the token economy, or by pre-testing students in academic areas.

4. Reinforcers included both concrete items such as toys to play with and activities the youngsters desired. Tokens were awarded students showing progress in the specified behaviors. The students spent tokens for activities, such as free play, use of toys or doing school work the youngster wanted to do.

Final results of the project are not yet available. Substantial gains are reported in youngsters learning to read more quickly than in traditional classrooms. Pupils appear to be motivated and attentive. The pilot program has resulted in other teachers in the elementary, junior high and high schools of the district becoming interested in behavior modification. Plans are now being made to expand the program to more classrooms and other grade levels. One

feeling reported is that for pupils to continue a high level of enthusiasm for school, it will be necessary for succeeding classes also to use behavior modification techniques.

For further information contact:

Ella Woolery
Director of Title I Projects
Van Buren Public Schools
501 W. Columbia
Belleville, Michigan 48111.
Phone (313)OX 9-2231

The following three reports describe some of the programs utilizing behavior modification techniques currently being carried on at Ft. Custer State Home. The use of these techniques at this facility is too extensive to describe them all in this booklet.

The home has adopted the techniques on an institution-wide basis. At the present time they have probably the most extensive program in the state utilizing the techniques of behavior modification.

The Acquisition of Language for Retardates Augusta, Michigan

Population Served:

This program serves 132 retarded children who are residents of a state home.

Approximate Annual Cost:

This program is funded through the regular budget of Custer State Home with no additional funds.

The goals of the program are to determine developmental sequences in language acquisition and to design a programmed methodology in language acquisition. The initial version of the program has been formulated and used with much success by the Custer State Home staff.

The program is conducted in five stages. At first, the child is trained in very basic skills which develop his ability to attend to the learning tasks. The second stage of training develops imitative skills such as lifting an arm or sitting in a chair in imitation of the therapist. At the third stage, children identify common objects such as cups by pointing to them and discriminating them from other objects. When children reach this level, they tend to begin to emit verbalizations spontaneously. In the fourth stage of training, a special program is devised for each child based on developing his own verbalizations. The final phase of this program increases the number and complexity of the child's responses.

The design of the program will allow it to be used in the clinic and school setting. A major emphasis has been placed on practicality and ease of instruction. Presently, both staff and consultants are in the process of revising and developing an even more effective program. A conference which will review the present program and determine further areas in need of improvement is being arranged. This program appears to be a significant development in the study of speech acquisition.

For further information contact:

Louise Kent, Ph.D.
Custer State Home
Box 248
Augusta, Michigan 49102
Phone (616)731-4181

**In-Service Training Program in Behavior Modification
Augusta, Michigan**

Population Served:

Nursing aides, social workers, physical therapists, and other staff participate. About forty-eight staff can be served per year.

Approximate Annual Cost:

The program is funded by a U.S. Public Health Service NHIS grant for the development of in-service training programs. The total grant is for \$23,000. Approximately half of this is used for training in behavior management techniques.

The program is designed to give in-service instruction on the principles of behavior modification to personnel of Custer State Home. Trainees participate in the training program full time (forty hours per week) for eight weeks. Half of this time is used for training

in techniques of behavior management. At the beginning of each class, the participants are tested over previously assigned readings. They also have lectures, demonstrations, and laboratory work.

The topics of study include the use of reinforcers, stimulus control, imitative responses, fading techniques, practical applications of behavior modification, and programmed learning. The text materials were written by Dr. Donald Whaley and Dr. Richard Mallot. These include Volumes I & II of *Elementary Principles of Behavior* (in press) and a laboratory training manual.

This program makes maximum use of in "vivo" training in teaching the class members the use of behavior modification techniques.

For further information contact:

Mrs. Virginia Young
Custer State Home
Box 248
Augusta, Michigan 48102
Phone (616)731-4181

Training Program
Ft. Custer State Home
Augusta, Michigan

Population Served:

The training program serves approximately 190 residents varying in age from 7 to 21. They have IQ's ranging from approximately 30 to 50 and are classified as trainable.

Approximate Annual Cost:

The program as a whole is funded by the institution's normal operating funds, however that part of the

program discussed below has received supplemental funding under a U.S. Office of Education grant. This program's portion of that grant was approximately \$1500 to build and equip the classrooms.

While behavioral modification techniques are used successfully throughout the training program, that part of the program which is of most interest to educators is called the Initial Training Program and deals with children who, because of their behavior or because of their lack of ability to handle the material have either been excluded from or refused admittance into the home's regular school program.

The goal of this portion of the training program is to work with children to modify their behavior and to develop their academic skills to the point at which the children function adequately in the normal school program for the retarded.

This program relies largely on student teachers from Western Michigan University who are taught necessary behavioral management skills by project staff. Under the direction of the staff, they apply those techniques in the classroom and in individual tutoring sessions with children.

The problems dealt with vary greatly: helping students overcome such deficits as inability to write due to lack of proper motor coordination, developing proper student behavior in a group, teaching a student specific academic skills. Each child's deficits are analyzed and a plan is developed which will move the child through a step by step set of procedures designed to bring the child to the point where he can perform the designated task. As the child completes each step he is reinforced with social praise and also receives points which he can use to purchase or rent a variety of items or services. He can use his points to buy time with the program director or to rent time on a record player on which are played his favorite songs. He might also buy candy or rent a toy.

The goal of this program is to teach "unteachable" students the skills they need to return to regular classrooms for the retarded. The program appears to be accomplishing this goal.

For further information contact:

**Custer State Home
Box 248
Augusta, Michigan 49102
Phone (616)731-4181**

What's It All About?

The emphasis of the programs described in this booklet has been on the systematic use of reward and feedback in the classroom. Some teachers have seen fit to include candy, toys, and rewards that are new to the classroom. More exciting is the planned use, by some teachers, of rewards that are commonly available in the classroom. For example, a teacher may make activities that a child enjoys (perhaps playing a game) contingent on his doing something that he would otherwise be less likely to do (perhaps finishing his arithmetic). This process, called the Premack principle, has a wide range of implications for the classroom. Readers interested in the application of Premack's hypothesis to the operation of their classrooms should refer to the references at the end of this booklet.

A necessary characteristic of successful programs in behavior modification is the careful collection of data on various aspects of student performance. While some teachers have so simplified the process of data collection that the children themselves can keep accurate records, effective programs have accumulated accurate information on changes in behavior, academic achievement, and use of reinforcers for each participant.

Another consideration appears to lie in the program's emphasis on research and the kinds of research that are permitted within the program. Research is not necessarily undesirable. However, the most successful programs appear to be those in which research efforts are subordinate to the interests of the children.

Two factors did not seem to be essential to the operation of a successful program in behavior management. First, such programs were not necessarily expensive. In fact, one of the programs does not have any extra funds. Second, teachers do not necessarily need a great deal of specialized training to successfully conduct a behavior modification program. Teachers do need to be able to instantly discern and reinforce behaviors that should be reinforced. This requires an understanding of the principles and application of behavioral techniques coupled with an understanding of the curriculum and the student.

The most important single consideration in determining whether a program will be effective seems to be administrative support. Even when the programs are operated within one classroom and require no funds, the success or failure of a program is closely related to the degree of interest and support given by the administrator.

Suggested References

- Ayllon, T. and Azrin, N., *The Token Economy*, Appleton-Century-Crofts, New York, 1968, 288 pages, softbound, \$3.95.
- Bijou, S. W., and Baer, D. M., *Child Development, Volume One*, Appleton-Century-Crofts, New York, 1961, 90 pages, softbound, \$1.25.
- Hewett, F. M., *The Emotionally Disturbed Child in the Classroom*, Allyn and Bacon, Boston, Massachusetts, 1968, 373 pages, hardbound, \$8.50.
- Mager, R. F., *Preparing Instructional Objectives*, Fearon Publishers, Palo Alto, California, 1962, 62 pages, softbound, \$1.75.
- Skinner, B. F., *The Technology of Teaching*, Appleton-Century-Crofts, New York, 1968, 271 pages, softbound, \$2.95.

Smith, J. M., and Smith, D. E. P., *Child Management*, Ann Arbor Publishers, Ann Arbor, Michigan, 1966, 97 pages, softbound, \$3.00.

Ulrich, R., Stachnik, T., and Mabry, J., *Control of Human Behavior*, Scott, Foresman and Company, Glenview, Illinois, 1966, 349 pages, softbound, \$4.25.

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