Described is the role of the teacher aide in the Papillion (Nebraska) Title III elementary level "engineered classroom" program which stresses accomplishment of academic goals by emotionally disturbed students. Noted is the aides' goal of carrying out students' prescriptions provided by the teacher and psychologist. Described are the aides' duties such as listening to children read, the classroom schedule, aide recruitment based on criteria stressing empathy, the 2-week comprehensive inservice program, and evaluation. An evaluation form is included. The aide is said to rate each child's behaviors during each daily instructional period on a rating scale (included) and to use the following intervention procedures: the academic assignment, movement of the child in the classroom, changes in writing media, nonacademic assignments, and temporary removal from the classroom. Appendices include the following components: suggestions for classroom reinforcement such as listed praising words and phrases, math game prescriptions such as playing store, reading game prescriptions such as making words from "Thanksgiving", science prescriptions such as investigating temperature control in a spacecraft, art prescriptions such as making a leaf print, and communication prescriptions such as calling authorities in time of need. (MC)
PAPILLON PUBLIC SCHOOLS
Papillion, Nebraska

TITLE III E.S.E.A.
ENGINEFRED - ADJUSTMENT CLASSROOM

THE INSTRUCTIONAL ASSISTANT AIDE

* * *

Paul D. Basler
Superintendent of Schools

Dr. Stanley Wilcox
Asst. Superintendent of Schools

Clifford Pratt
Principal Project School

* * *

Prepared by George Spilker
Project Instructor

November 15, 1972


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</tr>
<tr>
<td>Examples of Communication Prescriptions</td>
<td>44-48</td>
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</tbody>
</table>
INTRODUCTION

The Papillion project relies strongly on the success or failures of teacher aides in our work with project children. The project is designed with a teacher whose main goal is analysis and prescriptions in the academic areas and guidance to the aides in the methodology of presenting this material. The project is also designed with a school psychologist to make behavioral prescriptions to the project. The teacher aides have the goal of carrying out the prescriptions which are provided by the teacher and psychologist. In other words, the aide's role can best be defined as implementers of ideas, methods, techniques, and materials developed by other project personnel.

Since the implementation of these prescriptions is so vital to the success of the project, several facets of teacher aide development will be presented in this manual.

I. Job descriptions.
II. Aide recruitment and selection.
III. Teacher aide inservice - preliminary.
IV. Staff inservice meetings - ongoing.
V. Teacher aide evaluation.
VI. Behavior observations and ratings.
VII. Interventions.
VIII. Prescriptions and implementations.

Teacher aides are used as instructional aides and are invaluable to a program for children with multi-handicaps if the aides are used effectively. Only with good selection, inservice, and evaluation can a sound program be developed.
PAPILLION PUBLIC SCHOOLS
TITLE III E.S.E.A. PROJECT

Project Director
Building Principal)

Advisory Committee

Parents

Project Instructor
(Teacher)

Project Evaluator
SRI Selection

School Psychologist
ESU #3

Teacher Aide

Teacher Aide

Students

Testing--Student Evaluation
ESU #3

Project Auditing -- Dr. Krueger
I. JOB DESCRIPTION - THE INSTRUCTIONAL ASSISTANT AIDE

The term "aide", as used in the Papillion project, refers to a person who is an extension of the teacher's effectiveness. In the project the aide's role ranges from clerical to instructional duties. At times their duties consist of menial tasks of cleaning up the classroom. At other times their task might be reinforcing student behaviors. An important factor in working with aides is to remember that they are an extension of the teacher in charge and that all duties are assigned and supervised by the teacher in charge. The following lists provide areas in which aides are used in the Papillion project.

A. Instructional Duties of Aides

1. Prepare flash cards, charts, or other audio-visual materials under teacher direction.
2. Keep attendance and health records.
3. Operate audio-visual equipment.
4. Listen to children read, and record student achievements.
5. Supervise playground free periods.
6. Score tests and correct student work.
7. Maintain pupil activity during study periods.
8. Monitor restroom periods.
9. Read library books to students.
10. Hear requests for help and relay such help to the teacher.
11. Direct small groups of students during learning games in the area of reading and math.
12. Supervise and assist students in an art project which has been specifically outlined by the teacher.
13. Supervising and assisting students in a communication activity which has been specifically outlined by the teacher.

14. Tutoring individuals or small groups of children on well defined subjects for which the teacher feels the aide is competent.

15. Assisting the teacher during field trips.
<table>
<thead>
<tr>
<th>TIME</th>
<th>SUBJECT</th>
<th>GROUPS</th>
<th>IN CHARGE</th>
<th>POINTS</th>
</tr>
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<tbody>
<tr>
<td>8:40-9:00</td>
<td>Order Period</td>
<td></td>
<td>Mrs. Durnil</td>
<td>5</td>
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<tr>
<td>9:00-10:25</td>
<td>Reading Games</td>
<td>1</td>
<td>Mrs. Divoky</td>
<td>10</td>
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<td></td>
<td>Individualized Reading</td>
<td>2</td>
<td>Mrs. Durnil</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Phonics, Programmed Reading</td>
<td>3</td>
<td>Mr. Spilker</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Rebus System 80, Lang. Lab.</td>
<td>4</td>
<td>Mr. Spilker</td>
<td>10</td>
</tr>
<tr>
<td>10:25-10:45</td>
<td>Recess M-W</td>
<td></td>
<td>Mrs. Divoky</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>T-Thr</td>
<td></td>
<td>Mrs. Durnil</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Fri</td>
<td></td>
<td>Mr. Spilker</td>
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</tr>
<tr>
<td>10:45-11:45</td>
<td>Math Games</td>
<td>1</td>
<td>Mrs. Durnil</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Drill Math, System 80</td>
<td>2</td>
<td>Mrs. Divoky</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Individualized Math</td>
<td>3</td>
<td>Mr. Spilker</td>
<td>10</td>
</tr>
<tr>
<td>11:45-12:15</td>
<td>Lunch</td>
<td></td>
<td>Mrs. Durnil</td>
<td>5</td>
</tr>
<tr>
<td>12:15-12:45</td>
<td>Noon Recess</td>
<td></td>
<td>Mrs. Divoky</td>
<td>5</td>
</tr>
<tr>
<td>12:45-1:15</td>
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<td>Mrs. Divoky</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Ind. Tutoring</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1:15-1:30</td>
<td>Story Time</td>
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<td>10</td>
</tr>
<tr>
<td>1:30-1:50</td>
<td>Physical Education</td>
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<td>Mrs. Divoky</td>
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</tr>
<tr>
<td>1:50-2:50</td>
<td>Exploratory Period</td>
<td>1</td>
<td>Mr. Spilker</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td></td>
<td>Mrs. Durnil</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Art</td>
<td>2</td>
<td>Mrs. Divoky</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Communications</td>
<td>3</td>
<td>Mrs. Divoky</td>
<td>10</td>
</tr>
<tr>
<td>2:50-3:10</td>
<td>Total up. and Graph</td>
<td></td>
<td>All</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL POINTS POSSIBLE**

- 2 Points for starting
- 3 Points for working
- 5 Points for being a student

*Points may vary from this schedule to meet needs of individual students.
b. Non-instructional Duties of Aides

1. Duplication of materials.
2. Filing work in student folders and cataloging of materials.
3. Supervising lunch period.
4. Making classroom bulletin boards.
5. Rating student behaviors.
6. Cleaning and organizing classroom.

II. AID RECRUITMENT AND SELECTION

Finding applicants for a position as an aide is extremely simple, but the process of selection of appropriate aides is difficult. An ad in the local paper usually produces thirty to forty applicants. Applicants range from teenagers to grandmothers, from elementary school dropouts to certified teachers, and from housewives to professional secretaries.

The major emphasis in selecting aides is placed on empathy. It is important to find someone who has a feeling for children with critical problems and is willing to work hard to correct this problem. Formal education can be a benefit in selection of an aide, but also can be a hinderance to their success. With the oversupply of teachers, many certified teachers are willing to work as an aide just to have a job. One must take a careful look at each applicant.

The Papillion project shows that a person off the street who has the appropriate personality traits, and who is trained in the behavior modification techniques, and classroom techniques, can function well within the engineered classroom design.

The persons hired as aides are of a sound emotional status themselves. The stress of working with emotionally disturbed youngsters brings one's
emotional traits to the surface. The aides have to have some means of releasing their emotional stresses.

The Papillion project uses the Selection Research Inc. firm in selection of aides. The system matches psychological traits of applicants to the traits of qualified people in the field. The firm then reports back to the school the most effective ways in which to use the people. Effective aides compliment a program; ineffective aides can ruin a program.

III. INSERVICE - PRELIMINARY

The Papillion project formed a two week comprehensive program, which is set up to transform the person off the street into a professional aide. The inservice consists of everything from school policy to behavior modification. The project teacher has the duty of constructing and organizing the inservice plan. At times, he uses outside professional help to lecture on given areas. At other times, he secures films or conducts field trips to view other projects in-action.

Inservice is planned as an ongoing project with new ideas shared as the year progresses. The more areas covered prior to the first day of school the more secure the person feels in working in the project. The following is a brief outline of areas covered in the pre-inservice areas:

1. Employment conditions.
2. Chain of command.
3. Role of project participants.
   a. Administrative office.
   b. School principal.
   c. School psychologist.
   d. Aides.
   e. Teacher.
   f. Parents.
4. Lines of communication.
5. Duties of aides.
   a. Lunchroom supervision.
   b. Playground supervision.
   c. Clerical duties.
   d. Curriculum development.
   e. Small group work.
   f. Behavior observations and evaluations.
   g. Implementation of curriculum.

6. Curriculum design.

7. Intervention strategies.

8. Philosophy of engineered classroom.


10. Transitional phase of the classroom.

11. Individualized prescriptive teaching.

12. Definition and description of a perceptionally handicapped child.


14. Definition and description of a "behaviorally maladjusted" child.

15. Audio visual equipment use and care.


Before the inservice program begins, each aide is asked to read Dr. Hewett's book, *Emotionally Disturbed Children in the Classroom*. This reading gives the engineered approach to education. During the course of lecturing and discussion, the film *Santa Monica Project* is used to reinforce the textbook learning. An important factor to remember in any inservice program is to make it meaningful to the people involved. A comprehensive inservice program can do much to encourage a worthwhile program.

IV. INSERVICE - ONGOING

The inservice program we use in this project is not just a two week session prior to the beginning of school. It consists of weekly after school meetings....
of project staff. During these weekly meetings situations that arise are discussed. At times the meetings show areas for aide improvement. At other times, the meetings are structured into positive reinforcement for an aide's work well done.

Speakers, films, filmstrips, readings and discussions are used as a format week after week. The topics for a given week usually are chosen by questions which arise during the previous week. Each meeting is centered on staff development.

Each child's progress is studied during these weekly meetings. The psychologist and teacher make recommendations which the entire staff follows. Consistency by project staff is imperative to a worthwhile project. Each person in the project has to be going the same direction at the same time on the same problem. Weekly meetings provide consistency, in-service training, and a psychological release of frustrations by project personnel.

V. TEACHER AIDE EVALUATION

The importance of the aides to this project cannot be over emphasized. Because of this importance, aides are evaluated on a quarterly basis. This evaluation is completed through cooperation of the project teacher and the building principal. The evaluations are pointed at showing aides areas for improvement and are not used as a threat. In other words, it is used as an educational device to improve their working ability.

Major categories are:

--- Personal appearance and attitudes. Items are concerned with dress, grooming, temperament, reaction in emergencies, attendance, courtesy, and willingness to give time and effort to the job.
--- Relationships with children. Items include friendliness, fairness, helpfulness, liking for children, patience, sympathy and skill of resolving conflicts.

--- Relationship with classroom teacher. Items include punctuality, dependability, acceptance of direction, initiative and alertness in meeting teacher needs, efficient use of time and materials and assistance in keeping the room neat and orderly.

--- School-community relations. Items include awareness of school routine and policy, knowledge and use of proper channels in communication and discretion in discussing school or community matters.

Each item used in rating is shown and discussed with the aide concerned. Strengths as well as weaknesses are pointed out. The following is a copy of the form used.
I. Commitment to Total Program

- Shows interest and enthusiasm in the work
- Is willing to put in essential time and effort
- Is punctual
- Attends regularly
- Willingly accepts and carries out assignments
- Performs routine tasks efficiently

II. Responsiveness to Pupils' Needs

- Interacts positively with the pupils
- Is aware of facts of child development
- Shows concern for pupils' health and safety
- Accepts individual differences in pupils
- Shows resourcefulness in helping provide enriching experiences for pupils
- Is helpful in encouraging pupils to take part, ask questions and communicate in many ways

III. Instruction

- Is competent in reinforcement of skills
- Is able to work with small groups in instruction
- Can present lessons
- Completes work in scheduled time
- Demonstrates initiative and resourcefulness in performing assigned tasks

CODE:  
O - Outstanding  
S - Satisfactory  
NI - Needs Improvement  
NO - No Opportunity to Observe
IV. **Staff Relationships**

Accepts guidance and suggestions from resource personnel
Demonstrates loyalty to the teacher and the school
Has a friendly working relationship with other aides
Is a cooperative team member

V. **Personal Characteristics**

Is well groomed and appropriately dressed
Uses acceptable English in a clear and pleasant voice
Has good physical health
Shows evidence of professional growth

Building Principal

Signature

Comments:

Resource Teacher

Signature

Comments:

Instructional Aide

Signature

Comments:

Date
VI. BEHAVIOR OBSERVATION AND RATINGS

The major point of the emphasis in the Papillion project is to bring in the children who have emotional problems, change this behavior, and finally to return this child to a regular school program. The project developed the Behavior Recording Scale which simply is a means of rating each child for his behavior during each period of the day. Along with the ratings much emphasis is placed on recording comments on why a certain rating is used.

The behavior scale is an important means of communication for project personnel. Frequent low ratings in a given period of the day means some needed behavioral restructuring for that child. Frequent high ratings in all areas means a child is ready for removal from the program. The scale is a great help in convincing parents as to their child's behavioral problems.

Aides are inserviced as to the need of positive recording of behavior on this scale. At the end of each period they rate each student's behavior.

On a quarterly basis all project personnel individually rate student behavior on the E.H.C. Classroom Behavior Rating Scale. A sample of this form can be found in the appendix of this manual.

The following is a sample copy of the daily rating form as used in the project.
**BEHAVIORAL RECORDING SCALE**

Date: October 9
Name: John Doe

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Rating</th>
<th>Comment (If needed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order</td>
<td>4</td>
<td>went right to work</td>
</tr>
<tr>
<td>Phonics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Reading</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1st a.m. Recess</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Programmed Reading</td>
<td>2</td>
<td>day dreamed first part of period</td>
</tr>
<tr>
<td>Reading Games</td>
<td>1</td>
<td>good sport</td>
</tr>
<tr>
<td>2nd a.m. Recess</td>
<td>1</td>
<td>helped Steve play the game</td>
</tr>
<tr>
<td>Math Skills</td>
<td>1</td>
<td>worked real hard</td>
</tr>
<tr>
<td>Flash Cards</td>
<td>3</td>
<td>talking loud</td>
</tr>
<tr>
<td>Individual Math</td>
<td>3</td>
<td>messy</td>
</tr>
<tr>
<td>Math Games</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>4</td>
<td>fighting with Dan</td>
</tr>
<tr>
<td>Noon Recess</td>
<td>4</td>
<td>still fighting with Dan</td>
</tr>
<tr>
<td>Rest Period</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Story Hour</td>
<td>3</td>
<td>restless</td>
</tr>
<tr>
<td>P.M. Recess</td>
<td>1</td>
<td>good team member</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>1</td>
<td>helped Nancy finish project</td>
</tr>
<tr>
<td>Communications</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Rating Scale:**

1. Excellent
2. Very Good
3. Average
4. Fair
5. Poor
VI. INTERVENTIONS

The Papilion Title III program is created to stress academic goals. It is felt that "emotionally disturbed" children can accomplish academic goals in a structured environment if the reward structure is properly organized. As the program is developing it is found that certain students rebel at academic education. It is felt that keeping the child organized and working is better than causing more emotional problems. Since "emotionally disturbed" children are found to peak and fall in activities in a given day, an intervention system has been organized. The entire idea behind this system is to keep the child attending no matter what the cost.

1. The Academic Assignment.

The academic assignment is given the child based on his individual needs of achievement and learning level. The child earns all of his marks.

2. Shorten Original Assignment.

If for some reason the child is unable to accomplish the task, or even to begin it within a few minutes, the assigned task is shortened by cutting the page in half, folding it over in half, or covering the remainder of the exercise. The child earns all of his marks if he completes this shortened assignment.


This step is used in conjunction with step two, or as a separate intervention. The idea here is to bring the child into another area of the room. Often the change in the way one is sitting, or the height of a desk, changes one's outlook on what is to be done.
Position changes:

a. Study carrel.
b. Laying on a rug.
c. Sitting at a table.
d. Sitting on a high stool at a drafting desk.
e. The child earned all of his marks.


By this, it is meant to give the child some change in the manipulative device used.

Media changes:

a. Write answer with chalk on individual chalkboard or on classroom chalkboard.
b. Write on a Magic Slate.
c. Write with a crayon.
d. Write with an ink pen.
e. The child still earns all of his marks.

5. Changing to Another Academic Assignment.

This keeps the child in academics but changes the academic material used. Reading games, math games and phonics games still keep the child academically structured and learning. Continental press dittos here are also very helpful. The child still earns all of his marks if he completes the assignment.

6. Non-Academic Assignments.

Here academics are given up for the time period involved. The child is given a non-academic assignment which keeps the child involved in classroom activities.

Classroom activities:

a. Puzzles
b. Pegboard designs.
c. Parquetry designs.
d. Coloring a picture.
e. Listening to a record or tape.
f. Drawing a picture.
g. Art task card.
h. Science task card.
i. Communication task card.
One thing to remember here is that the teacher chooses the activity for the child. Never let the child manipulate the teacher or you have gone backwards. In this manner the child is kept busy and can be brought back into the next academic task. The child earns one-half of his marks for that period.

7. Removal from the classroom.

If the child still is withdrawing from the different task the removal from the classroom is the last step. No child is removed from the classroom for more than five minutes at one time. Remember this is not a punishment. It is stated very briefly to the child that he can have the right to return to the classroom and act like a student. No check marks are earned.

8. If step seven fails to produce any change, sending the child home is the only answer left. Here again it is important for the child to know that he is not being punished. He is a student who deserves to be in school. Important here is that the next day the teacher meets the child at the door and welcomes him back into the classroom. No check marks are earned while the child is not in school.

The interventions are designed to manipulate emotionally disturbed children before more problems accumulate. It is important that the teacher or aide decides on the activity used and not the child. Often the teacher or aide is able to decide which intervention works best with each individual child.

The project is designed for aides to be trained in the use of these interventions. As the project functioned, these interventions are constantly reviewed. Most emotional problems are handled through the use of these simple steps.
IX. PRESCRIPTIONS AND IMPLEMENTATIONS

Teacher aides have the major goal of carrying out all prescriptions handed to them by both the teacher and the psychologist. These prescriptions fall along behavioral as well as academic lines. In order to carry out the prescriptions, the aide has to closely follow the outline and directions handed her by the teacher. At times this prescription means playing a learning game with three or four children, at other times it means reading a library book to the class, and at other times it means playing tag on the playground.

In the appendix are some examples of prescriptions used during the operation of the project.

SUMMARY

Instructional assistant aides as used in the Papillion project can be used effectively if:

a. They are selected because of their appropriate personality traits.

b. They are inserviced thoroughly prior to their work in the classroom.

c. Their progress is evaluated and their efforts rewarded.
APPENDIX I

EXAMPLE

IN SERVICE

MATERIALS USED
SUGGESTIONS FOR CLASSROOM REINFORCEMENT

Social Reinforcers

Social reinforcers are consequent stimuli produced by your behavior which strengthens somebody else's behavior. They include words of praise, expressions, nearness, and physical contact. The first step in learning to be a good social reinforcer is to identify, study, and practice a variety of ways of producing potential social reinforcers.

Potential Praising Words and Phrases

<table>
<thead>
<tr>
<th>Good</th>
<th>That shows a great deal of work.</th>
</tr>
</thead>
<tbody>
<tr>
<td>That's right</td>
<td>You really pay attention.</td>
</tr>
<tr>
<td>Excellent</td>
<td>You should show this to your parents.</td>
</tr>
<tr>
<td>That's clever</td>
<td>I like that.</td>
</tr>
<tr>
<td>Exactly</td>
<td>Show the class your picture.</td>
</tr>
<tr>
<td>Fine answer</td>
<td>That's interesting.</td>
</tr>
<tr>
<td>Good job</td>
<td>See how well Joan is working.</td>
</tr>
<tr>
<td>Good thinking</td>
<td>Jimmy got right down to work after recess; he's going to finish on time.</td>
</tr>
<tr>
<td>Thank you</td>
<td>Let's all give John a hand (clap, clap).</td>
</tr>
<tr>
<td>I'm pleased with that</td>
<td>That was very kind of you.</td>
</tr>
<tr>
<td>Groove</td>
<td></td>
</tr>
</tbody>
</table>

Expressions

Smiling
Winking
Nodding up and down
Looking interested
Laughing
Clapping hands

Nearness

Walking among students
Joining the class recess
Sitting in their group
Eating with the children

Physical Contact

Touching
Stroking arm
Patting head, shoulder, or back
Shaking hand
Hugging
Holding hand
Sitting in lap

Making Praise Work

Dr. Haim Ginott, author of Between Parent and Child, has nicely pointed out that too often what we consider to be praise is not reacted to by the child as such. Just think how often someone has said to you, how great you are when
you really felt nothing of the sort. Take a child who has been repeatedly
told he is stupid and who has failed often. He is not likely to be overwhelmed
with joy by a teacher telling him, "You are smart". The praise statement
doesn't fit with his own experience. How can the teacher know that he is
smart from that response? On the other hand, if this same child has been
working hard for 20 minutes to complete 10 long division problems and he got
them all done and right, he might believe a statement like this: "I saw you
working hard on your arithmetic for twenty minutes, and I've checked every one
of them and see that they are right, and you know your writing is really neat
and clear." This statement simply describes what the child did and shows
appreciation by the detailed attention the teacher gives to the child's work
or behavior. Ginott says it's usually better to make praise descriptive
rather than evaluative. "Describe, don't judge".

There is much to be said for this viewpoint. The less you know about
a child the more likely descriptive praise will be effective and evaluative
praise will miss the mark. However, it is also possible to make phrases such
as, "Good", "Great", "That's clever" effective for children by initially
accompanying such phrases with descriptive statements of what the child did
to merit such praise.

"Jimmy watched carefully throughout the whole lesson. That's good paying
attention".

"Mary is sitting up straight with her hands on her desk, ready to listen.
She's going to be a good listener".

"Aaron, you kept at that one for a long time and you finally got it. That's
good working. When we work hard, we learn".

By repeatedly providing explicit examples of what is good working, good
listening, good talking, good responding, good thinking, etc., we teach the
children what we mean by such praise statements. Later, when we say briefly "good listening," "good talking," "clever answer," "that's what I call smart," they are no longer empty phrases.

**Activity Reinforcers**

Next to the use of praise, the use of reinforcing activities is the most readily available motivating tool the teacher has. Yet so often the teacher throws away, or gives away for free, her bargaining power with activity reinforcers. Another common error is to use activity reinforcers only for the chosen few. The key to a well-managed, highly motivated, and happy classroom lies in the contingent use of reinforcers.

The effective use of reinforcers involves teaching the child the general rule that "if he performs his tasks, reinforcing events happen." Working hard has a payoff. The effective teacher does this by constantly verbalizing new instances of this general rule. For example, "Toni finished her paper first. She can help me collect the papers." Instead of just calling on children to do this or that, instead of just saying it is time for recess, or lunch, set it up so that the children have earned a privilege by their improvement or excellent behaviors. USE ACTIVITIES THE CHILDREN LIKE AS REWARDS FOR DESIRED BEHAVIORS. DON'T GIVE THEM AWAY.

**Activity Reinforcers (Privileges)**

- Presenting at Show and Tell
- Being group leader
- Going first
- Running errands
- Collecting materials
- Being excused from a test
- Helping clean up
- Getting to sit where you want to
- Taking care of class pets
- Leading the flag salute
- Telling a joke to the class
- Being in a skit
- Supervising a group outside class
- Playing teacher
- Getting to go home early

- Seeing a movie
- Watching TV
- Listening to music
- Playing games in class
- Playing games at recess
- Having a party
- Making puppets and a puppet show
- Doing art work related to studies
- Making construction projects
- Going on field trips
- Having outdoor lessons
- Spending special time with teacher
- Choosing the game for recess
- Teaching younger children
Activity Reinforcers (Privileges) (continued)

- Competing with another class
- Performing for parents
- Decorating a Christmas tree
- Taking class pet home for the weekend
- Singing songs
- Being team captain
- Reading to the principal
- Getting to read a new book
- Assisting another student
- Earning an extra or longer recess
- Getting to make puzzles
- Helping set up equipment
- Studying with a friend in class
- Spending time in the library
- Having extra lunch time
- Putting up the school flag
- Being classed on to answer questions
- Seeing a film strip
- Going to an assembly program

Token Reinforcement Systems

Token reinforcement systems are appropriate for dealing with specific problem situations. Undertakings of this type require consistent attention and ingenuity on the part of the teacher. If properly done, the success rate with handling specific behavior problems is excellent.

Examples of Reinforcers to Back Up a Token System

Remember that any of the Activity Reinforcers listed earlier can be assigned a point and included in your "reinforcer menu."

<table>
<thead>
<tr>
<th>Foods</th>
<th>Play Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gum</td>
<td>Make-up kits</td>
</tr>
<tr>
<td>M &amp; M's</td>
<td>Toy animals</td>
</tr>
<tr>
<td>Candied cereal</td>
<td>Boats</td>
</tr>
<tr>
<td>Peanuts</td>
<td>Cars</td>
</tr>
<tr>
<td>Ice cream</td>
<td>Blocks</td>
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<tr>
<td>Candy bars</td>
<td>Badges</td>
</tr>
<tr>
<td>Lemon drops</td>
<td>Marbles</td>
</tr>
<tr>
<td>Marshmallows</td>
<td>Jump rope</td>
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<tr>
<td>Apples</td>
<td>Gliders</td>
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<tr>
<td>Raisins</td>
<td>Model airplane kits</td>
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<tr>
<td>Jelly beans</td>
<td>Picture books</td>
</tr>
<tr>
<td>Lollipop</td>
<td>Painting sets</td>
</tr>
<tr>
<td>Chocolate kisses</td>
<td>Crayons</td>
</tr>
<tr>
<td>Cookies</td>
<td>Coloring books</td>
</tr>
<tr>
<td>Soft drinks</td>
<td>Albums</td>
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<tr>
<td>Cracker Jacks</td>
<td>Records</td>
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<tr>
<td>Life savers</td>
<td>Colored chalks</td>
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<td></td>
<td>Clay</td>
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<td></td>
<td>Musical instruments</td>
</tr>
</tbody>
</table>

ALSO CONSIDER REINFORCERS PARENTS COULD GIVE AT HOME WHEN THE CHILD HAS EARNED IT.
APPENDIX II

EXAMPLES

OF

MATH GAME

PRESCRIPTIONS
**BIG OR LITTLE**

Draw on the board a diagram of large and small objects: a small cup and a large cup in one square, a large cap and a small cap in the second, a small house and a large house, etc.

Child will fold his paper to mark six squares. Under the appropriate picture child writes the words BIG or LITTLE after drawing them.

Color the pictures if time allows.

ALTERNATE: Hold up a picture of an object. Child sketches either a smaller or a larger picture, as called for by the teacher, then writes BIG or LITTLE under it.

**BACKWARDS ARITHMETIC**

Put on a ditto problems with answers suitable to each grade level, omitting one or more parts to the problem, such as:

\[ \begin{align*}
1? & \quad 31 \\
?1 & \quad -4 \\
99 & \quad x \quad x \quad x \quad = 24
\end{align*} \]

**FOOTBALL**

1. Make an 18 x 24 inch football field on tagboard. Mark length in 2" lines, both ends become end zones; other lines are 10-20-30-40-50-40 etc.

2. Cut five small footballs of oaktag. On each write a number suitable as an addend in a problem at your grade level.

3. On 1 1/2 squares of tagboard place another number. Clip these on the yard line markers with paper clips.

4. Divide into two even teams. Use a stop watch to time responses. Goal is to add the number on the ball to the one clipped along the side all the way to the end zone to score a six point touchdown. A bonus point is given if the child can answer a math question or problem suitable for his academic level. Goal posts could be placed on the game board for added interest, but are not a necessity.

5. Flip a coin to see who starts. Team A’s first player draws a football, and starting at the 10-yard line he adds the number on his football to the ones along the side. He continues until 20 to 30 seconds are up; then Team B’s first player does the same, striving to reach the opposite goal. Team with the highest score wins.

6. If any player gives a wrong answer, it is a "fumble" and the ball goes to the opposing team.

VARIATION: Use for subtraction, multiplication, or division.
NUMBER BOOKLETS

1. Staple ten sheets of lined or newsprint paper between sheets of construction paper.

2. On page one, have child write the number one. At the bottom of page one, write the word one, or have the child write or copy it. In the middle of the paper, have him draw one object.

3. Continue step two until you finish all ten pages.

VARIATION: Cut outs from magazines could be used as an alternate.

FLASHCARD GAME

Place answers to several flashcards on the chalkboard just above the tray. Divide cards evenly among players. At a given signal, children place cards under the right answer. Child getting rid of all his cards first wins.

CAN YOU BEAT BROTHER FOX TO THE BRIAR PATCH?

Materials: one "Fox" and one "Rabbit" game piece cut from tagboard. One set of footprint shaped flashcards cut from construction shaped flashcards cut from construction paper. One game board drawn on tagboard—or separate pieces cut from construction paper so that the game board can be assembled on a flannel board or bulletin board. Otherwise sketch the game board on the chalkboard and have it look something like this:

The object is to have the rabbit and fox race up the footprints to see who can get to the briar patch first.

Make more than one set of flashcards so that the game can be used for more than one level.

NUMBER PUZZLES

Sketch or use magazine pictures with 1-10 objects. Glue the pages onto tagboard and write the number and number words somewhere on the puzzle.

Cut into puzzle pieces and write the puzzle number on the back of each piece, then place each separate puzzle in an envelope.

Can be used as a "free time" activity.
FISHING

On 18 fish shapes of paper, write numbers from 1-9. Put a paper clip on each. Tie a magnet to a string and pole. Each child fishes for a paper. The first child to get a matching pair wins.

GRANDMA’S COOKIE JAR

Write down 10 problems at the child's academic level. Have the child lay out each grouping and give the answer. Use for beginning addition, etc.

OR

1. Discuss the meaning of one dozen and/or one half dozen.
2. Count by two's.
3. Bake cookies for a party. You'll need two cookies for each person. ____ people will be at the party. How many cookies should you bake?
4. ____ cookies are in the jar. Do you have enough to give each of ____ people ____ cookies?

CARD CONCENTRATION

Materials: One deck of playing cards.

1. Cards are placed face down in rows on the table. Children take turns turning up two cards and trying to make pairs.
2. Anyone turning up a matching pair continues until he fails to make a match.

Object: To remember placement of the cards and gain the most pairs.

Alternate: Ask those not matching pairs to add the two sums together.

MATH HOUSES

Use a 9 x 12 piece of tagboard, folded in half. On the outside draw in ten windows about one inch high. Cut around three sides of each window so they can be opened.

On the inside of each window write the answer to a combination that has been placed on the outside of each window.

1. Open up the houses—place a sheet of paper underneath the windows.
2. Close the house and look at the problems.
3. Open each window and write the answer to the problem.
4. When all problems are completed, remove the paper and check your answers with the ones inside the house.
MATH HOUSES -- Continued

This can be used for adding, subtracting, multiplying, dividing, fractions.

Alternate: Two people may play this game. One points to a problem, then the other gives the answer. After the answer is given, one of the two players opens the window.

GROUPING

1. Make cards of tagboard with different symbols on them. Make more than one of each. (1-10)

2. Jumble them and have children group them.

3. How many are there of each symbol?

PLAY STORE

Purpose: To review coin value.

1. Make up 3 x 3 cards with pictures of toys, etc. on them and list a price under each picture.

2. Have each child sort a selection of play coins by denomination and place the coins in piles in front of him.

3. Teacher or leader holds up a card. Child must give the leader the exact change. If he can do so the card is his to hold. If he cannot give the correct change, the card is placed back in play.

GRANDMA's COOKIE JAR

There are a number of games that can be played with these same game pieces.

A cookie jar is made from an empty shortening or 2 lb. coffee can covered with contact paper. Letters spelling "Cookies" are cut of a contracting paper and added to the outside of the can.

The "cookies" are made of 12 plastic margarine tub lids into which you glue circles of cookie-colored construction paper.

Game 1

1. How many ways can you group the cookies to make combinations that total 5, 6, 7, etc.?

2. Say aloud the combinations you have made, i.e., two plus two equals four, etc.

MATH GAME WITH BALL

Materials: One large rubber ball.

One person will bounce the ball one to ten times. The second person will clap the same number of times and give the proper number.
BEAN GAME

1. Put two beads or beans in a small tin can. Rule a gameboard of oaktag into nine smaller squares.

2. Number each square, but in no particular sequence.

3. Child must spill beans onto the card and either add or subtract (whichever you say) the two numbers on which the beans landed.

4. Score one point per child for each correct answer. Highest score wins.

Alternate: Rule one card into six squares for younger children, number 1-6.

ADDING AND SUBTRACTING COMBINATIONS

Make two spinners from cardboard.

1. Using these two spinners, spin both at the same time and ask student to add or subtract the two numbers shown by the points on the spinners.

2. Give points or candy reward for correct answers.

LADDERS

1. Draw the ladders on the board as shown—or make them on tagboard with magic markers. Have them laminated for extra durability.

2. At the bottom is a number and sign. You must add this number, or divide, etc. as shown by the sign so that you can climb to the top of the ladder.

3. Give prizes to the winners.

NUMBER ACTION GAME

1. Number flashcards from 1-10.

2. Write action words on the chalkboard or on cards and have child do the action the number of times shown on the flashcard.

COMBINATIONS GAME

Use a flannel board and construction paper figures of objects, plus cut out numbers grouped on the flannel board to aid in learning to count and to recognize combinations.
APPENDIX III

EXAMPLES OF READING GAME PRESCRIPTIONS
ALPHABET SOUP

1. The letters in each separate line below are arranged in a logical pattern. Think about the pattern, and try to figure out what the next letter should be.

2. You will see that some of the letters are lying down or leaning over; their position is important. In one line, the shape of the letters is important. This is an exercise in logic that is tricky but fun. We've done the first one. Can you figure out the rest?

   1. A ⊕ C ⊖ □ (E) 6. T ∨ V M ⊖ (X)
   2. A Z B Y ⊖ (E) 7. ⇒ K ← M ⊖ (Z)
   3. E ⊕ G ↓ (I) 8. P ⊕ R ⊕ (T)
   5. Χ ⊖ ⊖ (Δ) 10. A Z C X ⊖ (E)

THE DISCOVERER

The point of the game is to decode words or sentences.

<table>
<thead>
<tr>
<th>X</th>
<th>E</th>
<th>K</th>
<th>F</th>
<th>D</th>
<th>J</th>
<th>H</th>
<th>L</th>
<th>I</th>
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<th>W</th>
<th>Y</th>
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ALPHABET SEQUENCE

Purpose: To give players practice in recognizing initial sounds in words.

Directions:

1. One pupil starts the game by saying, "My boat is loaded."

2. The next student gives a sentence naming a word that begins with B.

3. The game is continued until one child stumbles.

CATEGORIES

Using A B C flash cards, have the children place the correct letter underneath the correct picture, i.e., alligator, bear, cow, etc.

These animal pictures may be cut from magazines and pasted to tagboard, leaving blank spaces for the A B C cards.
ALIKE OR DIFFERENT

Purpose: To distinguish between words that sound alike and those which sound differently.

Directions: Teacher stands about five feet from the pupils who stand with their backs to the teacher.

The teacher whispers distinctly the same word 3 or 4 times; come, come, come, come

Then she says, "Are the words different or alike?"

Then she might say the words mat, cat, sat, pat and repeat the above question.

CATEGORIES

1. Provide a list of objects on the board or on dittoes.

2. Each child is to read the words and arrange them in categories.

   Given Words:
   
   blue  red  stove  horse  gorilla  tiger  purple
   chair  lion  table  stool  yellow  cat  orange

3. Category headings are: Animals  Colors  Furniture

HOW MANY STEPS?

Purpose: To give practice in quick recognition of words.

Directions: Draw on the chalkboard a sidewalk divided into segments.

In each part write one of the words to be practiced.

Give each child a chance to "take as many steps" as he can by reading the words on the sidewalk. See how many children can cross to the other side.

LOLLIPOPS

1. Make lollipops out of construction paper and attach to long handled plastic spoons.

2. Each lollipop is printed with a capital and small letter of the alphabet.

3. Lollipops are put in a basket. Sell the lollipops to the people who can say the letters on the lollipops.
FEED THE BEAR

Construct a bear out of heavy paper.

The children are allowed to feed the bear A B C cookies or reading word cookies.

Variation: Construct a fish and feed it words, or construct a monkey and feed it bananas.

GO AROUND THE BOARD

Purpose: To provide practice with sight vocabulary words.

Materials: 18 x 24 inch sheet of tagboard. Make a 2 to 3 inch margin around the board and mark it into squares. You'll also need a spinner.

In each square place words; jump, happy, sing, and then every so often, put "move back two spaces", or similar things in a few of the squares.

Directions: Each player, in turn, spins the arrow and moves clockwise the number of spaces indicated, starting with a square called HOME BASE.

The child reads the word that he lands on. If he doesn't know the word, he returns to the original space until his next turn.

The first child going all the way around to home base wins.

HIDDEN WORDS

1. Give children a word such as Holloween, Thanksgiving, or Christmas.

2. Have them make a list of as many small words that they are able to find within the longer word.

Variation: Make the words fit a definition:

Example: Halloween --- hall, allow, ewe, wall, hen, new, lean, etc.

ALERT-O

Purpose: To provide practice in word recognition.

Materials: Word cards, chart holder.

Directions: Place a number of word cards in the chart holder. Write a number on the chalkboard. The first child takes that number of cards. He should name each card as he takes it. Change the number for the next child, etc. The teacher may add other cards to the holder until each child has had a turn.
WORD FOOD

Why is the letter E like a calorie? (When you add it to a word, the word gets bigger!) Add E to the words defined and see them grow.

1. A small rug ___________ = a partner ___________. (mat-mate)
2. Indistinct ___________ = a dime ___________. (dim-dime)
3. A grown up ___________ = a horse's neck hair. (man-mane)
4. Time gone by ___________ = a sticking substance ___________. (past-paste)
5. A fastener ___________ = an evergreen. (pin-pine)
6. Headgear ___________ = a sleeveless cloak. ___________. (cap-cape)
7. Metal ___________ = a prong of a fork ___________. (tin-tine)
8. One of a pair ___________ = a kind of cord ___________. (twin-twine)
9. Stop ___________ = Very ___________. (quit-quite)
10. A friend ___________ = light-colored ___________. (pal-pale)

JUST LIKE ME

Purpose: To provide practice in visual discrimination.

Players: One or more.

Materials: Two sets of cards containing several pairs of cards of like design.

Directions: Sort two sets of cards into two stacks. Give one stack to the player or divide one stack among players. Have players then match their cards to the ones the teacher holds. The first player to correctly sort all of his or her cards wins the game.

MESSAGES

Materials: Newspaper or magazines, sheets of paper, scissors.

Make up telegrams by cutting words out of a newspaper or magazine. Paste your messages on blank paper. Read messages to your friends.

READING

As you say one syllable words containing either a long or a short vowel sound, have students raise both their arms up high if the vowel is long. If the vowel is short, they must fold their hands on the desk. Later, after children have learned vowel sounds, you may add the category that is neither long nor short (ar, aw, er, oo, and so on).
CHRISTMAS TREE DITTO ON GREEN PAPER

Put letters (ABC) (abc) to be identified on the tree.

Say, "Here is a red pen. Red lights up the A's (or whatever letter you choose). You only get the red pen once, so try not to miss any."

Repeat with another colored pen for the 2nd letter, etc. You could say, "Light up the letters that begin with the sound of apple, boy, car, etc.".

When making the Christmas Tree Ditto, divide the tree in sections so the child can work more easily from left to right.

Variation: Use with numbers or with long and short vowel words. Red lights up long vowel words. Blue lights up short vowel words.
APPENDIX IV

EXAMPLES

OF

SCIENCE

PRESCRIPTIONS
HOW CAN PLANTS BE HELPFUL IN OUTER SPACE

Add water to a small bottle until it is three fourths full of water. Into the water, place a small plant that will grow in an aquarium. The plant Elodea works very well. Also drop a snail into the bottle, then put a cork or cap on the bottle. It should be possible for the snail and the plant to live for some time in the closed bottle. The plant gives off oxygen, which can be used both by the snail and by the plant. If the snail and the plant are able to live in the bottle, you have a balanced aquarium. For long trips in space, it probably will be necessary to have plants. In the spacecraft, there will have to be a balance between the plants and animals, somewhat as there is in a balanced aquarium.

HOW CAN TEMPERATURE BE CONTROLLED IN A SPACECRAFT

Place two thermometers in the sunlight. Cover the bulb of one thermometer with a piece of black cloth. Cover the bulb of the other thermometer with a piece of white cloth. Read and record the temperatures every five minutes. Under which cloth does the temperature rise faster? How can you explain the difference in temperature readings? Try to make one of the thermometers always show about the same temperature. What should you do when the temperature rises above the desired reading? What should you do when it falls below the desired reading? If the temperature rises, turn the white part toward the sun. Some of the energy will be reflected away. If temperature falls, turn the black part to the sun.
HOW MUCH WOULD DIFFERENT THINGS WEIGH ON THE MOON

To find out how much things would weigh on the moon divide the weight of the object by six. Things would weight one-sixth as much on the moon as they do on earth.

HOW CAN A LIQUID BE MADE TO BOIL

Pour a little water into a flask. Apply a source of heat until the water boils. After the water has boiled for a few minutes, take away the heat source and close the flask with a stopper. Then drip some cold water on the flask and see what happens to the water in the flask. If you have a stopper with a thermometer fitted in it, you can record the temperatures of the water in the flask. Repeat above directions, observing temperature readings on the thermometer. What happens to the temperature of the water vapor in the flask as cold water is dripped on the outside of the flask. Try to explain what happens inside the flask. Remember that most of the water vapor in the flask changes back to liquid water as you cool the flask.

WHY ARE DIFFERENT TIMES NEEDED FOR PLANETS TO COMPLETE THEIR ORBITS?

Place a chair or some other object near the center of a large room. Ask someone to walk in a small circle around the chair. This person will represent Mercury and the small circle will represent the orbit of Mercury. Have another person walk in a larger circle to represent the Earth. Have a third person walk in a very large circle to represent Pluto. Which person takes the longest time to complete one revolution around the chair? Which takes the shortest time?
WHY MUST A SPACE PROBE BE AIMED AT A PLACE WHERE A PLANE WILL BE MANY DAYS LATER?

If a space probe is sent from earth too early or late it will not reach a planet. Show why it is important to send a space probe at the right time. Use a large ball as a planet and a small ball as a space probe. Mark a spot on the floor about ten feet away from a chair. Let the spot represent the place where you want your space probe to reach your planet. Let the chair represent the earth. Ask a friend to roll the large ball from the side of the room toward the spot on the floor. When the large ball reaches the spot, roll the small ball toward the spot. Were you able to hit the large ball with the small ball. Ask your friend to roll the large ball again. This time, roll the small ball toward the spot before the large ball reaches the spot. Did you come closer to hitting the ball? Practice several more times until you are able to hit the large ball with the small ball. You should be able to see why it is important to send a space probe before a planet reaches the place where the space probe and planet should meet. You should also be able to see why hitting the planet with the space probe is so difficult.

Remember the earth does not stay in the same place as your chair does. Would it be harder or easier for you to hit the large ball if you were moving while you were rolling the small ball? Try it and see. Ask your friend to roll the large ball faster at sometimes and slower at other times. How does the speed of the moving object affect the way you must roll the small ball? Why would it be important for scientists to know the speed of a planet before they try to reach it with a space probe?
HOW CAN YOU DETERMINE THE HARDNESS OF A ROCK?

You can compare rocks by their hardness. You can do this by using your fingernail, a copper coin, a knife, and a piece of glass. Use the following key to determine the hardness of a rock or part of a rock.

- **Very soft rocks** -- can be scratched with a fingernail.
- **Soft rocks** -- can be scratched with the edge of a penny, but the rocks will not scratch a piece of glass.
- **Medium rocks** -- can be scratched with a knife, but the rocks will barely scratch a piece of glass.
- **Hard rocks** -- cannot be scratched with a knife, but the rocks will scratch a piece of glass.
- **Very hard rocks** -- will scratch a knife and a piece of glass easily.

HOW MAY CRYSTALS BE FORMED?

Put a few inches of water in a glass. Add a little salt and stir the water with a spoon. Keep adding salt until no more salt will dissolve in the water. Pour the salt water into a clean glass. Tie a string to a pencil. Lay the pencil across the glass so that the string dangles into the salt water. Set the glass aside and wait for crystals of salt to form. Try this using sugar instead of salt. They try it with alum and copper sulfate. When you have been able to form crystals from several different materials, you should notice that the crystals are not all alike. Use a magnifying glass to examine the crystals more closely. Notice the colors, shapes, and sizes of different crystals. Are crystals formed by different material different in appearance?
FOSSIL PRINT

You will need a small ridged shell or similar object, a milk carton, some vaseline, and some plaster of Paris. Cut off two thirds of the carton, leaving only the bottom third. Cover the shell or other object with a thick coating of vaseline. Put the shell or object in the carton bottom. If you use a shell, place it ridged side up. Mix some plaster of Paris and water. Add enough of each to make a soft paste. Pour the mixture over the shell, covering it completely. When the plaster of Paris hardens, tear off the carton and remove the shell. The imprint of the shell in the plaster of Paris is a homemade fossil.

HOW DO FROGS DEVELOP FROM EGGS?

Get some frog's eggs. They will look like very tiny bubbles held together within a larger bubble. Put the eggs in a glass dish or jar that will hold about two quarts to one gallon of water. If possible, put a rock and a few water plants in the bottom of the jar. If you have an aquarium, the eggs can be put in there. However, you should not put the eggs where there are fish, since the fish may eat the eggs. Watch the changes that occur. First the eggs will develop into fish-like animals called tadpoles. Tadpoles get oxygen from the water. Each tadpole will develop two legs and then two more legs. As the legs develop the tadpole looks more and more like a frog. As the tadpole approaches the stage of becoming a frog, be sure the water in the jar is shallow enough so that the newly formed frog can get on the rock and be out of the water. The frog takes its oxygen from the air.
REPTILES IN THE UNITED STATES

Turtles, tortoises and terrapins—ex. snapping turtle, box turtle, painted turtle, lizards and snakes—ex. geckos, chameleon, skinks, gopher snakes, garter snakes, rattle snakes. Alligators and crocodiles.

HOW CAN YOU SEE THE RESULTS OF MOLECULAR MOTION IN LIQUIDS?

Obtain a glass, some water, and vegetable coloring.

Fill the glass with water. Put the glass of water in a place where you can let it stand for three days. One hour after you filled the glass with water, slowly add a drop of vegetable coloring. Without moving the mixture, observe what happens over a three day period. Do you see how the water and vegetable coloring are slowly mixed. The coloring is spread throughout the water as a result of the motion of the molecules of each liquid.
APPENDIX V

EXAMPLES

OF

ART

PRESCRIPTIONS
LEAF PRINT

Materials: Crayons, fresh green leaves, white drawing paper or pale-colored construction paper, an iron and ironing surface, old newspapers.

Directions: Lay a leaf, vein side up, on a sheet of newspaper. Color the leaf completely, putting the crayon on as thickly as possible without tearing the leaf. Use all one color, or color different sections of the leaf in various colors. Lay the leaf, colored side down, on a sheet of paper (white). Place a protective layer of old newspapers under and over the work. Iron at medium heat to melt the crayon. The colors will be transferred onto the paper.

SCRIBBLE DESIGN

Materials: Crayons, white construction paper, sharp pointed instrument, as a nail, paperclip.

Directions: Complete scribble design, making sure to press heavy with crayon. With the nail or paper clip etch a design in each section of the scribble design. Etch a different design in each section.

CRAYON TEXTURE PAINT

Materials: Old crayons with paper wrappings removed, white drawing paper, candles in stable holders, matches, and old newspapers.

Directions: Draw and lightly color a picture on white drawing paper. This serves as a pattern and will be completely hidden by the melted crayon overlay. Protect work surface with layers of old newspaper. Place a lighted candle within arms reach. Hold crayon tip almost into candle flame until it becomes soft and almost dripping. Paint the surface of the picture with melted crayon. (This is a long process—plan on more than one day)

CRAYON ON COLORED PAPER

Materials: Crayons and colored construction paper.

Directions: Make a crayoned picture on colored paper, instead of usual white drawing paper. The effect is basically the same as in crayon Batik.
NOTCHED CRAYON

Materials: Old crayons, scissors blade, and paper.

Directions: Cut notches in the tip or side of an old crayon. Use this notched surface for unusual effects in lettering or other crayon work.

(You might prefer to use this as an intervention)

CRAYON ON CLOTH

Materials: Muslin cut into pieces, crayons, an iron and ironing surface, supply of old newspapers.

Directions: Color a picture or design on muslin. The thicker the crayon is applied the more effective is the finished product. Place muslin face down on a protective layer of old newspapers. Cover it with damp cloth, place another layer of newspapers on top. Press with a medium hot iron to melt the crayon and set the colors. Finished product may be washed in lukewarm water. If after several washings colors appear to fade, simply recolor the areas.

Ideas: Place mats and napkins for Mother's Day or a cloth booklet.

CRAYON ETCHING

Materials: Crayons, white drawing paper, pointed objects. Also may use talcum powder and India ink.

Directions: For background, color a sheet of paper with strips, blotches, or any hap-hazard areas of color, until the entire surface is colored. Press firmly on the crayons so that the colors will be thick. To add overlays, dust the colored sheet with talcum powder. This allows the India ink to adhere. Then coat the entire sheet with India ink. (A thick black crayon may be used in place of the India ink). For etching, use a pointed object, scratch away the ink in any desired pattern.
MAGIC PICTURES
Materials: White crayon and white drawing paper, water colors and brushes.
Directions: Have each child draw a picture on white drawing paper, using white crayon only. Finished work will be almost invisible. Have each child exchange his paper with a friend. Children then paint the entire sheet with one color of water colors, and Presto—just like magic—a secret picture appears.

SANDPAPER ART
Materials: Sandpaper and primary colors.
Directions: Sketch a picture on sandpaper with pencil. Color with crayons to obtain a sandpainting effect. By pressing heavily with crayons, your picture will resemble an oil painting.

CRAYON BATIK
Materials: White drawing paper, crayons, water colors, brushes.
Directions: Color a picture with crayons leaving much of the area blank. Using one color only, paint over the entire area. Water colors will adhere only to the non-crayon area. Entire sheet will have color on it.

CRAYON CARBON
Materials: Two sheets of white drawing paper, crayons, pencils or pens.
Directions: Color one sheet of paper with any pattern of colors, filling the sheet entirely. Press heavily on the crayons so that the colors will be thick and rich. Lay this paper, colored side down, on top of the second sheet. Use a pen or pencil to draw a picture or design on the back of the colored sheet. Carbon papers may be used over and over.
ERASER SMUDGE PRINTS

Materials: Crayons, scissors, scratch paper, white drawing paper, pencil with eraser.

Directions: Cut a silhouette shape of a house, tree, person, animal, etc. from scratch paper. Darkly color the border of this stencil silhouette with crayon. Place the stencil on white drawing paper. Holding the stencil firmly in place with one hand, place an eraser tip on the colored border and smudge outward onto the white drawing paper. Continue smudging color from the stencil border out onto the drawing paper all the way around the border. Lift the stencil and see it's shape color on the white sheet.

SPONGE PAINTING

Materials: Paper, tempera paint, sponge.

Directions: Place paper on the easel. Dip sponge in paint and paint lightly on the paper. Try to create different types of strokes and looks with the sponge.

ART

Materials: Patterns of oaktag in the shape of squares, circles, ovals, rectangles, triangles. Also construction paper and crayons.

Directions: Have each child assemble the shapes on his construction paper sheet to form an animal or other design. Trace around the shapes and color the picture.

BAD BAT

Materials: Construction paper, paper plates, glue.

Directions: Cut a 5½ inch diameter head with ears. Cut wings and feet as shown. Glue the parts between two body plates. Attach plates, rim to rim. Paint with tempera or use crayon.
APPENDIX VI

EXAMPLES

OF

COMMUNICATION

PRESCRIPTIONS.
TELEPHONE
Purpose: To learn to call authorities in time of need.
Materials: Phone, phone number(s) for local fire station, police, ambulance services, hospital(s), doctor(s).
Directions: Imagine you need the police, ambulance, doctor, hospital or fire dept.
Make your phone call, dialing the right number and telling them what you want. Be sure to use proper telephone manners and procedures.
Example: This is (name) I'd like to report (state problem)
at (give address) Etc.
This could be used in conjunction with a field trip to a phone company.

FIRE ALARM
Materials: A little bell.
Directions: Choose one child to go out of the room as the "fireman". While he's gone, hide a bell in one desk. This child rings the bell and names someone else to call in the alarm. The child chosen calls the fireman and gives complete directions--row and desk numbers--to find the fire. When he finds the right house, the fireman takes this seat and the one who's house was on fire becomes the fireman.
Variation: Play with policeman and report a theft, or call the Humane Society and report a stray dog.

CIRCLE OF MONEY
Discuss A:
A factory owner employs people. They work to make a product. The owner sells the product. The owner pay expenses (overhead, materials, taxes, employees). The money left over belongs to owner (profit). He uses profit to expand, produce more, spend more or saves it.
Discuss B: Salaried employees use their money to pay expenses, save, buy services and/or goods.
THE NEWS

Materials: Pencil, paper, crayons, daily newspapers.
Discuss how we use radio, TV, newspaper.

Ditto the following: RADIO--Name one type of program you hear on radio.
Draw a picture of one other way radio is used besides news and entertainment.

TV--Draw a picture of your favorite program. List four programs you watch (and consider worthwhile).

NEWSPAPER--Use papers on work table and find articles or pictures that show examples of:

1. Radio programs
2. An important meeting
3. A good cartoon
4. A job for someone
5. TV programs
6. The weather
7. An important incident
8. The headline
9. Lost and found item
10. Political item
11. Foreign news item
12. Something to buy

Mount the above articles on construction paper, label them and display on bulletin board.

SIGNS

Purpose: To learn to recognize traffic signs by their shape.

Materials: Large cardboard disc at least 24 inches by 24 inches with an arrow fastened in the center by a paper fastener, shapes of traffic signs placed around the outside of the disc.

Introduction: Each player spins the arrow and describes the sign and what it tells us to do. Younger child may act out what sign says to do. Older ones could write sentences about the signs.
MANNERS AWAY FROM HOME

Pantomime or act-out situations such as being asked to a friend's home for lunch and being served something you never tasted and you don't know if you'll like it, so you don't think you want to try it. Or spilling or breaking something at a friend's house.
SCIENCE-SOCIAL STUDIES COMMUNICATIONS

Materials: Large map of the United States to cut apart and put back together as a puzzle. Cut each state apart and back each piece with tagboard.

1. Give each child a pattern piece and have him outline his piece on tagboard, then research the state tree, bird, flower, slogan, capitol.

2. Make these sheets into a booklet.

3. Re-assemble puzzle frequently to aid in learning state's proximity to its neighboring states.

SOCIAL STUDIES

Materials: 8½ or 9" square pan 1.5" deep or cardboard base, modeling clay.

1. Use modeling clay in the pan to make land formations, i.e., plains, mountains, valleys, rivers and streams, lakes. Fill the lakes and rivers with water if you use the pan--omit it if you use the cardboard base!

Variation: Use damp sand instead of clay.

Variation: Do outdoors.

WHO TAKES CARE OF THE BABY? (COMMUNICATIONS)

Purpose: To promote concept of division of labor.

Discuss and pantomime family jobs and show what would happen if everyone did the same job instead of dividing up the jobs that need doing.

Draw pictures or write stories on the above topics.

TOOLS USED (COMMUNICATIONS)

Materials: 12 x 18 inch newsprint crayons, chalkboard to list children's responses, a list of activities in which tools are used on chalkboard.

Directions: Fold paper into squares and draw the tool for each activity listed. Discuss before or during sketching.
Make a large cardboard disk with an arrow spinner. Take turns spinning the arrow and tell:

a. What kind of work we do during this season.
b. What seasonal games we play.
c. What we wear.
d. What happens to trees.
e. What happens to animals.
f. Etc.

I SEE

Ditto as follows:

<table>
<thead>
<tr>
<th>MADE BY MAN</th>
<th>MADE BY NATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>house</td>
<td>flower</td>
</tr>
<tr>
<td>car</td>
<td>cloud</td>
</tr>
<tr>
<td></td>
<td>sun</td>
</tr>
</tbody>
</table>

Try to list as many objects under each heading as possible. Use this following a walk or field trip.