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## ABSTRACT

Focusing on staff development activities, this paper describes the process kindergarten teachers in one elementary school went through during a 3-year period as they transferred knowledge from staff development activities to classroom implementation. The development process included participation in workshops, assistance of a staff developer, observations of children and classrooms, discussions, and feedback. Topics selected for staff development training were chosen because of their importance in developing a program for early childhood. In the area of teaching management, these activities included child study and observation, room arrangement, scheduling, planning, selecting and using materials, teacher-made materials, and parent involvement. In the area of teaching strategies, the topics included learning centers, group meetings, flannel boards, and block building. Subject area topics focused on developing responsibility, language experience, mathematics, drama, art, movement, and science. In many topic area sections, discussion of the topic is followed by suggestions for kindergarten learning activities. A bibliography lists books about activities for young children, various curriculum areas, early childhood, learning centers, making instructional materials, observing children, parent involvement, room arrangement, specific teaching methods, and staff development. (RH)

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AN EARLY CHILDHOOD PROGRAM: A CONTINUING  
DEVELOPMENT INVOLVING MANY CHANGES

by

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PARENT TEACHER TRAINED

edited by

Basic Education Skills Staff

BASIC EDUCATIONAL SKILLS PROJECT

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## INTRODUCTION

Programs for young children make provisions for learning in cognitive, affective, psychomotor, social and creative areas. These programs take time, patience, understanding, planning and refining. This paper will focus on the staff development activities which evolved over a three year period for the kindergarten staff in one elementary school. The paper will describe the process the teachers went through as they transferred knowledge from the staff development activities to actual implementation within their individual classrooms.

The process recognized the leadership and guidance of the teachers as the essential ingredients needed to make their programs meaningful to children. The importance of staff development which adds to and strengthens the knowledge of the teacher was recognized. According to Gordon Klopff, "The ultimate purpose of staff development programs in schools is to improve education for children and youth. An underlying theme of all staff development programs is that the adult must see learning and the acquisition of new competencies as a life-long process." (Klopff, 1979).

During the three year period, the staff development process for these teachers included: participation in workshops, assistance of a staff developer, observations of children and classrooms, discussions and feedback. Learning and changes were on-going. Initially, meetings with teachers provided a direction for staff development activities. Later, observations of children and program and continuous dialogue between teachers and the staff developer

provided the information necessary to formulate a list of topics important to planning a program for young children.

A program for staff development should recognize the belief that individuals grow and change as new learnings are encountered. Essential to the success of the staff development program was the participation of the staff. Various techniques were employed to gain their participation. The planners of the staff development program were receptive to developing a process--a continuing development of change. They were also sensitive to situations which encouraged growth patterns in individual staff members. An emerging characteristic of the staff development program was the trust relationship of individuals as the program continued. Respect and confidentiality for staff contributed to the formation of the trust relationship.

A framework for staff development activities was devised so that maximum participation by teachers could be achieved. In the beginning, teachers were asked about concerns and needs for their classrooms. Later, workshops were planned so that information was presented and discussed. Brainstorming activities and actual hands-on experiences were strategies used at these workshops to involve teachers. In addition to this careful preparation of staff activities, another step often missing from staff development programs was added. A staff developer was assigned to the school. Responsibilities of the staff developer included assisting and supporting staff as they implemented strategies presented to them, and serving as an advocate of good teaching. Evaluation of the staff members was not a responsibility of the staff developer. Subsequent developments also played a very important role in the

framework of the program. These developments included frequent meetings with the teachers to discuss concerns and observations by the staff developer for improvement of classroom teaching. Teachers were afforded numerous opportunities to talk about the children with whom they worked and also about the organization and management of the classroom.

In the plan developed and described briefly above and in more detail earlier in the paper, changes occurred. The rate of change varied with each situation and each individual. The changes were slow and not dramatic. Sequences of observations, discussions, workshops and meetings clarified events and became part of the foundation for future thinking of individuals. The receptive attitude toward change was different for each teacher. The attitudes can be depicted as expressing sufficient knowledge; recognition of need for new knowledge or a change without assistance; awareness and acceptance of assistance in gaining new knowledge or changing; transfer of knowledge to implementation phase with assistance, and refinement of what was implemented with assistance. Individuals began to experience changes in their attitudes. As this happened, the individuals assumed more responsibility for the recognition of need to add new knowledge or need to change; transfer of knowledge to implementation phase; and refinement of whatever was implemented.

Observation of teachers followed by conferences with the staff developer enabled teachers to be more reflective about their own teaching practices. Teachers became more concerned with what worked, why something worked and how to make it work as well as appropriate answers to questions of when, where and why to do something. An important factor

that facilitated change in attitudes was the recognition that new learnings were to build upon previous knowledge.

The intricacies of educating children pose a challenge for those involved. Individuals are often confronted with many experiences that evoke various reactions such as positive expressions of enjoyment, satisfaction, surprise, excitement and concern. Other expressions exist simultaneously--despair, frustration, loneliness, and impatience. A harmonious relationship needs to exist and can exist with the establishment of a staff development program that concerns itself with understanding educational situations and the needs of those involved. The staff development program that evolved did concern itself with understanding educational situations and the needs of participants. The entire program was supported by a study of child development which took into consideration the influences and factors affecting curriculum and methods and depended on the participation of staff. Individuals were supported with techniques which encouraged them to analyze the classroom and teaching practices. The process developed for the individual teachers that encouraged qualities of questioning, testing, analyzing, synthesizing and implementing changed many patterns and attitudes over the three year period. The concept of program for young children became a picture of change over time. Together children and teachers were learning--learning in a way which will continue throughout life.

The topics selected for staff development were chosen because of their importance in developing a program for early childhood. Some of the topics were addressed on a continuous basis with the staff developer through techniques involving observations, discussions, reading, brainstorming, and implementing.

These topics are divided into three major categories, as follows:

Teaching Management

Child Study and Observation

Room Arrangement

Scheduling

Planning

Selecting and Using Materials

Teacher-Made Materials

Parent Involvement

Teaching Strategies

Learning Centers

Group Meetings

Flannel Boards

Blockbuilding

Subject Areas

Developing Responsibility

Language Experience

Mathematics

Drama

Art

Movement

Science

What follows is a discussion of each topic, staff opportunities, handouts, and supporting materials. A resource bibliography is also provided.

TEACHING MANAGEMENT

Child Study and Observation

Room Arrangement

Scheduling

Planning

Selecting and Using Materials

Teacher-Made Materials

Parent Involvement

## CHILD STUDY AND OBSERVATION

The significance of observing children is developed over a period of time, with teachers. The ideas developed with teachers are not new; many educators of the past have used child study.

For our purposes, two books were selected to be used as background reading for child study sessions. The books were: OBSERVING AND RECORDING THE BEHAVIOR OF YOUNG CHILDREN, Dorothy H. Cohen and Virginia Stern, and WAYS OF STUDYING CHILDREN, Millie Almy. Both books were invaluable tools to the teachers as their ability to observe children was strengthened.

After background reading was started, two or three children in each room were selected so that teachers could focus their attentions on a few. Samples of work were collected and observations noted. The times for recording observations were many and not confined totally to special time blocks during the day. These observations occurred when the children were involved with materials, engaged in activities, interacting with peers and adults during recess, at lunch, during dramatic play and discussion groups. Under the direction and leadership of an advisor from Bank Street, the children were observed periodically. Meetings were held with Bank Street staff to discuss the findings and focus on the strengths of the children. Activities and suggestions were made relative to planning for these children.

Numerous suggestions for observing children and recording observations were explored by teachers and the staff developer:

11

7 10

- ° Keep notes on index cards in an index box or in the child's folder
- ° Map the room where children are working
- ° Keep dated records of the behavior of children
- ° Do sociograms
- ° Use an interest inventory
- ° Keep notebooks at each center with a record for each child
- ° Use a calendar page for each child and write notes about the child in daily block
- ° Keep all records in a spiral notebook
- ° Make graphs of: Things We Like To Do, How We Get To School, Favorite Colors, Favorite Foods, or other appropriate subjects
- ° Make About Me books
- ° Take photographs
- ° Do sketches of blockbuilding
- ° Tape recording of children in play situation or learning to read
- ° Have each child keep a record of daily activities

Develop the ability to use child study as a professional skill. According to Almy, "Effective teachers not only have to appraise each child's behavior, thinking and feelings, but also set up situations in which children will want to learn and are likely to learn effectively . . . child study can provide the teacher with many clues regarding such matters, but teaching involves knowledge and professional skills that are outside the realm of child study." (Almy, 1979)

As one tries to solve problems related to teaching, Almy suggests that the scientific method be applied to teaching.

Step 1. Identify the problem

Step 2. Develop hunches about its cause and how it can be solved.

Step 3. Test one or more hunches

a) Collect data

b) Try hypothesis

c) See what happens

d) Evaluate or generalize on basis of evidence

(Almy, 1979)

The scientific process can apply in child study. Consider this example; the problem is a child who uses the block corner over and over again not participating in other activities. Perhaps with a few suggestions the child might be motivated to try another area. After observing and collecting information, the teacher generalizes that the child likes to build highways for cars to travel. In planning, the teacher can include books about cars for the library center and a collage about cars for the art center.

Teachers may gain insight into their children by collecting samples of their work; using a tape recorder to record language, writing down children's language used during play, or by taking snapshots or making sketches of their children's work. Teacher effectiveness is increased because as teachers get to know children, they discover selections of methods and materials to be an easier task.

Parent conferences can be enjoyable for the parent when they begin on a positive note with the teacher sharing objective information about the child.

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12

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There are times that the information collected should be treated with confidentiality. It is true that some stories may be funny and would bring a good laugh, but children are also entitled to the right of privacy.

13

SI

## ROOM ARRANGEMENT

Room arrangement can have an impact on the curriculum developed in a classroom and on the behavior of children. The positioning of various centers around the room will depend on: permanent fixtures, noise level of each center-type activity and amount of space. Before moving furniture around, one should think through the plan and actually draw it. An additional aid would be to make small moveable pieces of furniture that can be manipulated as the room arrangement is planned.

ROOM ARRANGEMENT AS A TEACHING STRATEGY, a filmstrip by Diane Trister Dodge, is a useful resource. the filmstrip stresses the importance of displaying and storing materials as well as the arrangement of the room. The filmstrip is divided into two parts. The following points are made in part one, "The Effect of Room Arrangement and Display of Materials on Children's Behavior":

- ° Keep materials for various centers separate--painting belongs with art, not mixed with beads at the math center.
- ° A mixture of materials can be confusing and children may misuse them.
- ° Low shelves may be used to create clearly defined areas for art and quiet table toys and books.

- A well organized classroom assists a child to develop socially, fosters independence and promotes creativity.

"Children coming into a strange new environment need to feel they belong there. They have to learn to trust this new world before they feel secure enough to interact with other people and materials." (Dodge, 1978)

- Things you can do:  
 Provide a locker with name.  
 Provide a special place to display work.  
 Display materials simply and in same place daily.  
 Label shelves with pictures.  
 Develop a routine.  
 Have a space large enough to meet with the group.

- Ways to help curtail aggressive behavior are:  
 Provide two of each of the more popular toys.  
 Avoid unnecessary open space in room arrangement.  
 Use a timer to help children wait their turn.

"When children are having difficulty making choices, the room can be stripped of all materials and decorations not directly used by the children or created by them. . . . The purpose of simplifying the environment is to eliminate confusion and unnecessary visual distractions." (Dodge, 1978)

- Minimize the number of choices in an area.
- Keep teacher's supplies stored separately.
- Keep pictures at children's eye level.

- ° Enclosed center areas are better for children who get easily distracted.
- ° Clean-up is important; put things away the way they were stored.
- ° Teachers need to consider clean-up important and consider it a learning time.
- ° Label shelves with pictures.

The following points were made in part two, "How the Physical Environment Can Be Organized to Emphasize Certain Skills and Concepts.":

- ° At the beginning of school year, children learn to identify objects in room.
- ° Limit types and quantities of materials early in year.
- ° If possible, put out two of each item in the house-keeping area.
- ° Outline blocks on the shelf and provide separate containers for block play materials. Example: a dish pan for zoo animals and a dish pan for farm animals.
- ° Materials in the dramatic center are grouped by rooms in the house.

- ° In the kitchen, utensils can be grouped by color coding. Example: cooking (red), cleaning (yellow), eating (blue). Color coded outlines of each can be placed on the wall.
- ° Sequence can be shown through pictures of any daily routine activity. Example: cleaning paint brushes by lining up buckets--soapy water, rinse water, bucket to clean hands, paper towels and trash can.
- ° A display table should be provided and the displays changed frequently.

This filmstrip was used with our teachers to demonstrate the effect of room arrangement when working with children. The teachers requested to see it again at the beginning of the next school year to assist them with their planning.

## SCHEDULING

The way the day's activities are organized into a schedule is important for planning by the teacher. This schedule becomes routine for children and helps them feel secure in the learning environment. A six hour kindergarten offers the teacher more time to include a variety of activities that provide for the cognitive, social, affective and psychomotor development of children.

The following schedule utilizes time well during a six hour day. It also provides blocks of time devoted to the specialized goals of an early childhood program.

Suggested schedule for a six hour Kindergarten:

8:30	Arrival
8:35 to 10:15	Indoor learning centers--individual and small group activities
9:45 to 10:15	Staggered snack
10:15 to 10:20	Clean-up
10:20 to 10:35	Group activities, stories, music, finger plays, etc.
10:35 to 11:15	Outdoor learning centers--individual and small group activities

11:15 to 11:25	Clean-up
11:25 to 11:45	Group activities--music, stories, planning Preparation for lunch
11:45 to 12:15	Lunch
12:15 to 12:30	Preparations for rest: tooth brushing, toileting
12:30 to 1:30	Rest. Individual needs vary. Children who are not asleep after 20 minutes may engage in quiet self-directed activities. Children who need to may rest until 2:00 p.m.
1:30 to 2:00	Snack--available on a staggered basis indoors and/or outdoors. Children who sleep longer may have snack when they wake up.
1:30 to 2:10	Outdoor or indoor learning centers
2:10 to 2:20	Clean-up
2:20 to 2:30	Quiet time. Preparation for going home.

(Althouse, 1981)

Students enter and begin the day by working in centers around the room. The teacher then has time to perform daily

duties of attendance, money and other housekeeping responsibilities and also to work with students in centers. Built into the schedule are periods for clean-up to help students assume responsibility for their work. A long outdoor period is provided where children also engage in outdoor learning centers--such as balance beam, water table, sand, wood-working, painting, playground apparatus, tricycles and so forth under the guidance of the teacher. There are two times for group activities. Lunch is about 30 minutes and a clean-up period before sleeping is 15 minutes.

A block of 60 minutes is devoted to rest. As the year progresses and the children grow older, the amount of sleep needed will decrease. Teachers will find that they have to plan for twenty to thirty minutes of naptime. The remainder of time is incorporated into the instructional plan for the day.

Snacks are provided on a staggered schedule in both morning and afternoon as children work. Worktime occurs again in the afternoon through use of centers, either indoors or out.

By following the above schedule a teacher can maximize the amount of time children devote to their work and also include a wide variety of activities that develop all areas of the child.

## PLANNING

Many present day approaches to the development of an early childhood program emphasize planning based on broad goals and developmental objectives. Systematic and continuous planning can directly affect the goals of the program. Therefore, an important characteristic of the teacher is the ability to plan. Rosemary Althouse in her book, THE YOUNG CHILD, states: "Good teachers are planners. Teachers who plan, prepare for the future."

Hildebrand provides a daily plan that calls to teachers' attention the activities they plan in a logical fashion. The plan suggested by Hildebrand includes: art projects, science projects, dramatic play, literature-language area, group time, outdoor activity and snack time. Using this plan, teachers can organize the day's activities for themselves as well as the children. The same author also developed a planning device for a resource unit. When examining the topics, one notices that there are a variety of activities designed to develop the total child. The resource page includes the following: concepts to be learned, vocabulary, science activities, art activities, dramatic play themes, stories, songs, fingerplays, records, outdoor activities, fieldtrips and pictures. (Hildebrand, 1976)

Programs in early childhood are very time consuming for the teacher to plan because there are no textbooks to follow. The makeup of the class and the special needs of individual students will guide teachers in formulating their program.

Many books are available to assist teachers as they develop the activities. The use of plan sheets, as illustrated by Hildebrand, will help the teacher to view the total program in terms of short and long range objectives.

Planning can be viewed in four steps as follows:

- 1) goal setting
- 2) objectives and activities
- 3) direct application
- 4) evaluation by questioning and observing

Examples of goals for an early childhood program and planning sheets follow.

The general direction that a classroom will take depends on the framework. The following are broad, general goals for the year and may be helpful in setting up an early childhood program.

#### COGNITIVE DOMAIN. A Child:

1. Develops sensory and perceptual acuity
2. Develops new concepts and modifies and expands existing concepts
3. Develops communicative skills
4. Develops problem-solving ability
5. Develops creative thinking ability
6. Develops his or her potential for good health and establishes good health habits

SOCIAL DOMAIN. A Child:

1. Develops a positive self-concept
2. Progresses from egocentric ways to more sensitive feelings for others
3. Develops self-control
4. Learns responsibility

AFFECTIVE DOMAIN. A Child:

1. Enlarges aesthetic appreciation of the environment
2. Shows an interest in learning
3. Shows an openness to new ideas

PSYCHOMOTOR DOMAIN. A Child:

1. Develops body coordination and is able to use the body effectively
2. Develops eye-hand coordination
3. Develops eye-foot coordination

(Althouse, 1981)

Other goals may then be developed for specific curriculum areas. Objectives may then be written so that the child's performance of the activity indicates if the child is learning.

Schedule for a Six-Hour Kindergarten  
(8:30 a.m. to 2:30 p.m.)

8:30	Arrival
8:35 to 10:15	Indoor learning centers--individual and small group activities
9:45 to 10:15	Staggered snack
10:15 to 10:20	Clean-up
10:20 to 10:35	Group activities, stories, music, finger plays, etc.
10:35 to 11:15	Outdoor learning centers--individual and small group activities
11:15 to 11:25	Clean-up
11:25 to 11:45	Group activities--music, stories, planning Preparation for lunch
11:45 to 12:15	Lunch
12:15 to 12:30	Preparations for rest: tooth brushing, toileting

12:30 to 1:30 Rest. Individual needs vary. Children who are not asleep after 20 minutes may engage in quiet self-directed activities. Children who need to may rest until 2:00 p.m.

1:30 to 2:10 Outdoor or indoor learning centers

2:10 to 2:20 Clean-up

2:20 to 2:30 Quiet time. Preparation for going home.

(Althouse, 1981)

## Teacher Daily Plan Sheet

DATE \_\_\_\_\_

SPECIAL CLASSES: Library \_\_\_\_\_  
P.E. \_\_\_\_\_  
Music \_\_\_\_\_

8:00 - 8:10

## Roll Call

8:10 - 8:30

Helpers (Monday)

Calendar.

## Weather

Story or filmstrip \_\_\_\_\_

### Explain centers and activities

8:30 - 9:00

## Group Lessons

I

II

--	--

9:00 - 10:00

### Centers (Choice Time)

Art ·

## Writing

Lang. Master

## Books

## Home

## Puppets

Water

## Easel

## Flannel Board

## Letter of the Week

## Manipulatives

Math

## Listening

Lang. Arts

Science

## Blocks

## Sand

# Teacher Daily Plan Sheet

Page two

10:00 - 10:15	Clean up
10:15 - 10:20	Group time, evaluation (What centers did you go to? What did you do?)
10:20 - 10:55	Wash up and lunch
11:00	Morning children go home
11:05 - 11:30	Story or filmstrip _____
11:30 - 12:00	Music (songs, instruments, fingerplays) Small group work
12:00 - 12:15	Group time (story, discussion)
12:15 - 1:15	Bathroom and nap Work with individuals or small groups
1:20 - 1:45	Outdoors or indoor learning center time
1:50	Bus children leave Prepare for dismissal
2:00	Dismissal

PROGRAM PLANNING AND EVALUATING  
Daily Plan of Activities

Date\_\_\_\_\_

Activity

Who Is Responsible?

Things to remember:

Art projects:

Science projects:

Dramatic play:

Literature-language area:

Music area:

Group time:

Outdoor activity: \_\_\_\_\_

Transition:

Snack menu:

Diary:

(Hildebrand, 1976)

PROGRAM PLANNING AND EVALUATING  
Resource File Cover Page

Subject: \_\_\_\_\_

1. Statement of concepts to be learned:

2. Vocabulary to develop:

3. Science activities:

4. Art activities:

5. Dramatic play themes:

6. Stories, poems, finger plays:

7. Songs, rhythms, records:

8. Outdoor activities:

9. Field trips and special visitors:

10. Pictures:

(Hildebrand, 1976)

## SELECTING AND USING MATERIALS

The importance of selecting appropriate materials was continuously emphasized. Small group meetings were held with teachers to discuss materials and how they would fit within the classroom. Durability, quality, need and rationale were important factors in deciding which materials to purchase and use.

The teachers participated in workshops that discussed the reasons for having certain kinds of materials in the classroom and also experienced working with the materials before they were introduced into the classroom. Hands-on experiences were provided for teachers on how to use parquetry, beads, cuisenaire rods and unit blocks. Several methods of recordkeeping were presented and the teachers were encouraged to select one that would fit their classroom needs. A discussion of recordkeeping with parquetry and beads may be found beginning on page 29.

Displays of materials were also arranged. Equipment was made available so that teachers could use the equipment before deciding on what to purchase. One piece of equipment that was new to the teachers was the language master, so a preview was arranged. After purchasing the equipment, teachers participated in staff activities on how to use the language master in the classroom and how to make language master cards.

A sample of some of the materials purchased for the program to enhance children's cognitive, social, affective, physical, and creative development includes the following:

Building Sets

unit blocks  
Lego brick sets  
Tinker Toys  
giant Tinker Toys  
Ring-a-Majig  
Plumbers Friend  
block accessories

Other

water table  
butterfly kit  
dish pans  
easel  
all purpose photo library  
book and tape packets  
Simon

Music

maracas  
cymbals  
triangle  
tom-toms  
tone block and mallet

Movement

airplanes, trucks  
trikes, scooters  
Stepping Stones  
balls  
balance beam

Dramatic Play

play screen with a puppet  
front  
kitchen furniture  
high chair  
dolls  
driving bench  
puppets

Records

Learn Through Basic Skills I,  
II  
Simplified Folk  
Getting to Know Myself  
Folksong Carnival  
Home Made Band  
Creative Movement  
Rhythmic Record-Parachute Play

Manipulatives

pegs, pegboards, patterns  
quiet counters and other  
counters  
puzzles--assorted  
lacing cards--assorted  
parquetry and cards  
Bingo, (color, number,  
alphabet, rhyming)  
sequence cards  
felt letters, numerals  
wooden calendar  
Cuisenaire Rods and Idea Book  
stencils for tracing  
colored cubes

Equipment

hot plates  
Language Master and Cards  
listening centers-headphones  
projector  
record player  
tape recorder-tapes

## RECORD KEEPING WITH PARQUETRY AND BEADS

Bead activities develop many basic skills in boys and girls. By using the beads with bead cards in a sequential manner, the following skills are developed:

- color, shape, and size discrimination
- perception of space
- directionality (left to right)
- eye-hand coordination
- finger dexterity
- spatial relationships
- one to one correspondence
- matching
- classification
- auditory and visual memory
- sequencing
- organization
- problem solving

Working with parquetry pieces can develop the following skills:

- color and shape discrimination
- sorting and matching
- parts to whole relationship
- eye-hand coordination
- spatial relationships

By keeping track of the cards a child works on, you can more readily see growth patterns of individual children and the class as a whole. The record can also be used in parent and student conferences to indicate what the child is working on.

The record may be kept up to date by the child under close supervision by the teacher. Careful attention must be given to orient the children to their responsibilities and also to check the work. Another form of record may be kept by the teacher or another adult working in the room.

All of the following systems of management depend upon a color and number code and also storage of materials and record keeping devices.

### Example #1

The format of this system includes up to twenty circles a sheet for beads and up to twenty-two for parquetry. A small number beside the circles indicate the level of difficulty. There are fourteen stages for beads. There would be four sheets to keep. Each one is labeled beads or parquetry with a picture in the upper right hand corner. A color word in that corner indicates divisions of difficulty. Blue being the easiest with twenty circles, progressing to red with eighteen circles, then green with sixteen circles and yellow, the most difficult with fourteen circles.

As a child accurately works a card, s/he then colors in a circle. For bead cards a child may not need to do all cards for each of the eleven levels. You may set the number at three or require that s/he do them all.

To adapt for parquetry the following number of circles is used per page. Blue would have nineteen circles, red would have twenty-two, green would have thirteen and yellow would have eleven. The same procedures as used for beads would apply.

### Example #2

Numbers are arranged around the edge in the same number sequence as presented for example one. A small line under the numbers and fourteen small numbers below the line indicate the level of difficulty. As a child completes a card, the number is hole punched.

### Example #3

This is an adaptation of #2. A master is divided into four identical rectangles. Around the edges are twenty numbers. A place for name, date started and completed, the word beads or parquetry with a picture and a circle on each rectangle. The circle is colored to indicate level of difficulty. Each child has a rectangle. As s/he progresses from one color level to the next, s/he receives a new rectangle. The number is hole punched as the child completes the task correctly.

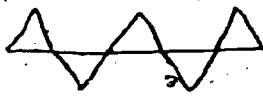
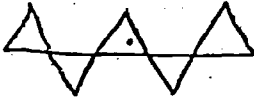
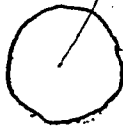
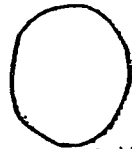
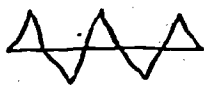
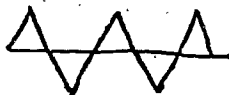


### Example #4

This is a class record sheet. Use a manilla folder. Each side would have glued to it a sheet with the names of the children going down the left hand side and numbers going across the top. There would be boxes under each number and beside each child's name. A blank in the upper right hand corner for the word beads or parquetry and color level. As a child completes a skill card, an X is placed in the box under that number.

Along with this form of record keeping, the skill cards will need to be divided into color groups--blue, red, green, and yellow. Each color would have cards with tabs to separate the skill cards. For example, for beads the blue section would have twenty dividers with tabs with numbers one to twenty on them.

The class record sheet is kept by the teacher or aide. The other record keeping devices may be colored or hole punched by the student. The teacher could keep them as well, but they are intended for the student to use to foster self discipline.

A policy should be established with students so that they show the teacher or aide completed work so that they may learn if they are right. They go on to the next card when they have correctly completed the one they are working on. In checking the child's work, vocabulary concepts can be strengthened. For example: What color is beside the blue bead? Show me a square.

1	2	3	4	5	6	1	2	3	4	5	6		
22	Name <u>✓</u>					7	22	Name _____					7
21	Date started _____					8	21	Date started _____					8
	Date completed _____					9	20	Date completed _____					9
20						10	19						10
19	parquetry 					10	19	parquetry 					10
<del>18</del> 17	16	15	14	13	<del>12</del> 11	<del>18</del> 17	16	15	14	13	<del>12</del> 11		
1	2	3	4	5	6	1	2	3	4	5	6		
22	Name _____					7	22	Name _____					7
21	Date started _____					8	21	Date started _____					8
	Date completed _____					9	20	Date completed _____					9
20						10	19						10
19						10	19						10
<del>18</del> 17	16	15	14	13	<del>12</del> 11	<del>18</del> 17	16	15	14	13	<del>12</del> 11		



## TEACHER-MADE MATERIALS

As the teachers worked with the children, they realized the necessity of having additional materials to help teach reading, math, and other subjects. They realized that while commercial materials were available, they could design materials and actually custom tailor them to their particular classes. In making the materials the teachers considered the particular interests of the children, appropriate vocabulary, and skills the children need to learn as well as the skills they already know. There are many resource materials available to teachers who prefer to develop their program with activities that are teacher prepared.

Time can become so valuable that many teachers often feel they just don't have time to prepare materials. Parents are often very willing and eager to help. The teacher selects the activities and sends the materials home for the parent to make. Sometimes a teacher may invite several parents to school to work on activities.

A system can be developed to record the materials which have been made. Index cards can be used to write the name and description of the activity. One teacher who developed numerous activities also developed a listing of materials and placed them in numerical order. The materials were classified by content: math, language, reading, listening and science. Under each category the teacher-made materials are listed with an identification number. The identification number was then placed on the index card where more detailed information about the particular activity was recorded.

Several books are listed in the Bibliography which can be useful to teachers as they make materials. A few titles:

OPEN LEARNING - Barbara Day

WORKJOBS II--and other Workjobs book - Mary Barata Lorton

AN ACTIVITIES HANDBOOK FOR YOUNG CHILDREN - D. Craft and R. Hess

GROUP GAMES IN EARLY CHILDHOOD - R. DeVries & C. Kamii

Examine the activity described below for possible skill development in observing, listening, and predicting.

#### IT'S IN THE BAG!

Make a drawstring bag and fill it with objects. Be very dramatic as you explain, "Everyone will take turns reaching into the bag and pulling out an object." Then ask questions to get started.

"What can you do with it?"

"Where was it yesterday?"

"Could you play with it?"

"Can you feed it to the cat?"

As children catch on--some will tell you what the object is used for; some will make up tales about the object and others may be very practical.

#### Bag Items:

watch

walnut

coupon

yo-yo

ring

clothespin

leaf

measuring cup

fork

leather

letter

Change the items every now and then, for example:

- a. Mystery bag--Child closes eyes and reaches into the bag. By feeling and senses other than sight, the child tries to guess what the object is.
- b. Child chooses an object and tells the others about it. They have eyes closed and try to guess the object as the child describes it.

Other kinds of activities may be made so that the children can practice skills such as classifying, matching, alphabet skills, recognition, alphabet and sound matching, counting and one to one matching. The children can work the activity under the supervision of an aide or volunteer, or independently.

Teachers are given numerous opportunities to become involved in making their own games and activities. All necessary materials were provided at the workshops.

A lot of materials that are usually thrown away around the house can be put to good use at school. These materials can be scavenged and used to supplement science and math as well as in the preparation of teacher-made materials. On the next page, in a letter to parents, is a scavenger list that can be used to involve parents in collecting items for the classroom teacher.

Please note that the principal or supervisor should be aware that you plan to distribute such a letter. Also, the tear-off portion should be discussed with the principal since the idea of asking parents to donate some purchased items may be objectionable.

Dear Parent,

We are busy making plans for the year. Many things that are usually thrown away at home could be used by our class this year. Please send to school with your child any of the items mentioned which you may have.

bottle caps

camera containers

baby food jars and lids

plastic margarine tubs and lids

clothespins

shoeboxes

small boxes for games

newspapers

small carpet squares

empty spools

buttons

popsicle sticks

bubblegum machine size toys

magnets

magazines

empty toilet tissue rolls

paper towel rolls

Perhaps, there are other items that you are aware of that may be of interest to our class. Just send a note or call and we can talk about them.

-----

In addition to the above named items, if you would be interested in donating any of the following items, place a check by it and send this portion back to school with your child.

\_\_\_ lunch bags

\_\_\_ waxed paper

\_\_\_ dried beans

\_\_\_ straws

\_\_\_ sponges

\_\_\_ aluminum foil

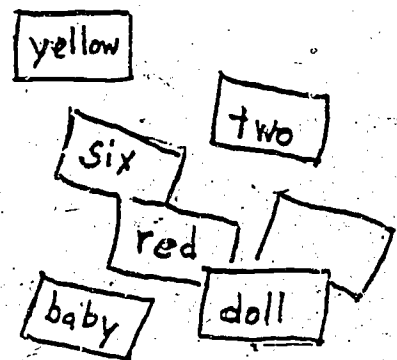
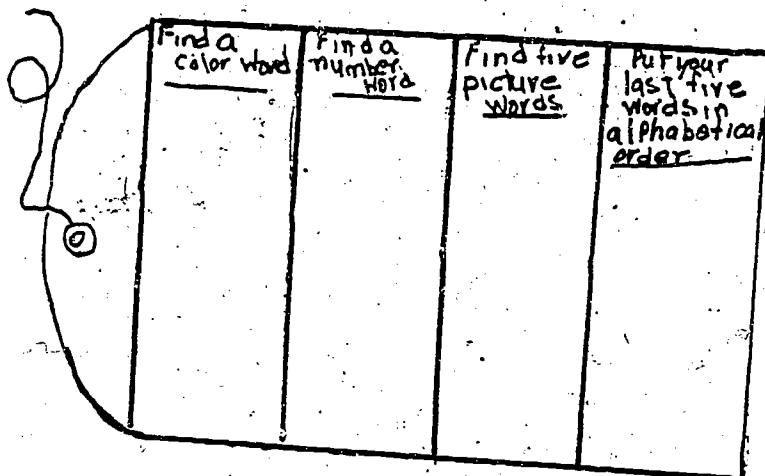
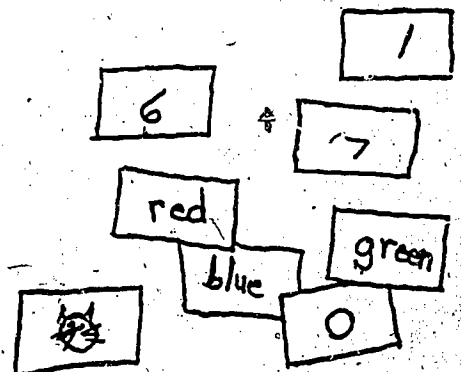
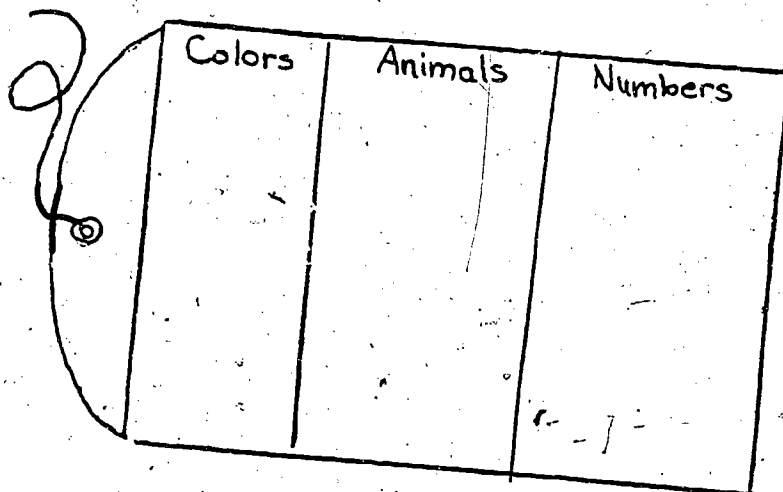
\_\_\_ paper plates

Parent's Name \_\_\_\_\_

The directions for another teacher-made game appears below. The game can be used by the child and teacher together, the child independently, or by the teacher for assessment. The game may be adapted depending on the age and skills of children.

Materials needed: envelope, cards, pen.

On the front of the envelope, rule off three or four columns. Label each with a picture or word category. Students pull picture or word cards from the envelope and sort them into the correct categories. Combine all types of words for older children to make an interesting activity.



## PARENT INVOLVEMENT

Recognizing the importance of the role of the parents in the child's education led to several workshops to enhance parent effectiveness. Topics for workshops were: Language Experience, Junk Art, Cooking, How to Help Your Child Learn to Read, Summer Activities, Bookmaking, Special Needs and Problems, and Helping Your Child Develop Responsibility. On some occasions, teachers led the workshops and at other times it was more important for teachers and parents to socialize and get to know one another.

Another form of parent involvement was through the volunteer program. This required staff training on how to use volunteers. Volunteers participated in orientation and training. The National School Volunteer Program (NSVP) was a source for information and training activities. Also, please see the Bibliography for additional resources on this subject.

## TEACHING STRATEGIES

Learning Centers  
Group Meetings  
Flannel Boards  
Blockbuilding

## LEARNING CENTERS

The role of the teacher in developing learning centers and using them with children provided a theme for staff activities. The idea of work areas or learning centers in the classroom was not new. In the past, the addition of some center areas to the kindergarten had created a new look. Centers for science, language arts, writing, math, and indoor movement were added to the already existing library. Dramatic play, woodworking, water and sand, block art, and music centers were also added.

Reading materials on learning centers were developed for the teachers by the staff developer. Hand-outs were often given to teachers and the material was discussed. Occasionally, the staff developer demonstrated the use of new centers with the children so that the teachers could observe the process.

The Choice Board was recommended as a means to manage all of the center activities. A Choice Board is a management tool which can be used for planning and record keeping. Pictures of centers are represented on a pegboard with hooks below each picture. Each picture is numbered. As a child makes a selection her/his name tag is placed by the picture of the center. The use of the Choice Board with the children was introduced by the staff developer and initiated in large group meetings so the students could learn the process.

## WHAT ARE LEARNING CENTERS?

A learning center is an area within a classroom that contains a collection of activities that have been planned and organized to teach new skills or concepts, review or enrich skills and concepts. Activities at a center should be varied to provide options for various individual learning styles. Two or more centers may be combined at times to provide multi-media approaches for a specific skill to be taught. An example would be the pairing of a listening center with vowel records and activities with the reading center to teach the skill vowels or a filmstrip projector added either to the listening or reading center to show a filmstrip about the skill vowels. A specific learning center can also offer variations in degree of complexity of the skill at the center. A learning center such as a reading center may offer activities related to many reading skills.

The terms station, interest center, learning center and enrichment center are often used interchangeably. Those terms may have slightly different meanings, but share common features. These features include:

- a non-traditional classroom organization pattern
- varied multi-media activities
- opportunities for children who learn in different ways and at different rates
- time for children to interact with each other
- children assume responsibility for learning with teacher guidance
- practice in following directions, practice in basic skills
- development of creative thinking skills.

The word "station" has been used here to designate individual activities within a center. At the reading center on vowels, there are six different stations (activities) a student may do. Not all stations are required of all students. Learning centers offer a mode of instruction that is skill oriented or content oriented, organized and planned allowing a student to assume responsibility for learning.

An interest center is designed to highlight material that is not necessarily part of the regular classroom curriculum. It focuses on the student's interests. Interest centers provide a teacher with a means of personalizing instruction.

Enrichment centers provide alternatives to students engaged in a unit study. They are used only after introduction of a unit of study. They help extend, enrich and develop further a student's knowledge about the topic of instruction.

#### WHY USE LEARNING CENTERS?

Learning centers are only one of several approaches to individualize instruction and learning for the student. They offer an alternative to seat work. Teachers can provide students with information about learning in a variety of ways. Students can actively engage in their learning by participating in various activities. In order to support moving into a center approach as a means of individualizing instruction, let's look at some beliefs about children and implications for using centers.

## BELIEFS ABOUT STUDENTS

Students are curious and will explore without adult directions.

Motivation and interest are increased when students share in planning goals, content, and processes.

Active participation and exploration in a classroom environment filled with alternatives facilitates a student's growth.

Students are capable of making significant decisions about what and how they learn.

Student learning is enhanced by opportunities to apply information to new situations.

Students develop at their own rates and in their own styles.

Cognitive development proceeds from concrete experiences to abstractions based upon those experiences.

Excessive direction by adults leads to student conformity, apathy, and genuine disinterest.

Students who lack success in school have negative views about most experiences schools have to offer.

Students learn to accept responsibility by making decisions and by accepting responsibility for those decisions.

Students are capable of monitoring and evaluating their own progress.

## IMPLICATIONS FOR CENTERS

Develop centers for exploration of interests, subject matter, topics, and skills.

Have students participate in planning, implementing, and evaluating centers, and have specific centers for interest development and sharing.

Alternative centers are desirable: skill development centers, interest and fun centers, exploration centers, interdisciplinary centers, reading centers, listening centers, construction centers.

Center purposes and designs should contain a variety of learning alternatives and media to capitalize upon student abilities and desires for choice.

Learning alternatives in centers should help students gain and apply new knowledge and skills.

Centers should offer a wide variety of learning alternatives (including media and materials); students will choose those alternatives most consistent with their own learning styles.

Centers can be places where manipulatives and other learning materials for concrete experiences are easily accessible.

Centers should maximize opportunities for student self-management and self-direction based upon student abilities to be self-directive.

Centers should have a range of learning alternatives to accommodate varying abilities.

Students should help in designing centers and have choices within and among centers.

Teachers and students develop techniques for students to manage their own learning progress. Teachers help students understand the importance of choices and their consequences for learning.

The beliefs about students and implications for centers are copied from Blackburn & Powell, One at a Time, All at Once (Pacific Palisades, California: Goodyear Publishing Co., 1977), p. 54

## MANAGEMENT OF CENTERS

Centers can be managed by using one of many styles of planning systems. These planning systems include the following:

- rational scheduling

- assignment

- choice

- contracting

- self-programming

After gaining experience with centers, teachers may develop management plans that incorporate more than one planning system.

In rotational scheduling students are rotated through learning activities. They do not decide the time they are at centers, but what they will do there. This system works well with a basal reading program.

In assignment planning students are sent to centers based on diagnosed needs. They may decide when to go and what to do there.

Students select the activities, and it is the teacher's responsibility to observe and plan new activities for the student to select. This is a choice system.

Contracts are written agreements between the teacher and student. In a contract situation the student assumes responsibility for doing assignments. In self-programming, students set their own course for learning based on availability of activities and resources in the room. This type is particularly useful to use with students who work well independently and use initiative in working.

Once a system has been decided upon, it should be introduced to the students and used consistently. On the following pages is a description of one system that can be used to manage centers. More complete management systems can be read about in ONE AT A TIME, ALL AT ONCE by Blackburn & Powell.

## A PLAN FOR WORKING WITH THREE GROUPS

Time: Approximately one hour  
and forty-five minutes

The first 15 minutes the teacher works with total group in a language-related activity and gives directions to all groups for their independent activities. These directions are ideally written on the chalk board or on a chart, and placed in the center.

Group A	Group B	Group C
(30 minutes)	(30 minutes)	(30 minutes)
Teacher works with this group now.	This group works in learning centers at this time.	This group works independently on enrichment activities at this time.
(30 minutes)	(30 minutes)	(30 minutes)
This group works independently on enrichment activities at this time.	Teacher works with this group now.	This group works in learning centers at this time.
(30 minutes)	(30 minutes)	(30 minutes)
This group works in learning centers at this time.	This group works independently on enrichment activities at this time.	Teacher works with this group now.

Reproduced from Imogene Forte and Joy MacKenzie, Kid's Stuff Reading and Language Experiences Primary Level, (Nashville: Incentive Publications, Inc. 1969), p. 293

## A PLAN FOR DEVELOPING A LEARNING CENTER

- I. Objectives--What do you want to teach?
  - A. Central purpose for the center
  - B. Specific purposes for each level, activity or content area
- II. Tools & Materials--With what will you teach it?
- III. Operational Procedures--How will you go about teaching it?
  - A. Introduction of center
  - B. Directions for use
  - C. Well-defined procedures for activity
- IV. Provision for Evaluation--How will you know what you have taught? (May be built in as part of operational procedures.)

Imogene Forte and Joy MacKenzie, Nooks, Crannies and Corners Learning Centers for Creative Classrooms, (Nashville, Tennessee: Incentive Publications, Inc., 1972) p. 135.

## TWO CENTERS

Together we talked about setting up additional centers in the room. These additional centers should be based on objectives and activities changed as needed. We brainstormed ideas for a writing center using materials already available.

### Writing Center (materials readily available)

laminated tracing cards	clay and pan
laminated alphabet	sand tray
laminated names	tracking cards
laminated numerals	magic markers
wipe off cards	paper
finishing shapes	crayons
blocks with pattern cards	pictionary
chalkboard, chalk	magazines
tracing shapes	flannel letters w/ phonetic pictures
stencils	rubber stamp set (lower and upper if possible)

We talked about keeping the necessary materials at each center. For example, paper, pencils, crayons could be a part of the art center, but should also be a part of the writing center. A central storage of materials should be available, but necessary materials at every center will increase attention span, reduce unnecessary movement, maintain child's interest longer and assist child in completing task.

We addressed the question of what can I do to make the library more interesting? The following were suggestions for that center.

### Library

characters to go with books	change books frequently
stuffed animals	few books
resting mat	throw pillow
bean bag	puppets
flannel stories	individual books
class books	sponge storybook characters (at writing or art center)

### SUGGESTIONS FOR SCHEDULING CENTERS

1. Schedule centers each day during reading instruction. During this time block, one group will be assigned to seatwork, and the third group will be working independently at centers. Rotate the groups.
2. Choose a large block of time such as a Wednesday or Friday afternoon. All students work at centers. This allows the teacher to "float" so that s/he may supervise and evaluate.
3. Use a smaller block of time such as 30-60 minutes. Have all students at centers each day of the week during this time. Increase the center time if and when you feel more comfortable with it.
4. Let about one fifth of your students work at centers on Monday for about an hour while you're working with a small group and others are doing independent seat work. On Tuesday a different group works in centers and so on.

5. Choose one content area. Make plans to use centers for just the time that will be spent each week in that one subject area.

Interest Seminar Manual, (The Education Center, 1411 Mill St., Greensboro, N.C., 1979), p. 5.

## EVALUATION OF CENTERS BY THE TEACHER

This should be done frequently to make certain that the needs of the children are being met. It should be a continuous, daily procedure of observation of students and interaction with students.

Ask yourself the following questions:

Are there centers for growth in skills; is it time to change some of the skills?

Are various curriculum areas represented?

Are the interests of the students included; are they maintaining the interests of the children?

Have they been used by everyone; do they need to be updated?

Do they provide for individual differences?

Should I add additional centers?

Are the students experiencing difficulties? If so how and what can I do to help?

Did I provide directions--are they clear?

Are there places to put completed or incompletd work?

Are there procedures for the students to check and evaluate or record their own activities?

Are they balanced so that successes in many areas can be experienced?

## EVALUATION DEVICE FOR THE STUDENT

Evaluation becomes a process in which both student and teacher engage. Below are some evaluation devices that can be modified and used effectively with learning centers.

- anecdotal records
- drawings
- manipulative bulletin boards
- open ended questions
- games or quizzes
- logs, diaries
- graphs
- tests--students and teacher made
- charts and posters
- dramatizations
- art projects
- tape recordings
- suggestion boxes
- scrapbooks
- dioramas
- building and constructing
- creative writing
- experiments
- records of observation
- interviews, discussions, debates

## GETTING STARTED

Move slowly in the beginning. Initially, one center or two centers will be enough to acquaint students to a center-style approach. As you proceed, you will move through various transitional phases. The children will probably adapt very easily to centers, but the teacher must also be comfortable with the process to implement centers. It involves the natural process of problem solving and, depending upon individual teaching styles, all or only some phases will happen.

A good center with which to begin is listening. Start the center as a means to replace seatwork for a group of students. Give clear and concise directions about center use. Stories for pleasure as well as skills tapes can be used.

After a short time period of possibly two weeks, add another center and allow a specified time for use of centers (30-60 minutes). The teacher's role during that time is to observe and keep notes.

While the students are learning to use the centers, the teacher role is to emphasize the procedures the children are to follow. Explain directions carefully, provide necessary materials, places to put completed work and what rules are necessary. Students are actually taught the skills needed to work independently at the centers. Guidance is a part of the classroom, whether it is applied indirectly or directly. Planning and observation become key ingredients that insure the success of your centers.

As soon as the students and teacher have experienced a couple of centers and established procedures, other centers may be implemented by:

1. Adding more time to center time and creating additional centers. Then teaching will take place directly in the centers.
2. Use a center approach in a curriculum area--for example, language arts center--and then add other areas such as science, math, etc. As you add centers, the amount of time increases.
3. Team with other teachers to set up centers for one or several areas of curriculum--sharing the responsibilities.

#### USING A CHOICE BOARD

Decide which centers will be required to participate in weekly and those that a child may choose daily. Make certain that both types are understood. One method is to employ the use of a Choice Board (a piece of pegboard). All available centers are named and pictured on the pegboards. Pegboard hooks determine the number of children who can be at a center at a given time. On the same board is a space for hooks so that each child may hang a name tag on the pegboard. When children go to work in a center they place their names under their center choice. When the work at one

center has been completed, the student may make another selection on the Choice Board. Openings at centers will be indicated by empty hooks. After selecting, the child adds her/his name tag to the new center and goes there to work. At the end of the designated time for centers, name tags should be placed on the side of the Choice Board allotted for name tags.

On a bulletin board located near the Choice Board, the teacher lists required centers. Students are responsible for choosing them sometime during the week. A record-keeping device should be posted so students can check off when they have been to the required centers.

Instead of using a bulletin board, some teachers prefer to use an additional pegboard entitled, "Required Centers for the Week." Under the pictures of the centers, the teacher places the names of students who should use the centers each week or daily. Language arts and math are centers that should be required. Individual assignments can be made. Some students may have two math times and four language arts.

**Materials needed:**

- 2 pegboards--24 in. x 48 in. each
- pegboard hooks
- key tags
- pictures and labels for centers (use old equipment and supply catalogs)

## CHOICE BOARDS

### Help a Child To Learn To:

- make decisions
- assume responsibility for own learning
- work independently
- work with other children
- complete a task
- share materials and take turns
- put away materials

### Help Teacher To:

- observe children, especially in their choice
- organize learning centers
- prevent overcrowding
- evaluate use of centers and change as needed

Learning Centers Children Alive (The South Carolina State  
Department of Education, Columbia, South Carolina).  
1973, pp. 16, 17.

## GROUP MEETINGS

Some activities naturally lend themselves to meetings of the whole class or groups of twelve or more children. These meetings can be used to introduce or discuss new content into the classroom. A meeting can provide opportunities to discuss how things are going within the classroom and to gain input from the children. Directions and plans for the day's work should be included in group meetings. Discussions of current events, newspaper articles or pictures can also be held during a group meeting. Musical activities, puppetry, dramatizations, sharing, and fingerplays are good for meeting time. Reading to children on a daily basis can be a group time activity.

A full-day program schedule can accommodate two or more large meetings each day. Group meetings, like any other activity, should be planned. The group time activities should tie in with the topics currently being studied by the children.

The staff developer assisted the teachers with large group meetings by:

- demonstrating how to introduce new content in various centers to a large group and
- sharing her observations of teacher-led class meetings, and encouraging teachers to use group meetings to solve class problems.

## FLANNELBOARDS

Children's interest in literature is heightened and language skills can be developed through the use of a flannelboard. The colorful figures are attractive to children and serve to focus their attention. Skills such as receptive listening, auditory memory, attention to details, sequencing, characterization and extending vocabulary can be taught using the flannelboard.

The flannelboard captures the children's attention and is an ideal instructional tool because it can be used over and over again. Children will enjoy helping you put the characters on the board or playing with them in the library center after the story--recreating the story or making up a new one.

Some stories adapt to the flannelboard better than others. The stories should be simple and have few characters and details. Fast paced stories could be better dramatized.

Flannelboards may be purchased commercially or made. Objects for the flannelboard may be made of colored felt, pelton colored with markers or paper backed with strips of felt.

A technique for making flannel stories which utilizes the illustrator's drawings of the selected book was developed. The text was typed and each picture of scenery or characters to be used is carefully traced. A handout to be shared with teachers at workshops is made of the text and illustrations. This technique makes developing flannel stories much easier and faster. Teachers will then be able to use more stories with their classes.

(In addition to the flannelboard, children enjoy fingerplay. Fingerplay can be used to teach concepts, sequence, listening skills, motor development, relaxation, increase attention span and add to the vocabulary of the child. Some fingerplays can also be used with the flannelboard.

Fingerplays should be coordinated with teaching and selected to help teach concepts--size, shape, number and direction. Starting a file box of fingerplays is suggested so that a variety can be used during group time. The fingerplays written on index cards can serve as reminders of the rhyme. However, it is best to memorize them.

When introducing fingerplays to the class, remember the following points:

- Demonstrate actions when saying or singing words to the group.
- Do repeat the fingerplay encouraging children to do the action.
- Do again putting action with words.
- Keep slow enough for children to learn.
- Do variations.
- Be enthusiastic.
- Repeat old favorites.
- Send words of fingerplay home for parent to enjoy with children.
- Make large copies of fingerplays to place on wall for other adults in the room. (Flemming and Hamilton, 1977, p. 45)

Teachers participated in flannelboard and fingerplay workshops several times. The workshops were very popular with teachers and were requested over and over again. New

stories were prepared for each workshop along with old favorites. Teachers were provided with the necessary materials to make the stories. Since they are time consuming to make, sharing of flannelboard stories facilitates the teacher's planning and increases utilization of the stories. A flannelboard story follows.

EVERYBODY EATS  
by Mary McBurney Green

Red rooster, red rooster, with your red cockscomb,  
tell me what you like to eat when you scratch the ground for food.

Corn and grain, and little bugs, too.  
That's dinner for a rooster.  
Cock-a-doodle-doo!

Little pig, little pig, will you tell me what you're eating  
when you oink, oink, oink?

Little pig is eating table scraps, corn and sour milk.  
That's dinner for a pig. Oink, oink, oink.

Big horse, big horse, standing by the barn,  
tell me what you eat when it's dinner time for you?

Grass from the pasture, hay and oats from the barn.  
That is what the horse eats when dinner time is here.

Bugs and berries, worms and seeds.  
That's dinner for a little bird. Peck. Peck. Peck.

Little kitty, are you hungry when you mew, mew, mew?  
What kind of dinner is a dinner for you?

Warm, sweet milk to lap from a bowl.  
That's dinner for a kitty. Mew. Mew. Mew.

Big cow is chewing all day long.  
What are you chewing, big cow, big cow?

Grass from the pasture, hay from the barn, and chopped-up corn  
stalks, too.  
That's dinner for a cow to chew. Moo. Moo. Moo.

Hop-toad, hop-toad, with your bumpy brown back,  
what food do you find when you hop, hop-toad?

Beetles and mosquitoes and little flying bugs.  
That's dinner for a hop-toad. Hop. Hop. Hop.

Little lamb, little lamb, with your curly wool coat,  
tell me what you're eating for your dinner, little lamb.

Oats and corn together, with molasses mixed in, and hay from the barn.

All of this is dinner for a hungry little lamb.

Big dog, big dog, with your wagging tail, will you tell me what you like to eat when dinner time is here?

Good red meat and a big bone to chew.  
That's dinner for a big dog. Bow-wow-wow.

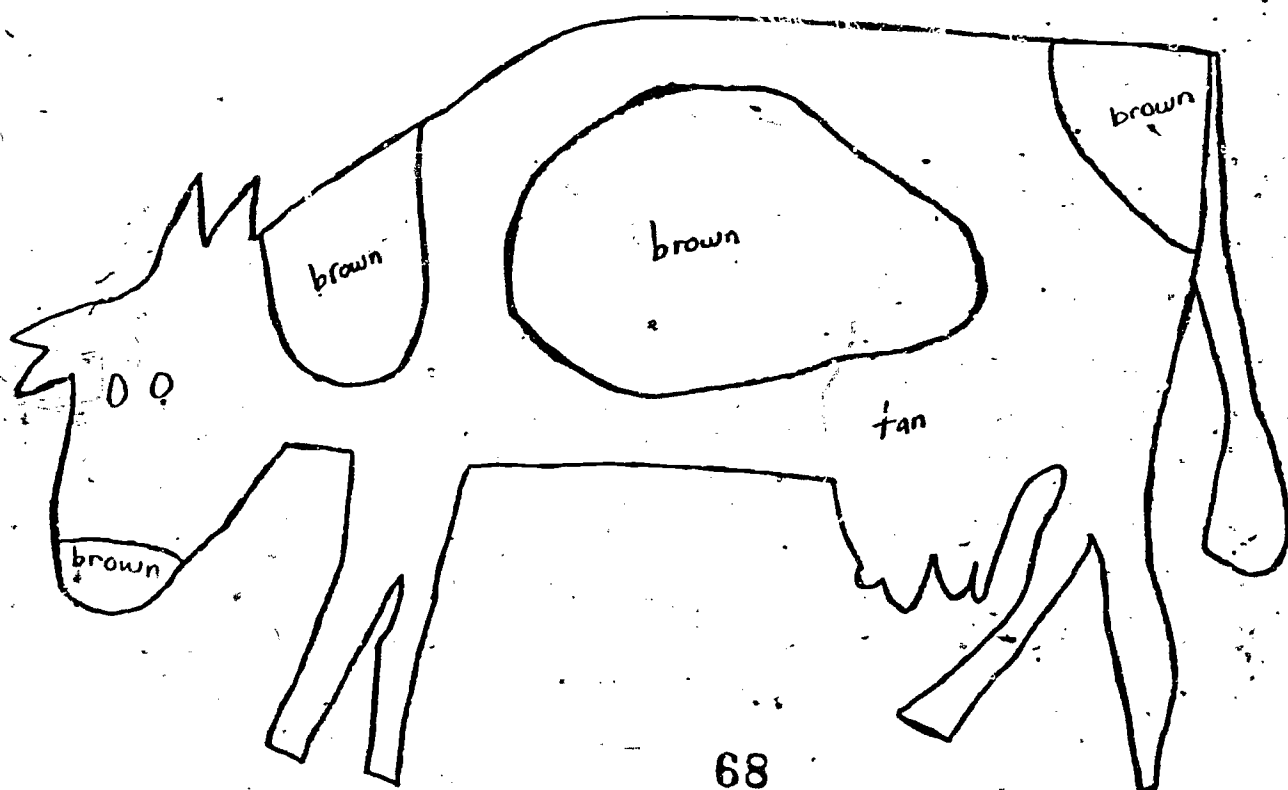
And you?  
When dinner time is here and you are hungry too,  
will you tell me what you like to eat the very best of all?

Is it hay like the horse or bugs like the bird?  
Is it bones like the dog or sour milk like a pig?

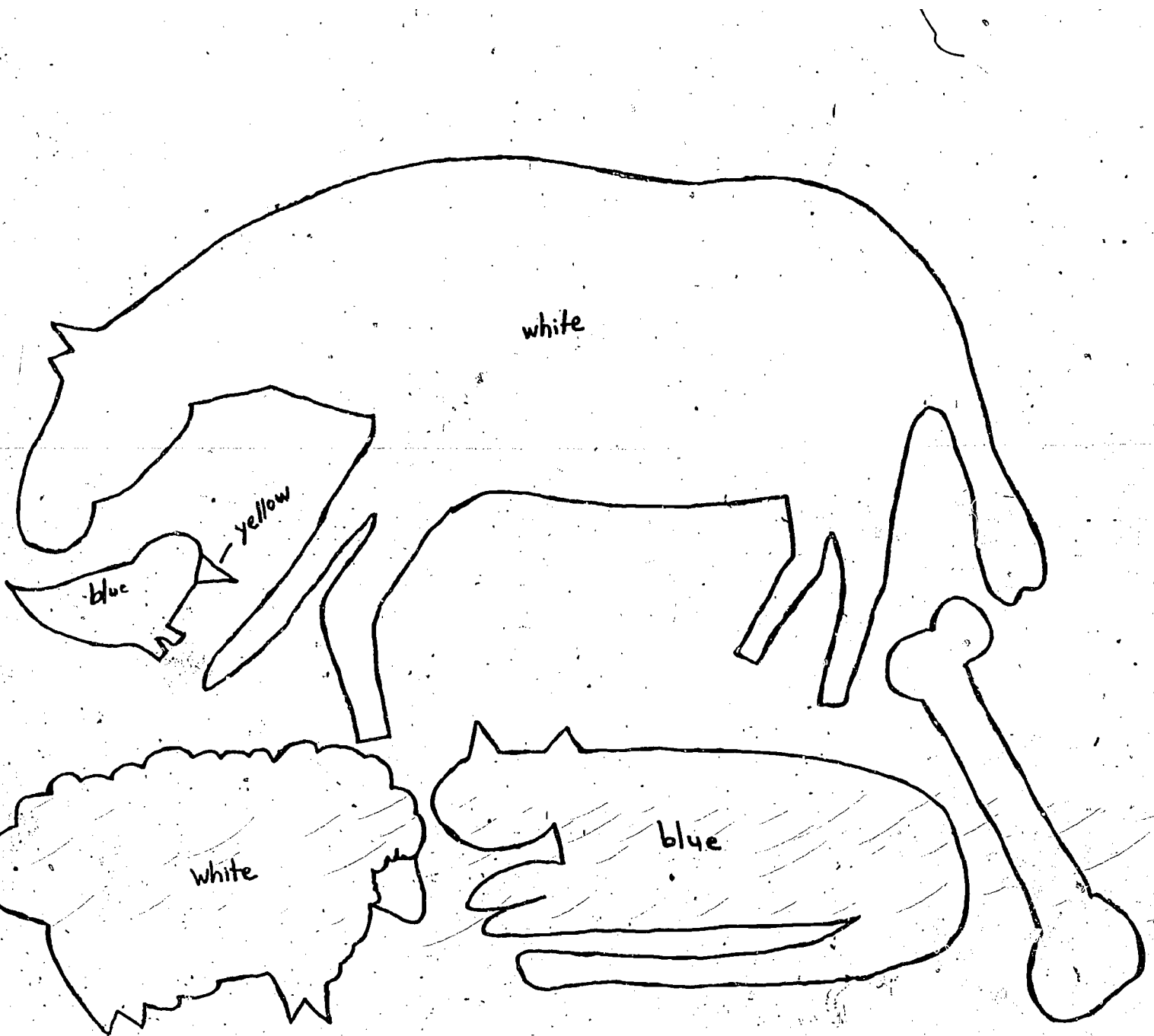
Or is it potatoes and meat, carrots and peas,  
applesauce and cookies, and a big glass of milk?

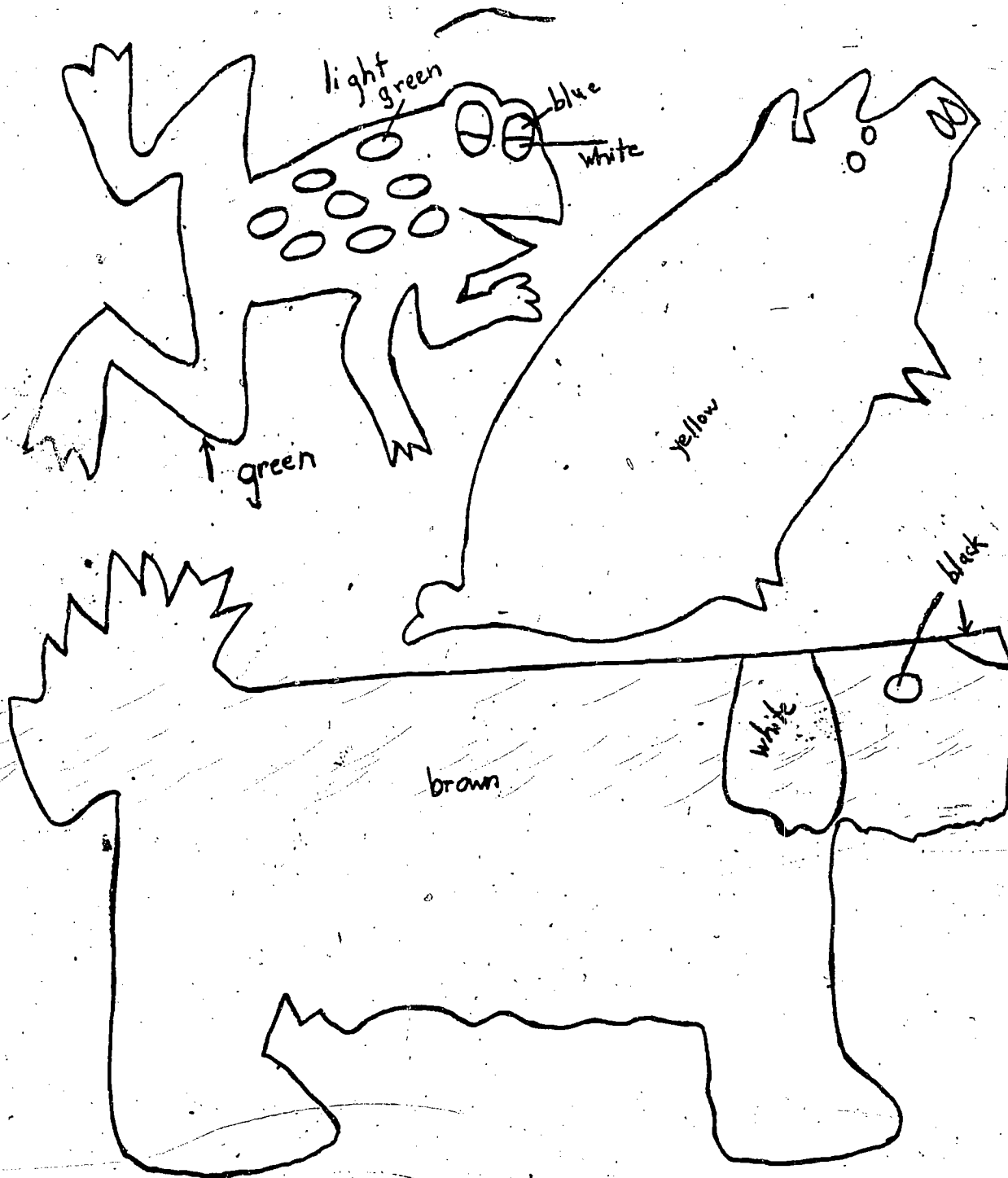
That's the very best dinner or you.

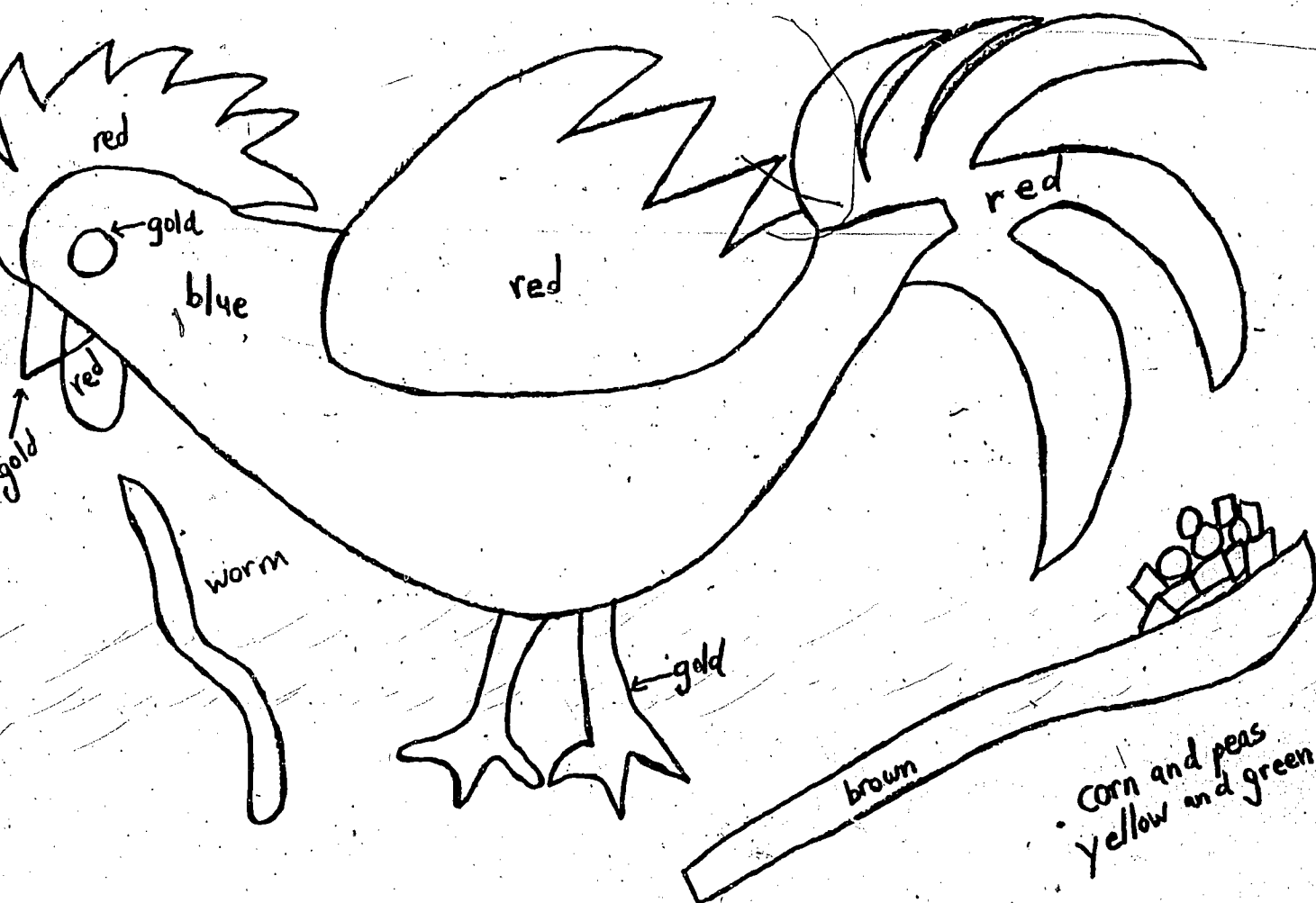
EVERYBODY EATS



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## BLOCKBUILDING

Techniques of blockbuilding are simulated for teachers through participation in a hands-on workshop. Staff from Bank Street College in New York City conducted the inservice sessions. A slide presentation about the beginning of Oak Ridge became the stimulus for building. After viewing the slides, teachers recreated parts of Oak Ridge--the first bridge that no longer exists, the only tall building in town (eight stories) and some of the original homes. Art materials such as paste, construction paper, crayons and cardboard were available to add to the constructions. Another group of teachers participated in a similar workshop and afterwards built a school of their dreams and a mansion of their dreams. The concept of working together was evident as they planned what would be in the buildings.

Much learning can take place in the block area: social studies--the world around the child; math concepts--numbers, length, measurement, balance, symmetry, categorizing; language--bit, little, up, down, etc.; learning to work together.

Children can be encouraged to write labels or stories about their constructions. Books and pictures can inspire children to build in the block area. Other objects can be combined with the block area to add fine details to the constructions. These objects include: small toys, signs, cars, trucks, people or things made with paper and crayons.

Some books about blockbuilding which are helpful are:

THE BLOCK BOOK by Hirsch

OPEN LEARNING IN EARLY CHILDHOOD, Chapter 2 by Barbara Day

Teachers should involve themselves in the block area either directly or by observing. If children's interests are noticed, capitalize on it--for example, if a child is interested in cars. Help foster creativity through books, art and science concepts, a study about wheels, for example. At the end of worktime in the block area, the teacher should initiate a responsible clean up. Children can be assisted in their clean up by diagrams cut from contact paper and placed on the shelf where the blocks belong.

The staff developer often introduced the block area to the children. After doing so, the teacher would receive a copy of notes that the staff developer made while working in the block area. Patterns were placed on shelves to help with clean up and clean up emphasized.

#### SOME NOTES ON BLOCKBUILDING

The role of the teacher is one of preventive safety.

When working in the block area with children the following rules should be stressed:

- Do not walk on blocks.
- Blocks should never be thrown.
- Buildings or other constructions should be far enough from shelf to be able to get more blocks.
- Building height--no higher than child's eyes.

- ° Buildings should be respected (not knocked, pushed, kicked).
- ° Generally three or four children--more than that is too many (not enough blocks or room to build).

#### ACTIVITIES--Examples of teacher involvement

1. Place 2 double units at right angles in a conspicuous spot on the floor.
2. Be accessible to the students when blocks need to be handled.
3. Suggest a "good place" to build.
4. Make suggestions of what to build.
5. Use stories to stimulate interest.
6. Use pictures to stimulate interest.
7. Discuss what students did over the holiday, weekend or day before to serve as a stimulus.
8. On some occasions leave the construction up for the day.

#### NOTES--The teacher works in the block corner

Two patterns need to be completed for the shelf.

Clean up was good.

Rotation of small groups does not allow for choice in blocks; some days children may want to work in blocks.

Today serves as an introduction. This takes quite a bit of time--other activities for children should be fairly independent when introducing blocks to be able to manage the group at one time.

Set aside a time to look at the children--as far as socialization, language, other skills and planning.

**SUBJECT AREAS**

**Developing Responsibility**

**Language Experience**

**Mathematics**

**Drama**

**Art**

**Movement**

**Science**

## DEVELOPING RESPONSIBILITY

Young children feel secure in an environment in which they help take care of things. Placing a name in a locker provides a special place for the child to keep belongings and invites the child to keep things there. Displaying children's work around the room indicates the value of the work and also that the room is there for the child to use. Children can assist the teacher in collections of money and slips by having a special place to keep their money.

Clean up time is an excellent way to develop responsibility. The teacher sets an example by guiding the children through clean up and conveying the message that care of materials is important. Children can help the teacher keep the room clean and organized on a daily basis. Although expecting the children to assist with clean up is more time consuming in the beginning, because of the guidance children need when learning, the benefits will be great as the child understands the reasons for participation. Labels and pictures may indicate where things go. A chart showing who is responsible for cleaning up certain areas of the room is helpful. When things get spilled or crayons mess up tables, show children how to clean up.

When children arrive in the morning, they can help the teacher by turning their names over on an attendance chart. Through the use of a Choice Board for managing centers, the child can select where to work. A record of the day's activities can be kept first by the teacher and later on by the child.

Other suggestions for fostering responsibility include:

- having pets in the classroom and allowing children to be responsible for feeding and caring for them
- growing a garden or having plants inside the classroom
- displaying a visual record of things the children learn to do

Examples of charts which can be helpful in the classroom follow.

## ATTENDANCE CHART

### Materials needed:

- 1 sheet of posterboard
- library pockets (number determined by class size)
- 3 x 5 blank index cards
- glue

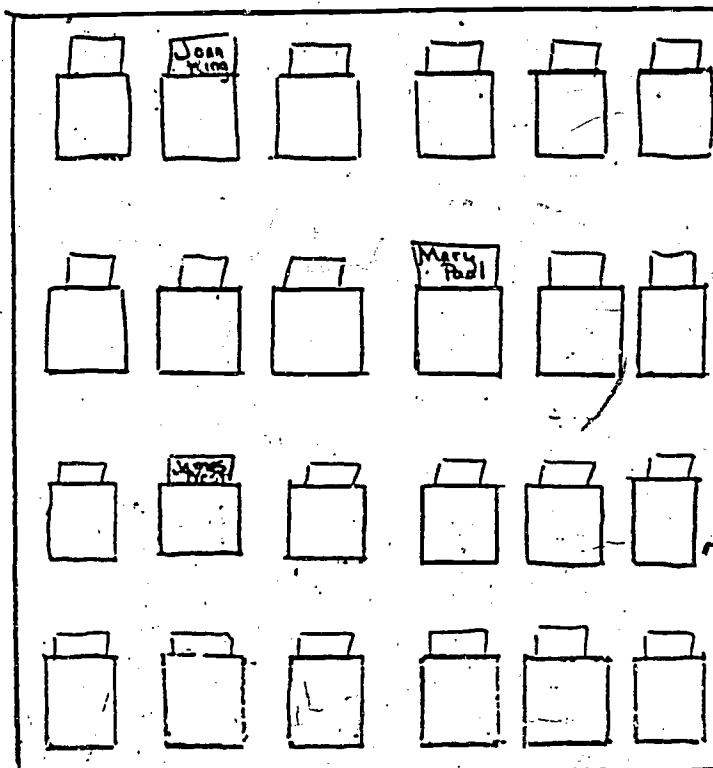
### Directions:

Glue pockets to poster board.

Write children's name on index cards. One name per card. (Actual photographs of children can be added or drawings by the children.)

Place a name card per pocket.

The children turn their names over when they arrive. Only the children's names who are absent will show. The others will have been turned over so the names would not show.



# I CAN CHART

### Materials Needed:

1 sheet of posterboard  
pockets (one for each child)  
3 x 5 sheets of paper (many for each child)  
glue

**Directions:**

Glue pockets to posterboard.

Write objectives for your program. Record on 3 x 5 sheets. Assess the children during the week. If they know the skill, record on the 3 x 5 sheet and date. Then the children place in the I Can Chart.

At the end of each month, send the stapled 3 x 5 notes home.

(0x1ey)

A 4x6 grid of boxes for a 'I Can...' activity. The first row has labels: 'I can', 'I can', 'I can', 'I can', 'I can', 'I can'. The second row has labels: 'I can', 'I can', 'I can', 'I can', 'I can', 'I can'. The third row has labels: 'I can', 'I can', 'I can', 'I can', 'I can', 'I can'. The fourth row has labels: 'I can', 'I can', 'I can', 'I can', 'I can', 'I can'. A large 'X' is drawn over the first three boxes of the second row.

John

Can 9-30-82 counts objects up to 12.

9-30-82 right can hup on right foot

9-30-82 story tells to story for a mrs.

## JOB CHART

### Materials Needed:

- 1 sheet of posterboard
- library pockets (number determined by number of jobs)
- 3 x 5 blank cards
- pictures of areas to be cleaned or jobs (actual photographs may be used)
- glue

### Directions:

- Glue pockets to posterboard.
- Write children's names on index cards. One name per card.
- Put pictures of job responsibilities on pockets.
- Select children to perform the job for a week.
- Keep a record of the areas children work.

Watch the children to see if they do their job. Also how well the job is completed and if the child enjoys doing the job.

### Our Jobs

Turn names over on Attendance Book	Feed the Pets	Check Library Area	Check Shelves	Check Block Area
Check the Art Area	check the Dramatic Area	Check the Materials Storage	Line Leader	Check Science Area

## LANGUAGE EXPERIENCE

The idea of a language experience approach to teaching reading is not new. It has been with us since the turn of the century. While some teachers use this approach extensively, others use it to a lesser degree and some do not use it at all. Rather than discussing reasons for this varying degree of language experience usage, this paper will present a renewal of the ideas and techniques for motivating and teaching children using this approach.

Themes, such as living things which are interdependent with the environment, are central to the idea of language experience. Developing an environmental theme and drawing on the child's experiences, the teacher can help the child see the relationships in their surroundings.

Experiences of the child might be within or beyond the walls of the classroom: on the school ground, near the school, at home or on excursions. Children need to communicate what their senses are relaying to them. Children need certain skills to help them learn to communicate both verbally and in writing. They need direction in scrutinizing objects closely so that their observations will lead to better describing, organizing, interpreting, synthesizing, hypothesizing, inferring and analyzing.

The environment can be the source of many experiences which can be invaluable in helping children learn logical thinking. Children can draw on their experiences and apply their knowledge to new situations easier if they have been guided in vocabulary development, critical thinking skills, techniques of questioning and observation skills.

Teachers and parents can assist children in their learning by helping them develop skills in the following: observing, recall, comparing/contrasting, cause/effect, verbalizing/communicating, listening, locating information, classifying, ordering/sequencing.

Parents can also help their children by introducing them to concepts such as shape, color, size, texture, time, number and design.

Teachers participated in several workshops that supported the idea of language experience. Topics were: fingerplays and flannelboard stories, science, block building and a special workshop on language experience techniques and bookmaking. There is some discussion of those workshops in other sections of this paper.

Using a language experience approach for beginning reading instruction involves three major goals:

1. to help the beginning reader understand that written language, like oral language, is a form of communication
  2. to provide early reading materials that are meaningful to the child and easy to understand
  3. to develop the skill of independent reading.
- (Endreweit, n.d.)

Experiences that actively involve people enhance understanding. This knowledge provided the stimulus for a workshop in which teachers planned a kindergarten class trip to the principal's office. Their plans included:

- talking with the children about the proposed trip
- having the group develop a letter to the principal asking permission to visit the office
- reading the letter
- reading the written response from the principal saying that it would be fine for them to visit and when to come
- making a list of questions to ask
- talking about the trip and, perhaps, drawing or painting about it upon their return to the classroom
- making a group book of the drawings and the children's dictated comments to the teacher about the trip
- or making a group chart.

The second part of the workshop involved making books with children--how to get started and topics to include. Books about a variety of topics can be written by the children. Some sample titles for these books are:

All About Me  
When I Grow Up...

Things You Can Do in Our Town  
Things You Can See in Our Town  
My Family  
Things I Like to Do  
Food I Eat  
Poems I Like  
Things I Saw at the Farm  
All About Fall (Spring, Summer or Winter)

Shape books can be made using the shape of an object. Ideas for shape books are innumerable: alphabet letter, animal, truck, holiday shapes, etc.

In making a shape book, the child is prompted by the shape to dictate a sentence to the teacher. The child then illustrates the page. At another time, the child may do the next page. This process continues until the book is completed, a process which may take several days. The skills of dictating, writing, illustrating, listening and reading are strengthened over time. The child is able to see spoken words become printed matter and develop the concept of written communication. (Endrey, n.d.)

Pictures cut from magazines can also be used to make books. Pictures can be pasted on pages to form the sequence of a story. Alphabet books are easy for young children to make when they cut pictures from magazines.

Class charts and class books can be made about any group experience. They are more difficult with a large group, because it is difficult for everyone to contribute and agree on what should be written. Some ideas for charts include: Tastes I Like, Tastes I Don't Like, The Fire Drill, Our Caterpillar, Our Trip to the Principal's Office, The Cafeteria, Our Playground, Things We Do at School, and Seeds and Seed Coverings.

In addition to making books and charts, music, drama, poetry and art also combine to develop language for the child. A painting by a child can easily have a story written to go with it. By writing on a separate piece of paper, the teacher can record the story and also save the beauty of the art work.

## MATHEMATICS

An emphasis upon concrete objects for teaching mathematics to young children was evident in our manipulative workshops. Teachers were presented information about Piaget's developmental stages and their characteristics. Included in the booklet for teachers were activities that could be used for teaching math concepts. Teachers shared manipulatives with each other that work for them in their classroom. Cuisenaire rods were presented to the teachers and they experimented with them in much the same way that the children would. This style of workshop encouraged teachers to order and use cuisenaire rods in the classroom.

A math center can be set up in the classroom. Materials that are useful in the center are: objects for counting, buttons or beans for classifying, scales for weighing, paper, pencils, cuisenaire rods, teacher-made games, beads, parquetry, puzzles, number lines, felt numbers and objects, pegs and pegboards, geoboards, dominoes, yarn, bottle caps, macaroni, straws, catalogs, newspaper ads and books for reference. Children working in the block center are also working with math concepts as they build.

Individual notebooks can be kept in the center for keeping notes and records about individual children. Children can work in the center independently and observed by the teacher. The teacher may, at times, choose to pull a small group together in the center to teach a new skill or reinforce a concept already learned.

Musical selections, poetry and finger plays are additional

## DRAMA

This learning center is sometimes known as the housekeeping center or the doll corner. By changing the name to dramatic center, the area is open to many other ideas. The children can use the center to portray family living.

As their world expands and they learn about the world in which they live, the imagination of the children can transform this center into whatever they wish. It can become:

1. An office (the principal's office, the doctor's or dentist's) complete with a typewriter, chalkboard, secretary and principal.
2. A restaurant with menu and goods to cook and people to eat the food, as well as serve the food.
3. A grocery store with grocery bags, canned goods, storekeeper, shoppers and cash register.
4. A children's museum
5. A department store which includes pretend items to sell and a cash register.
6. A toy store
7. A circus or zoo
8. A post office

9. A gas station

10. An airplane cockpit

11. The children's section of a bookstore

The content that a teacher provides in the classroom through the materials used, the books read and the trips taken can support the imagination of the children. A few props can be added to get the children going. Together the staff and children developed several of the ideas mentioned above in the dramatic center. The principal's office was a success as the children acted out their impressions of the new discipline system implemented at the school.

## ART

Ideas for the art area were often a result of classroom observations. Discussions were held about what should be included at an art center. Big pieces of equipment included: an art easel, a work table and storage for materials. Materials included various assorted colors and textures of paper, scissors, paste, magazines, junk materials, seeds, magic markers, paints, crayons, pencils, fabric, fingerpaint and playdough.

Teachers were encouraged to include many opportunities for the children to draw either whatever they wished or about specific topics. By planning for the art center, the teacher could provide a variety of art activities and support other content areas. For example, in the art area children could be cutting and pasting foods and painting at the easel.

There are many books available to assist the teacher as an art center is developed. Workshops were provided by Bank Street College on Tray Painting and Clay. The workshops were hands-on--the teachers made objects with clay and painted using newspaper, furniture casters, trays, water, and brushes.

## MOVEMENT

A space in the room may be used as a movement center. If space does not permit this inside the room, then this area can be outside the classroom in the hall or on a hard surface.

Some activities in movement can be introduced to a child in a small group. Activities which occur in a movement center should be planned to meet broad goals and objectives in movement. Many skills to be learned do not require special equipment. A good time to do these activities would be during free choice or center time. Many activities may be done independently. The young child will benefit from practicing the skills again and again.

Materials for a movement center include:

balance beam	cardboard blocks
wagons	record player/records
tricycles	balls
water table	boxes
hula hoops	jump ropes
teacher made materials:	
bean bags	
paper balls	
rope	

Rosemary Althouse gives a description of movement skills for the year in her book *THE YOUNG CHILD*. More complete information on this book is available in the bibliography. Activities for teaching movement follow.

### Nylon (Stocking) Racquets

**Skills:** Eye-hand coordination, visual tracking, balance, whole body coordination, spatial judgment, figure-ground discrimination

**Age:** Any age

**Materials:** Nylon racquets. A balloon for each two children, string or tape for center line, rubber band

To make racquet--pull the coat hanger into a diamond shape, and stretch the nylon stocking over the coat hanger. Fasten the stocking at the neck of coat-hanger with a wire tie or rubber band. Bend the hook of the coat hanger into a closed loop. You may draw a face onto the racquet with a magic marker.

**Directions:** Children tap balloon across line. They should not step over line and should go behind other player to get balloon out of that court.

### Dog and Squirrel

**Skills:** Visual steering of the hand toward a precise target (aim). Rapid processing of visual information: space-distance judgments. Perceptual awareness (figure-ground and form constance discrimination.) Integration of kinesthetic and visual information

**Age:** All ages

**Materials:** Chalkboard and chalk

**Directions:** One person is the dog and the other is a squirrel. The dog chases the squirrel. Each jump by the squirrel is represented by a dot or small circle. The dog follows with a straight line. Each time the squirrel makes a dot, the dog follows with a straight line. This continues until the dog runs up the tree. Children may stop or change places. At the end of each game, the children should stand away from the board and study their work. At this time the child may see shapes such as triangles on the board. A new game can be played, "Find the Triangles." A child may outline the triangles with colored chalk.

(Wirth, Marian Jenks)

### Clay Tray

**Skills:** Strength of the muscles needed for printing and handwriting, eye-hand coordination, shape recognition, small space awareness.

**Age:** Young children

**Materials:** Four sticks of clay in a cookie tray spread 3/8" deep evenly over the tray.  
An old pencil for writing.

**Directions:** Child draws in the clay, traces stencils, makes lines, simple designs, shapes and letters.  
(Requires a lot of pushing and pulling.) When the clay gets choppy, have the child help you smooth it out or warm in oven.

**To store:** Cover with plastic.

### Toss-Jump-Pick

**Skills:** Coordinating eyes, hands, body and feet, space judging

**Age:** All ages

**Materials:** Bean bag for each child using the center.

**Directions:** The teacher will need to demonstrate and children should practice separately or with only one or two individuals depending on space. With children standing on the starting line, toss the bean bag in front of you onto the floor, any distance that you can jump over. Next, jump over the bean bag so that all parts of the foot are ahead of the bag. If you didn't quite jump over it, the bean bag must be picked up and you return to your original throwing place for another try. Assume you did jump over the bean bag. Now you turn your body and without moving your feet, bend over, pick up the bean bag and toss it ahead of you again. Repeat the toss, the jump and the pick up until you are back at the starting line.

### Punch Out

**Skills:** Manual dexterity--form recognition

**Age:** Primary

**Materials:** A small rectangle of carpet (12" x 15"), paper, old ball point pen, styrofoam trays.

**Directions:** The teacher draws geometric designs on a sheet of paper. Place the paper on top of the carpet. The child punches holes in the paper. The child may then tear along the punched holes. Afterwards, s/he may fit the pieces back like a simple puzzle.

**Variation:** The child may copy from a picture model or make his/her own.

### Hoop-Hop

**Skills:** Counting while jumping. Strength, agility, balance and coordination. Matching visual, auditory and kinesthetic information to an intellectual symbolic concept.

**Age:** Primary grades. Younger children will benefit from practice of a simplified version.

**Materials:** Hula-hoops or rope or chalk circles placed in a row. Always start on the left; move to right. This game could be one section of an obstacle course.

**Directions:** Demonstrate the jumps and counts. Discuss how hard it is to keep the jumps and counts together. The child walks into the second hoop and jumps twice, "one, two." Then s/he walks into the third hoop, jumps three times, etc.

**Comments:** It sounds so easy and is--from an adult point of view. The teacher should supervise the jumps closely at first, giving help as needed and settling for an imperfect match of jumps and counts from some children.

## Stencils

**Skills:** Shape recognition--eye-hand coordination. Arm-hand-finger strength (the handwriting muscles). Small space and distance discrimination and judgment.

**Age:** All ages

**Materials:** Chalkboard and chalk; large stencils in the five basic shapes: circle, square, triangle, rectangle, diamond made of posterboard.

**Directions:** Brace the stencil and trace on the inside a set number of times. Remove the stencil and try to draw shape. Place your stencil on top of your drawing to see how close you were. Repeat going the opposite way. Try your other hand.

**Variations:** Decorate the drawings. Make a face, house, car. Use several stencils; make a picture or design. Find basic shapes in the room (door, window, clock). Draw a shape with dot-to-dot guides instead of stencil. Make a puzzle by drawing shapes on top of shapes. Use the stencils (or smaller ones) with paper and pencil. Identify stencils by feel, with eyes closed.

### Improvised Obstacle Course

**Skills:** Space judgment. Balance and coordination. (especially eye-foot coordination.) Agility. Response to visual signals. Comparative body awareness in various space situations.

**Ages:** All ages

**Materials:** Readily available objects from the classroom: chairs, tables, ropes or string, chalk, masking tape, large blocks, yardsticks, etc.

**Directions:** Arrange obstacles around the edge of room or in as large a circle as space permits.

1. Chairs placed about one foot apart for children to walk between without touching.
2. Chairs placed like ski flags to zig-zag around.
3. Chalk marks to jump over, across, or to use as footprints.
4. String or ropes arranged as straight, curved or zig-zag lines to walk beside or as circles to jump into.
5. Masking tape hop marks; masking tapes to jump in.
6. Large blocks to step over without touching, or to step on like stepping stones.
7. Yardsticks to walk heel-to-toe or placed across chairs to crawl under, and/or step over.
8. Table as a tunnel.

Start children at various points on the course. In a large class, children could move in pairs or three's. Remind children that they should keep a safe distance between themselves and the children they follow.

**Optional:** children may move to next station only on tom-tom signal. (Wirth, Marian Jenks)

### Suspendable Ball

**Skills:** Near and far focus of the eyes, tracking rhythmic coordination of both hands together, or separately, numbers and counting.

**Age:** Adaptable to all ages

**Materials:** A wiffle ball, paddle, clown face or target by doorway.

**Directions:** Secure the ball to the doorway. The child bats the ball. Later, s/he may try to hit the target. For a change, the ball may be raised high so that the child must jump to hit the ball with open hand or paddle.

## Foot and Hand Prints

**Skills:** Right and left awareness, naming, space judging, body awareness.

**Age:** All ages

**Materials:** Fifteen or more poster board soles, preferably in two colors (15 red rights and 15 green lefts). A set of eight pairs of hand prints all in one color. If your classroom size permits, you can make them of felt and they will cling to the carpet.

**Directions:** Discuss how our hands and soles match the curves of the cut-out model. Arrange footprints in an easily-walked pattern across the floor, all red prints for the right foot, green prints on the left. (Masking tape may be used to hold the prints down.) Explain that the right foot must step only on red and left foot on green. Never mind if young children do not fully understand which is right and which is left. In doing this and other right-left games, they will become slowly, increasingly aware of their two sides. The teacher should give as much help as needed while children are moving through the course, perhaps having only one child go through at a time for a while. The teacher may want to mark the right toe with a rubber band, a ribbon around the ankle or with an old large sock pulled over the shoe. As the children become adept at the game, a few hand prints may be added to the right and left sides of the walking course. As the children spot a hand-print, they should touch down a hand to hand-print.

## Sponges

**Skills:** Strengthening, coordinating and loosening the arm, hand, wrist and shoulder musculature that is (or will be) used in writing.

**Age:** All ages

**Materials:** Chalkboard, plastic cup for water, and cut-up squares of synthetic household sponge, about 1 " x 1 " x 3/4".

**Directions:** Place a couple of teaspoons of water in a cup to dampen sponges. Child makes large circles with sponges. Other writing strokes and drawings may be made on the board. The young child may not obtain smooth and rhythmic motions with chalk or sponges, and should be encouraged to use the sponges in the best way that s/he can.

## Balance Beam Exercises

1. Walk forward on beam, arms held sideward.
2. Walk backward on beam, arms held sideward.
3. With arms held sideward, walk to the middle, turn around and walk backward.
4. Walk forward to the middle of the beam, then turn and walk the remaining distance sideward left with weight on the balls of the feet.
5. Walk to center of beam, then turn and continue sideward right.
6. Walk forward with left foot always in front of right.
7. Walk forward with right foot always in front of left.
8. Walk backward with left foot always in front of right.
9. Walk backward with right foot always in front of left.
10. Walk forward with hands on hips.
11. Walk backward with hands on hips.
12. Walk forward and pick up a blackboard eraser from middle of beam.
13. Walk forward to center, kneel on one knee, rise and continue to end.
14. Walk forward with eraser balanced on top of the head.
15. Walk backward with eraser balanced on top of the head.
16. Place eraser at center of beam. Walk to center, place eraser on top of head, continue to end of beam.
17. Have partners hold a wand 12 inches above the center of beam. Walk forward on beam and step over the wand.
18. Walk backward and step over the wand.

19. Hold wand at height of 3 feet. Walk forward and pass under the bar.
20. Walk backward and pass under the bar.
21. Walk the balance beam backward with hands clasped behind the body.
22. Walk the beam forward, arms held sideward, palms down, with an eraser on the back of each hand.
23. Walk the beam backward, arms held sideward, palms up, with an eraser on the top of each hand.
24. Walk the beam backward, arms held sideward, palms down, with an eraser on the back of each hand.
25. Walk the beam forward, arms held sideward, palms up, with an eraser on the top of each hand.
26. Walk the beam sideward, right weight on balls of feet.
27. Walk the beam sideward, left weight on balls of feet.
28. Walk forward to middle of beam, kneel on one knee, straighten right leg forward until heel is on the beam and knee is straight.
29. Walk forward to middle of beam, kneel on one knee, straighten left leg forward until heel is on the beam and knee is straight. Rise and walk to the end of the beam.
30. Walk backward to middle of beam. Kneel on one knee, straighten right leg forward until heel is on the beam and knee is straight. Rise and walk to end of beam.
31. Walk backward to middle of beam, kneel on one knee, straighten left leg forward until heel is on the beam and knee is straight. Rise and walk to end of beam.
33. Hop on left foot the full length of beam.
34. Hop on right foot the full length of beam, turn around and hop back.
35. Hop on left foot the full length of beam, turn around and hop back.

36. Walk to middle of beam, balance on one foot, turn around on this foot and walk backwards to the end of the beam.
37. Walk to the middle of the beam left sideward, turn around and walk to end of right sideward.
38. With arms clasped about body in rear, walk the beam forward.
39. With arms clasped about body in rear, walk forward to middle, turn around once, walk backward the remaining distance.
40. Place eraser at middle of beam, walk out on it, kneel on one knee, place eraser on top of head, rise, turn around and walk backward the remaining distance.
41. Walk the beam backward with an eraser balanced on back of each hand.
42. Walk to middle of beam, do a right side support, rise and walk to end.
43. Walk to middle of beam, do a left side support, rise and walk to end.
44. Place eraser on middle of beam. Walk out to it, kneel on one knee, pick up eraser and place it on the beam behind pupil, rise and continue to end.
45. Walk to middle of beam, do a balance stand on one foot, arms held sideward with trunk and free leg held horizontally.
46. Place eraser at middle of beam, walk beam sideward, pick up eraser, place it on right side of beam, turn around and walk right sideward to end of beam.
47. Hold wand 15 inches above beam. Balance eraser on head, walk backward stepping over wand.
48. Hold wand 15 inches above beam. Balance eraser on head, walk forward stepping over wand.
49. Hold wand 15 inches above beam. Balance eraser on head, walk sideward right, stepping over wand.
50. Hold wand 15 inches above beam. Balance eraser on head, walk sideward left, stepping over wand.

51. Hold wand 3 feet high. Walk forward, hands on hips, pass under bar.
52. Hold wand 3 feet high. Walk backward, hands on hips, pass under bar.
53. Hold piece of paper at right angle so it will stand on beam at the middle. Walk to paper, kneel, pick it up with teeth, rise and walk to end of beam.
54. Place paper as in 53, walk out to it, to a left side support, pick up paper with teeth, and walk to end of beam.
55. Place paper as in 53, walk out to it, to a right side support, pick up paper with teeth and walk to end of the beam.
56. Hop to middle of beam on left foot, turn around on the same foot and hop backward to end.
57. Hop to middle of beam on right foot. Turn around on same foot and hop backward to end.
58. Walk beam forward, eyes closed.
59. Walk beam sideward, eyes closed.
60. Walk beam backward, eyes closed.
61. Stand on beam, feet side by side, eyes closed and record number of seconds balance is maintained.
62. Stand on beam, one foot is advanced of the other, eyes closed and record number of seconds balance is maintained.
63. Stand on right foot eyes closed and record number of seconds balance is maintained.
64. Stand on left foot, eyes closed and record number of seconds balance is maintained.
65. Walk beam sideward left, eyes closed.
66. Partners start at opposite ends, walk to middle, pass each other and continue to end.
67. Place hands on beam; have partner hold legs (as in wheelbarrow race) and walk to end.

68. Same as 67, but partner walks with feet on beam, instead of the ground, straddling the beam.

69. "Cat walk" on beam, walk on "all fours", hands and feet on beam.

Note: Standard beam size: 2 x 4 x 10 inches. Supports 1 x 4 x 10 inches.

As pupils improve in balancing skills make another beam with the top tapered down to one inch in width; another with a half inch top.

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## SCIENCE

Science for young children involves understanding and exploring the world around them. Often science concepts are taught in isolation, yet many science concepts and skills are compatible with those of language arts. Classifying, observing, describing, verbalizing, predicting, listening and recording are a few of the common skills. Many experiences that happen on a daily basis provide a framework for the extension of language.

Examine the learning in the following activity.

Take a walk around the school area and observe everything in sight that is one color. Make collections of objects if possible. Green is a good color for starting. The collections will show a range in colors from dark to light.

Lists may be printed on the board or paper after returning from the walk. Colored chalk or magic marker can be used to print the color word of the picture beside the word.

green house



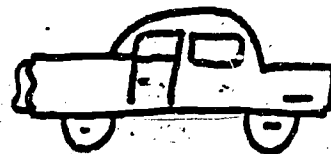
green bottle



green-grass



green car



green roof



This activity can be extended to learn the specific hues of colors. Color charts are helpful with this:

avocado - car

emerald - bottle

moss - house

jade - grass

(Allen and Allen, 1969)

Cooking with young children can teach nutrition, science, math and language. Children can read by using recipes. Individual cooking can be done using the book CUP COOKING by Barbara Johnson and Betty Plemons. Children read individual pictures which explain in a series of steps what to cook. By working together on recipes, teachers can make the individual recipe cards and exchange them. They may then be bound into a book for future reference. Books of interest as one prepares the science curriculum for the year are:

LANGUAGE EXPERIENCES IN EARLY CHILDHOOD - by Claryce and Roach Van Allen

SCIENCE EXPERIENCES FOR YOUNG CHILDREN - by Rosemary Althouse and Cecil Main, Jr. (A set of ten books: Pets, Senses, Air, Water, Magnets, Seeds, Wheels, Food, Colors, As We Grow.)

RESOURCES FOR CREATIVE TEACHING IN EARLY CHILDHOOD EDUCATION - by Bonnie Flemming and Darlene Hamilton.

The magazine, Science and Young Children, has a section devoted to early childhood. Children's literature, flannel-board stories and finger plays also heightened interest in science.

The teachers participated in a workshop for science which highlighted the use of bulletin boards, learning centers, scavenged materials, cooking and shoebox laboratories. Shoebox laboratories developed included:

Using the Magnifying Glass	A Seed Sorting Kit
The Food Groups	Animal Cards - Classification
A Seed Kit	Experimenting with Colors
Magnets	

An activity that can be fun to both teacher and children is growing a garden. The original purpose of the garden was to combine science with literature. A list of other suggested experiences, topics for science study, and a description of shoebox laboratories follows.

#### Activities That May Be Applied to Science Studies

1. Growing seeds and plants
2. Taking care of animals as pets
3. Walking trips near the school to look at nature; for example looking for evidence of spiders
4. Drawing pictures
5. Recording what is observed--by teacher recorded in scrapbooks, books, charts
6. Photography
7. Making graphs to display information
8. Field trips--zoo, farm, bakery, etc.
9. Language experience--using charts and making books.
10. Experiments

11. Making collections--rocks, seeds, shells, things found on walk, etc.
12. Children's literature, finger plays, puppets, flannel stories
13. Making scrapbooks
14. Cutting pictures from magazines to form collage
15. Mounting pictures for display
16. Displays created to stimulate interest--should be able to be examined; perhaps a special table at science center
17. Cooking experiences using recipe charts
18. "Feely" box
19. Keeping a record of observations
20. Rubbings
21. Making graphs of information

#### Topics for Science Study

Teachers will need to select concepts to be studied and develop the program according to the abilities of the students.

## Living Things

### Animals

amphibians  
reptiles  
birds  
fish  
insects  
zoo, circus  
farm  
pets  
field & forest

### Plants

wild flowers  
garden flowers  
seeds  
food plants  
trees & shrubs  
woods & grasses  
simple plants  
molds  
commercial crops

### Human Beings

size  
growth  
parts of body  
health  
nutrition  
interest  
senses

## Earth Science

seasons  
temperature  
precipitation  
water

earth  
magnetic pull  
air and air pressure

## Chemistry

chemical garden  
congealing

rust  
change

## Physical Science

lever  
fulcrum  
screw  
balance

inclined plane  
wheel and axle  
gears

(Wills and Lindberg, 1967)

## Shoebox Laboratories

A shoebox science kit consists of simple materials and instructions designed to teach a specific science concept. The learner manipulates the materials guided by the instructions provided. A shoebox science kit provides the child with an independent activity. It also makes available to the teacher a more laboratory oriented science program with a minimum of space and equipment.

The materials used should be inexpensive and may be begged, borrowed or purchased locally. The shoebox is more attractive when painted with tempera, covered with cloth or contact paper, or decorated in some other way. The instructions will always be available if they are glued to the inside lid of the shoebox. Attach the identification cards to both ends and one side of the box. A picture could be used to identify the contents for children unable to read. Shoebox science kits can be stored conveniently on shelves and used by the children after the instructions have been explained by the teacher.

The teacher will want to be sure the children understand how and when they may use the science shoeboxes. Shoebox science kits have no inherent power by themselves. They are no substitute for good teaching. They do provide an intellectual stimulus and offer an opportunity to help children become more self-directing. Shoebox science kits will function best when the teacher is able to establish a comfortable classroom environment that is responsive to the interests, needs, and activity of children.

Shoebox labs are not new on the educational scene. The Teacher Center at Durham School, Philadelphia, Pennsylvania has made use of shoebox labs in many subject areas. Interested teachers will also want to read:

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