ABSTRACT
        A 4-week training program for the personnel of two
federally supported child day-care centers in Tucson had behavior
modification of teacher aides as its objective. It was felt that by
their mere presence in the classroom, the aides had an effect on the
children and should thus be trained in appropriate behavior patterns
and reinforcement techniques. A total of 14 aides--seven Negro, five
Mexican-American, and two Anglo--from poverty backgrounds were
divided into five groups, each headed by a teacher. Training
procedures included group discussion of appropriate behaviors,
demonstrations by teachers, practice with children, and immediate
corrective feedback from the group leader. The aides were taught to
observe and record a child's behavior and to give a positive response
to good behavior, rather than a threatening response to disruptive
behavior. Evaluation by means of video tapes, behavior rating scales,
a behavioral task, and attitude tests showed a change in the aides.
Prior to the program they had agreed on the theoretical desirability
of reinforcing good behavior, but had not practiced this method.
After training, there was a definite increase in reinforcement
behaviors. (RT)

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BEHAVIOR MODIFICATION TECHNIQUES

AND

THE TRAINING OF TEACHER'S AIDES

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a Consultation Process Model
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Auxiliary classroom personnel - aides, volunteers, and parent participants - are appearing in public school classrooms with increasing regularity. Their roles have varied. Welcomed by some teachers as an additional instructional agent, many aides have been given real teaching responsibility. Others have not been regarded to have requisite teaching skills and have been assigned tasks of materials preparation, clean-up, and custodial supervision. State Departments of Education have wrestled with the tasks of role definition, training, and career development while individual teachers alternately lament and praise the addition of new classroom personnel.

By most original definitions the aide is regarded to be one who can relieve the teacher of any number of preparatory, organizational, and supervisory duties so the teacher will be freer to "teach." In most systems the aide is not regarded to be an instructional or teaching agent. Such a definition is based on a concept of teaching restricted to formal instruction in certain traditional academic skills. Everything we know about learning processes suggests that it is hardly possible for an aide to be a "non-teaching" individual. As an adult member of the classroom's social environment the aide's behavior can be a rich source of model behaviors which children will imitate. The aide can provide a range of cues which will effect social, academic, and deportment repertoires of the children. The aide's behavior is a functioning source of reinforcement in the classroom and can contribute to the shaping of a large group of important behaviors. There probably can be no such thing as a "non-teaching" aide. Simply by being present in the environment, the aide may make a substantial contribution to the behavioral development, social and otherwise, of the students.

Whatever the role and training of classroom personnel ultimately entails, it seems crucial that they have some grasp of behavior principles which will enable them to predict and observe the many ways in which their behavior effects that of the student.

Over the past two years we have been developing training programs to meet this need and the purpose of this paper is to describe one such program and some of the measures used to evaluate it's effectiveness.

The Training Program

The program was designed for the personnel of two federally supported child day care centers in the Tucson area. There is nothing, however, which would make it inappropriate for school as well as preschool situations.

Subjects

Five trainee groups, each composed of a teacher and two or more aides and volunteers, participated in the four-week training program. Earlier experience taught us that to train aides in new skills without the teachers is to court disaster. Except for one teacher, all of the Ss were women with a mean age of 38 years. All were married with from zero to seven children. Seven Ss were Negro, five Mexican-American, and two Anglo. Aides were drawn from poverty area population; six had completed high school or had obtained an equivalency certificate.

Training Goals

The goals of the program were derived from a series of naturalistic observations made in the day care centers prior to training. These observations suggested that behavior modification was needed for the following areas:

a. High frequency custodial and menial behaviors on the part of the aides, much standing around, little or no involvement in instruction.

b. Little use of positive reinforcement by the aides with high frequency threat and punishment; poor contingency management with much positive attention going to the child who was hurt, angry, crying, isolate, or demanding attention; ignoring of a wide array of good behavior; little systematic use of positive reinforcement for skills.

c. Low frequency planning and organizing behaviors on the part of the staff.

The training program therefore stressed:

a. Setting behavioral goals.

b. Contingency management especially the shaping and positive reinforcement of goal behaviors.

c. The evaluation of methods and procedures.

Focus throughout the four weeks remained on the behaviors of children and adults with no attention given to concepts such as needs, emotional disturbance, self-concept, or personality growth.

Training Methods

During the first two weeks of the four week program the trainees and ten children from their own center population spent two morning hours in our Pre-school Laboratory. The laboratory provides one way mirrors and closed circuit TV observation of the classroom. It is staffed by graduate and undergraduate Psychology students at the U. of A. We found from earlier work that the use of center children reduced the trainees' belief that their own children were unique and impervious to all management attempts. Also, it may promote transfer of management skills out of the training situation back to the center. We asked the staffs to bring their ten worst behaving children. The children's activities in the laboratory included breakfast, stories, lessons, music, art, exploration, and free choice. The second two weeks of training took place back out in the centers where a full day program was maintained.

The training methods might be described as a kind of behavioral engineering. Each day began with demonstration and guided observation of modeled behaviors. No trainee was asked to engage in a behavior which the staff had not demonstrated. When the time came for practice in the classroom every trainee was accompanied by a trainer for on-the-spot shaping and reinforcement of appropriate behaviors. The trainer provided verbal feedback, demonstrated, and had the aide practice. Inappropriate behavior was

ignored or labeled as "wrong" if the appropriate behavior could be demonstrated and the trainee practice it. Verbal labels were supplied for all behaviors demonstrated or practiced.

As an example, a day might begin with all trainees in the observation room. A trainer might say "today, lets look for some good behaviors and reinforce the children doing good things by giving them a big smile and saying something nice to them." Then would come a period of identifying and labeling good behavior with the trainer praising observing and labeling behavior. Then would come observation of the staff's behavior - smiling , speaking to the children, the contingencies, their mistakes. Usually it was easy by this time to get one or two trainee volunteers to enter the classroom to try it. A trainer accompanied them, helped them select behaviors, helped with the timing, e.g. the trainer might say, "Wait until he's finished putting the box on the shelf"; helped decide on what to say (say, "My you put that away nicely"), praised for a good job. The rest of the trainee group observed and discussed until all trainees had entered the classroom to practice smiling and saying pleasant things to children contingent upon good behavior.

Brief lectures, discussions, written materials, and short prepared assignments followed each days' observation and practice session. Again an attempt was made to supply and repeat verbal labels for the behaviors observed and practiced by the trainees and the contingencies between these behaviors and those of the children.

Specific Training Procedures and Techniques

It is, of course, impossible to convey all the procedures, and techniques of a four-week training program in this brief paper. The following are illustrative of principles used in the instructions to the trainers:

1. Teaching Observing Behavior. Trainees do not necessarily and automatically engage in observing behaviors in a observation room. They may use the time for visiting, relaxing, and socializing. Thus, trainees were never left

alone in the observation room. Observation is modeled
by the trainer who sits or stands looking through the
glass and commenting on what he sees. He instructs the
trainees to look and watch and asks questions and points
out aspects of the program that are obvious (e.g., ignor-
ing a crying child or use of reward). We repeat this
"sitting and looking" many times in the two weeks at the
laboratory. Hopefully, the trainee comes to accept this
behavior as a valuable source of information and develops
considerable skill in observing behavior.

2. <u>Modeling by the Training Staff.</u> It is important that the
training staff perform instructional and shaping functions
in the classroom. They may take the role of both teacher
and aide. This modeling removes the stigma of "They talk
a lot, but let's see them try to work with the children."
Also the trainers themselves can model behaviors of special
interest. For example, "Today I am going to use tokens.
First I'll teach the children what tokens are, and then
I'll try using them as rewards during the lessons. You
watch and then we'll talk about how well this worked."
or "Today I'm going to be the hard working aide during
story time. Watch me and later we'll talk about what I
did and why."

3. <u>Providing Corrective Feedback.</u> The trainers attempted to
develop a frankness and willingness to see errors. First,
the newness of some of our college classroom staff was
clarified. For example, "Miss Smith is going to do the
lesson today for the first time. Lets see how it goes."
or "This is Mr. Jones' first day in the lab, but notice
how well he's rewarding good behavior." Second, our
staff modeled discussion of their own errors, and the
accepting of instructions. Third, the training staff
always admitted ignorance when they were and would say
something like, "I don't know the answer, but I'll find
out today and let you know." or "I don't know what we're
going to do with Bobby, lets discuss it in staff today."
Trainers usually dealt with inappropriate verbal behavior
directly. If a trainee said, "The child has a complex"
the trainer might say, "We don't call that a complex any-
more. Now-a-days we just look on that as behavior." The
same for "flaw in personality", "born mean", "bad home",
etc. If a trainee engaged in wrong classroom behavior,
the trainer told her it was wrong, either told her what to
do or demonstrated, had the trainee immediately correct,
and praise her. If this corrective procedure could not
be established the wrong behavior was ignored. There was
never "later" criticism. Corrective feedback always ended
with praise. Incidently, we have never observed a child
attend to or in other ways respond to this trainer -
trainee interaction in the classroom.

4. **Discussing Behavior.** Discussion in the daily staff meeting was used sparingly at first to prevent the trainees from emitting a lot of behavior which would have to be corrected or ignored. At first the trainers reviewed the morning and labeled or explained the observed behaviors. Later simple assignments became the focus of discussion. For example, The Good Behavior Assignment:

> For every child in your group, list his name, and three good behaviors he <u>already</u> has. Try to find at least one good behavior that the child is especially good at. Practice rewarding the child for good behavior. Write down one thing you did, tell who it was, what he did, and what happened. Bring this to the lab.

Representative Training Topics

The identification and reinforcement of appropriate behavior was a central training topic. There were several others during the four week period. Three of these will be discussed to illustrate the programming of training topics.

1. **Time Out Procedures.** The ten "worst behaving" children had extensive repertoires of disruptive and agressive behaviors, most of them developed in the centers. We used time-out from the classroom to control these behaviors. This meant that time-out procedures began early in the program, usually by day two. This was difficult for training since trainees did not usually understand the principles underlying time-out at that time.

In our laboratory it is possible to observe into the small time-out room through an observation window. Usually the whole training group moved out to observe the first few time-outs. The functions and methods of time-out seemed best explained while observing the procedure. In addition, trainees want and need to know what is happening to the children when they are taken from the room. The person who was in time-out with the child (a characteristic of our brand of T.O.) came in and talked to the group immediately after the child returned to the room. Someone was always present in the T.O. observation room to explain, clarify, point out, and answer questions.

Trainees had to begin to learn to manage time-out at least by day four of training. Otherwise, there would be few further opportunities to learn since time-out brings

inappropriate behavior under control so effectively. Formal discussion of time-out was held on days nine and ten.

2. Record Keeping Behavior. Training in record keeping began on day three of this program to help teach observation and focus on behavior. The trainers begin with simple tasks such as timing behaviors – minutes during which a child cried, time spent on the rug or at the table, and the like. Care was taken not to burden the aides with complicated category systems. Time sampling was signaled by the trainer if any was done. Practice with recording methods continued until training day seven, when recording became a basic element of the team work and problem solving unit. Records are used to identify and define problem behaviors and to justify given management methods with given children. Records are used to follow the progress of behavior development.

3. Instructional Skills. The trainers begin shaping instructional skills in aides, one at a time. Each trainee experienced these sessions repeatedly with different trainers. The sessions began with the trainee asked to select a child she likes to work with. Those who wanted to choose the worst behaving child were discouraged. They were told they'd work up to that. As the trainee became more skilled a second and third child were added so the aide could handle a small group.

     The trainer begins by modeling the teaching task, then hands the task to the trainee interspersing comment, direction, and more demonstration as needed. Our main point was to make the task clear and simple so that the trainee could imitate successfully and receive praise. We used concrete stimulus objects and kept the task structured so the aide could follow the steps. We used techniques suggested by Resnick and her colleagues at the Pittsburg R & D. We did not attempt to teach the aides the subtle and elaborate skills which one finds in the repertoires of many teachers.

     Usually a stimulus object is presented with the goal of teaching the child a label, a function, one or more attributes, comparisons, or the like. Correct responses are reinforced. Of particular importance was the teaching of rapid prompting in the absence of correct and appropriate responding by the child. Many classroom personnel do not know what to do if a child does not respond to instructions or questioning, will not prompt, and may make the situation aversive. This program taught a rapid prompt, followed by the correct response by the child, followed by immediate reinforcement. This by-passed long

waits, nagging, begging, and involved aide verbalizations. The aides were taught to provide the same sense of excitement and reward for a prompted response as an unprompted one. This was difficult for many aides to carry out and required practice. Aides also were taught the management of art lessons, story telling, and question asking.

By the last three days of the laboratory training the classroom was being managed by the trainees. The trainers had faded out and acted only in advisory capacity and as participants in the training staff meetings. The final two weeks consisted of helping the trainees adapt their skills to conditions in their own centers.

Evaluation

This paper is largely descriptive. It is impossible to describe adequately a training program and the issues and techniques of assessment in a single paper. In an earlier paper presented at the American Educational Research Association, Marian Martin, Joseph Patterson, and I presented and discussed the data of four training assessment procedures used with this program. I will only mention them briefly here.

1. Video tapes of the aides in the centers before and after training appear to show training effects. This is a very subjective judgement at this time since no one has yet taken on the tasks of editing and analysis. We will look particularly at participation behaviors of the aides and the frequency of aides in instructional roles. (We do not see any arm-folding behaviors in the post-training tapes.) There are many technical difficulties to work out before video tapes provide good training assessment data.

2. Behavioral measures of training effects. Using a modification of the TIA Scale developed at our center by Rosenthal, Underwood, and Martin, observers recorded the approval and disapproval dispensed by trainees, and the targets of these incentives. Targets were either individual children, or groups of children and reinforcers were categorized as verbal, gestural, or physical. The data show an over-all significant pre-pose increase in recorded approval and a decrease in disapproval. Trainees also responded more to individual children than to groups after training and showed a significant increase in the use of both verbal and physical positive reinforcement.

3. A behavioral task. Trainees were asked to have the children perform a standard bean drop task before and after training. During the first presentation, coordination among teachers and aides was rather poor, performance by the children variable with many appropriate behaviors (e.g., throwing beans) evident. Post-training presentation produced better adult coordination, a higher child performance level (with good adult reinforcement) and no inappropriate behaviors. The achievement measures for the control group dropped in the second administration. They rose significantly for three of the five training groups.

4. Attitude measure. The instrument used covered three areas: the use of reward and punishment, why children behave as they do, and the use of written records in day care centers.

Trainees agreed unanimously prior to training on such items as: "When a child is doing something good you should let him know it;" "A friendly smile or saying 'good' can be a big reward for some children;" "Children should be rewarded for the good things they do;" "It helps a child to learn when you tell him what he is doing right;" "You can teach a child to be friendly." The aides talked a very good game. But none of our behavioral measures indicated any corresponding classroom behaviors. They said it, but they didn't do it. In fact we had to introduce smiling, hugging, and praise lessons during training. The trainees could verbalize the value of reinforcement but not its use. They felt initially that reinforcement should be used optimally, and almost exclusively, contingent on need , crisis, and sorrow behaviors, rather than on appropriate, happy, and capable ones. The training was centered on the modification of trainee behaviors in this area. It was in this area that maximum change occurred in survey item ratings. One of the principle effects of this training program was to bring the verbal behavior about reinforcement and the use of reinforcement in the pre-school into congruence.