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ABSTRACT

A bilingual, bicultural approach, the Kindergarten Curriculum Guide is intended for all persons involved in teaching American Indian children in either public or Bureau of Indian Affairs Schools. The objective is to establish a broad base of sound principles and philosophy of education for young Indian children with some ideas, experiences, materials, and resources for implementation, from which each school can select appropriate directions, relevant to the particular child, his family and community. The purpose of the guide is to serve as a reference to schools developing their own curriculum. The guide suggests that the teaching method to be employed should stress learning through play and through identification with the teacher rather than through instruction. The 5 areas discussed include (1) early childhood education, such as the articulation of early childhood experiences; (2) creating an environment for learning, such as the planning of use of kindergarten space, the arrangement of equipment and supplies, both indoors and outdoors; (3) curriculum experiences, such as language and concept development, the development of social science, mathematical, and natural and physical science concepts; and experience with music and art materials; (4) supporting services, such as parent involvement in the kindergarten program and bilingual, social service, and health programs; and (5) bibliographical materials, such as books, pamphlets, and films. (FF)

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No. 5

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A KINDERGARTEN CURRICULUM GUIDE

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A KINDERGARTEN CURRICULUM GUIDE FOR INDIAN CHILDREN



**A KINDERGARTEN CURRICULUM
GUIDE FOR INDIAN CHILDREN**

A BILINGUAL · BICULTURAL APPROACH

U. S. BUREAU OF INDIAN AFFAIRS
Washington, D. C.

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June 1970

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INTRODUCTION

It is our privilege to present to you the Kindergarten Curriculum Guide for American Indian Children.

The result of much planning, evaluation, devising, and revising, the Guide is the product of contributions of those persons responsible for the development of the BIA Kindergartens, now in the second year of operation. The staffs of the National Association for the Education of Young Children drew up the preliminary draft in 1968 and submitted supplementary materials, as did the Bank Street College of Education, as part of the BIA's contract with them for training of personnel. BIA teachers, aides, administrators, together with representatives of parental and Tribal leadership were invited to send suggestions. The staff of the BIA Curriculum Development and Review made substantial contributions as well as Division of Social Services and the U. S. Indian Health Service.

This Guide is presented only as a beginning. It is not to be considered a mandatory course of study. The chief purpose is to establish a broad base of sound principles and philosophy of education for young children with some ideas, experiences, materials and resources for implementation, from which each school is free to move in appropriate directions, relevant to the particular child, his family and community. It is expected that the Guide could serve as reference to the Indian community and schools of each region as they develop their own Guides - as they develop their own curriculum.

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portance. It is a time when the child's
experiences may well determine the direction
of his future life and learning. It is a
time when what happens to him can either
stimulate or stifle his future eagerness to
learn.

It is our sincere hope that this Guide will
be helpful to all those persons who touch
the lives of young Indian children and who
have concern for their growth and develop-
ment - wherever they are, in kindergartens
enrolling Indian children in public schools
as well as in BIA schools.

- Tom R. Hopkins
Chief, Division of Curricu-
lum Development and Review

- Mariana Jessen
Education Specialist, Early
Childhood Education

THE YOUNG INDIAN CHILD

The wide variations which exist in the cultures and deeply rooted tribal characteristics of the young Indian child are as wide as those of his vast tribal lands; from the endless expanse of the Alaska Arctic, the waving grass lands of the Great Plains, the red rocks and deserts of the Southwest, the smoky hills of North Carolina, to the soft green lands of Mississippi and Florida.

Central to many tribes, however, is the possession of rich sophisticated cultural heritages that include dance, arts, crafts and lore; the view that man is one with nature, living with all things in harmony; and that the land, the "natural" soil, is sacred. Great value is placed on the wisdom of age and experience; language, cultural heritage and close kinship of the large extended family in which the child is deeply cherished, where his early socialization takes place. These values encompass many that we could wish today for modern civilization.

It is from this background that the young Indian child derives great strengths, skills in coping with his environment, great zest for living and learning.

At the same time he can be inhibited in his adjustment to our competitive technological society. Many Indians find themselves in a cultural identity bind. The problem of language is an obvious and immediate example. The majority of Indian children, entering school for the first time, speak little if any English. There is a lack of material, books, stories, films, songs and games based on Indian life available either commercially or within the repertoire of the traditionally trained kindergarten teacher. Concern about the loss of cultural identification together with the isolation of home and

school may prevent parents with schools to help the child gain a feeling of adequacy on his own and the white culture can be accurate the child's emotional maturity which is necessary for significant choices in his life.

Isolated, in vast areas many families find themselves in poverty -- some with less income -- the victim with disease and malnutrition.

The task of the Bureau's kindergarten program is to help the child bring with him his zest for living and learn to meet his unfilled needs.

THE BIA KINDERGARTEN

The kindergarten is a day school for old Indian children. The children are brought to school by parents or by bus, no more than a few miles from home. The daily program, from 8:00 to 10:00, includes 1 1/2 hours of work-play learning experience, including breakfast and a family style in the classroom. A teacher and a paraprofessional are employed with each classroom. As many teachers are Indian or native Alaskan.

- The Kindergarten is a day school -- a place where the child and his family feel comfortable where value is put on the child's enthusiasm, his drive

AN CHILD

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school may prevent parents from cooperating
with schools to help the Indian child achieve
a feeling of adequacy and comfort both in his
own and the white culture. Only when this oc-
curs can he accure the knowledge, skills and
emotional maturity which enables him to make
significant choices in his adult life.

Isolated, in vast areas of the reservation,
many families find themselves in economic
poverty -- some with less than \$700 annual in-
come -- the victim with their children, of
disease and malnutrition.

The task of the Bureau of Indian Affairs Kin-
dergarten program is to build on the strengths
the child brings with him, to keep alive his
zest for living and learning, and begin to
meet his unfilled needs.

THE BIA KINDERGARTEN

The kindergarten is a day school for five year
old Indian children programmed into Bureau
schools. The children are transported by their
parents or by bus, no more than an hour's trip
from home. The daily program, usually of four
to six hours, includes large blocks of time for
work-play learning experiences, indoor and out,
food including breakfast, snack and lunch served
family style in the classroom, balanced rest and
routines. A teacher and an aide, the teaching
team, are employed with each group of 15-20 chil-
dren. As many teachers as possible and all aides
are Indian or native Alaskan, of the community.

- The Kindergarten is the bridge between home
and school -- a place where the young child
and his family feel comfortable and at home
where value is put on him: his culture, his
enthusiasm, his drives and interests, where

his zest for living and learning is kept alive and growing, to move out into the wider school and community world, with competence and courage.

- The kindergarten program builds on strengths the child brings with him and extends the base upon which the following years of schooling will rest.
- The kindergarten is his school, a place he wants to come back to each day.

THE AIMS OF BIA KINDERGARTEN EARLY CHILDHOOD EDUCATION PROGRAMS

The Bureau of Indian Affairs aims at the development of an early childhood education program (K-2) available to all reachable five year old Indian children by 1973. The program will provide for:

- an humanistic child development approach to understanding human behavior involving learning and becoming
- strong involvement of parents and the Indian community. The child's greatest potential for growth and learning is within his family. To strengthen the family is to strengthen the child. Their full participation in the kindergarten is essential to bridge the gap in his bicultural education. Ultimately, Indian leaders and parents must become fully involved, with real responsibility and decision making in the education of their young children.
- continuity with the later school years and other programs such as Headstart and Follow Through, capitalizing on gains the children have made in these programs and on the strengths that they bring with them as individuals and by virtue of cultural

membership.

- health, nutrition

ITS

The ultimate objective of the program is to enable

- become deeply involved in his learning.
- acquire a positive attitude as a person and learner.
- grow in terms of his ego strength, self confidence, his relating capacity both in and out of school and eventually to

SIGNIFICANCE

A few years back Brock Chisholm, wrote "Can People Learn to develop enough mature action that man (will) ing the human race?"

During the past we know that if this question is to be answered positively, we must start with our children. We have education must be based in human values. When a child is five or six and toward himself and to spell the difference between an affirming person or We know today th

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- health, nutrition and social services.

ITS OBJECTIVES:

The ultimate objective of the BIA kindergarten program is to enable each child to:

- become deeply involved and self directive in his learning.
- acquire a positive image of himself as a person and learner.
- grow in terms of his intellectual function, his ego strength, initiative and inventiveness, his relatedness to people and his coping capacity both in adapting to his culture and eventually to help in shaping it.

SIGNIFICANCE OF EARLY LEARNING

A few years back a wise citizen of the world, Brock Chisholm, wrote a challenging book entitled "Can People Learn to Learn?" In this book he posed the urgent question, "Is it possible to develop enough mature people during the next generation that man (will be) prevented from destroying the human race?"

During the past decade or so, we have come to know that if this question is answered affirmatively, we must start educating our very young children. We have also come to know that their education must be rooted deeply and continuously in human values. We know that even before a child is five or six he has formed many attitudes toward himself and his world that will probably spell the difference between his being a positive, affirming person or a negative, denying person.

We know today that what a child learns in his

first five years is not as important as how he feels about what he learns. We know that even a baby may be made neurotic and ill by being force-fed a mental diet that he cannot escape. We know that the most significant teacher a child has is the mother who cares for him during his dependent years.

We know that a child does the most significant learning of his whole lifetime in the first five years. He learns his language, his feelings about himself and his family, his ways of perceiving his world, and his attitudes toward learning.

We know, too, that the most dependable fact about young children is that each is very different from all others - in fact unique. There is only one you in all the world.

Given this knowledge which has been accumulating for the past century at least, some methodologies follow in teaching the very young.

Young children learn through play. Play is a child's most serious and most absorbing business. We must not deny play to the young child or we will later find him experiencing a mental breakdown of some kind. (In fact, eminent students of human behavior feel that many of our serious modern problems are the result of our inability as adults to play.) Most of what a child learns permanently so that it becomes a part of him comes through play.

In this play process a child discovers, he organizes, he classifies, he accepts and he rejects. From his play he develops a concept of his world and, just as he is unique, so is his world unique to him. (Your world and mine are not alike although we may live next door to each other.)

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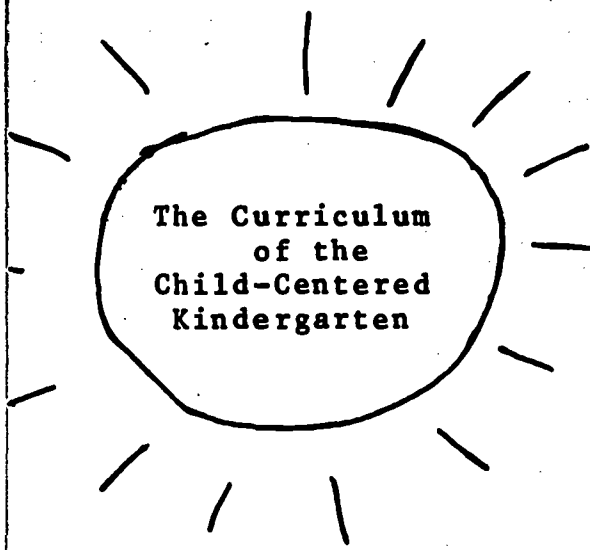
Our basic method then in the early years (and I define these years as from 2-8) is play - its utilization, its extension, its deepening and its interpretation.

Another aspect of methodology follows from what we know - that young children learn more wholesomely through identification than through instruction. This means then that our passion to instruct, to inform, must be curbed, limited, used sparingly. In its place, we develop a way of being in the play in such a way that a child sees the teacher as one with whom he can identify. From this identification comes rich, meaningful learning. In a bilingual kindergarten being able to speak the mother language is a great asset in encouraging identification.

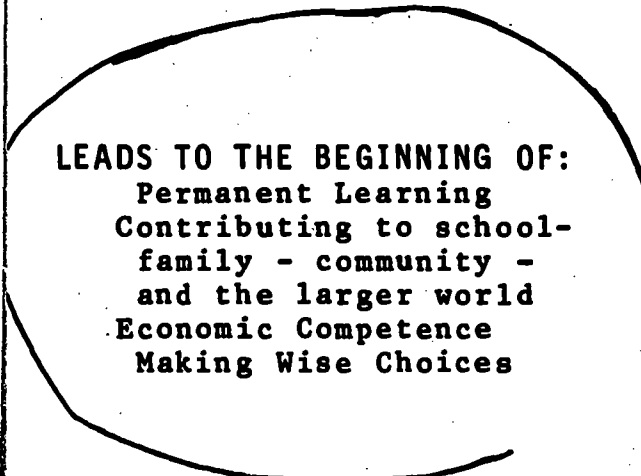
Finally, our knowledge tells us that the learning of the very young child must involve the total family, especially the mother, if it is to be meaningful and lasting. The involvement of the family in the kindergarten program is as important as the teaching of the child. A child cannot compartmentalize himself at age five and live one life at home, another at school without serious damage to his personality.

The kindergarten program that is being designed for the Indian schools is attempting to implement the foregoing concepts. A significant attempt is being made to bring together, in one setting, the best that is known and to support the program with adequate resources. The Bureau of Indian Affairs has shown great vision in shepherding this program from the drawing board to reality.

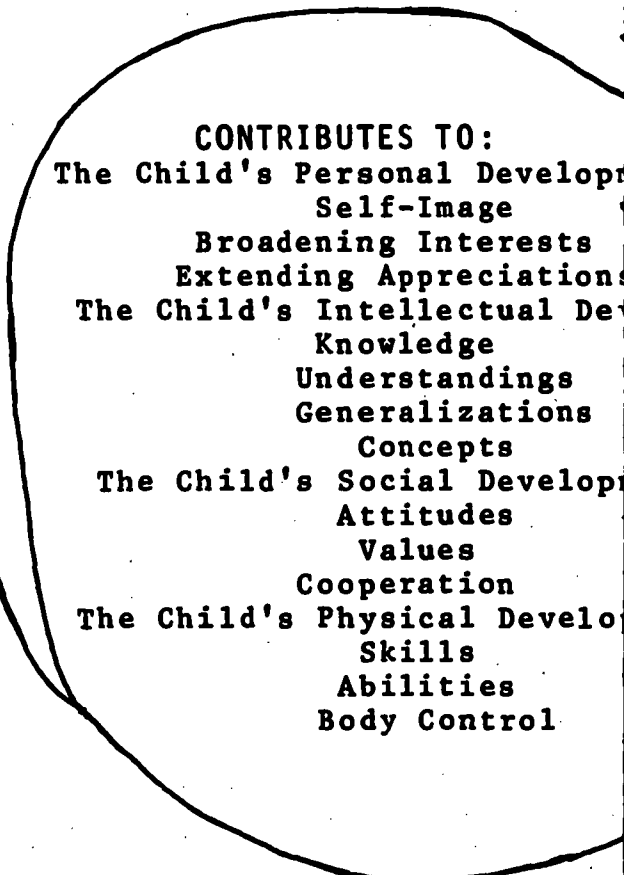
- Dr. Mary B. Lane



**The Curriculum
of the
Child-Centered
Kindergarten**



LEADS TO THE BEGINNING OF:
Permanent Learning
Contributing to school-
family - community -
and the larger world
Economic Competence
Making Wise Choices



CONTRIBUTES TO:
The Child's Personal Development
Self-Image
Broadening Interests
Extending Appreciations
The Child's Intellectual Development
Knowledge
Understandings
Generalizations
Concepts
The Child's Social Development
Attitudes
Values
Cooperation
The Child's Physical Development
Skills
Abilities
Body Control

TAKES EXPERIENCES FROM:

The Social Studies
Mathematics
The Natural and Physical Sciences
Aesthetic Experiences
art - music - body movements
rhythms

CONTRIBUTES TO:

The Child's Personal Development
Self-Image
Broadening Interests
Extending Appreciations
The Child's Intellectual Development
Knowledge
Understandings
Generalizations
Concepts
The Child's Social Development
Attitudes
Values
Cooperation
The Child's Physical Development
Skills
Abilities
Body Control

PROVIDES OPPORTUNITIES FOR:

Language Activities through
Listening - Speaking
Interpreting - Reading -
Dramatization - Role Playing
Exploring - Discovering -
Testing - Classifying -
Categorizing - Generalizing -
Observing - Imitating
Sharing - Trusting
Self-Understanding

THE FIVE YEAR OLD

Although there are individual differences, it should be remembered that five year olds share many common characteristics, whether they are Eskimo children in the Far North, Choctaws in the Deep South, or five year old children anywhere on earth. They want to be grown up. Yet, they are still family centered. They seek affection and support from the persons with whom they feel comfortable and at ease. They are eager to be independent and to assume some responsibility for carrying out home and school tasks. They are beginning to be able to accept a little self-criticism. Feelings are close to the surface, and under stress a five year old may show signs of former infantile behavior. During these times especially, he needs to know that a trusting adult is there to guide and help him.

Fine details in daily routine situations rarely interest a five year old. He washes, dresses, eats and goes to the toilet by himself. However, dirt may remain near his wrists, shirts may be half buttoned, food may be gulped down in large bites or remain on his chin, and he may be so preoccupied with his play that he may have to be reminded to go to the bathroom.

Five year olds are physical beings. They live fully and intensely with their active feet and investigating hands. They seem to have boundless energy. They feel the need to practice repeatedly any newly acquired skills in their own way and at their own pace. Indian children seem to be particularly skillful in their use of small muscles. Their large muscle coordination may not be too well refined in the upper torso region. Each child is intently discovering the power of his own body and the concept of himself as a person.

This is a period when girls are lengthening and growing larger than boys. They are ahead of boys in hand-eye coordination. Most children are right-handed. Handedness has

Indian children are concrete, direct, and practical with the different things they believe. In their play they like to find out - how? What? Why? What? Where did that? Where did

In their early years they live in a puzzling world. They learn best by doing. They smell, taste, touch, and want information. They use language to express themselves from the sidelines in their own way. Their play is active, though often quiet. They are like the five-year-olds for they are by themselves. Friends are important. They may change quite often. They develop ways of doing things. They are faced with unfamiliar materials. They are quiet and reticent. They are comfortable, though they are discovering new ways and discovering themselves and their

Always each child is loved, respected,

YEAR OLD

Individual differences, that five year olds characteristics, whether in the Far North, South, or five year old North. They want to be still family centered. support from the per- comfortable and at be independent and to ty for carrying out They are beginning to le self-criticism. e surface, and under ay show signs of for- During these times know that a trusting and help him.

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ysical beings. They with their active ands. They seem to They feel the need to newly acquired skills their own pace. Indi- articularly skillful scles. Their large not be too well re- region. Each child the power of his own himself as a person.

This is a period of slow growth. Their bodies are lengthening, and their hands and feet are growing larger. Girls are usually about a year ahead of boys in physical growth. In most children hand-eye coordination may be poorly developed. Most children at this age are farsighted. Handedness has usually been established.

Indian children, like all children, need many concrete, direct experiences. They are grappling with the difference between reality and make-believe. In their individual ways they are trying to find out - how does this work? Why did you do that? Where did it go? When will you come?

In their earnest efforts to comprehend the puzzling world of people and things around them, they learn best through their senses: seeing, smelling, tasting, feeling and hearing. They want information. Many are beginning to use language to express thoughts. A number watch events from the sidelines and absorb meanings in their own way. Their play is purposeful and constructive, though often noisy and vigorous. Most fives like the companionship of other children for they are by and large sociable beings. Friends are important, yet at five, friendships may change quite freely as children attempt to develop ways of getting to know each other. During the first days of school when Indian children are faced with so many new persons, routines, and unfamiliar materials, they may appear unusually quiet and reticent. But as children become more comfortable, they begin to express themselves in new ways and discover new ways of sharing themselves and their materials with others.

Always each five year old needs to know that he is loved, respected, and valued as a person.

ARTICULATION OF EARLY CHILDHOOD EXPERIENCES

The time when the child enters the formalized school program is a beginning of a new experience for him. Yet the child has not lived in a vacuum in his early years. Whether he makes his initial entrance into Head Start, Kindergarten or the Beginners Class, he comes with knowledge, attitudes, and skills already formed within family and community. What he brings with him provides the teacher and staff of the kindergarten with much upon which to develop further curriculum experiences.

Building on what the child brings and extending the base upon which the following years of schooling will rest is fundamental to the kindergarten program. If the child has had a year of Head Start, the kindergarten staff can make some assumption about the child's relative ability to relate to a small group of children and to adults who are not of his family. A concern for extending the ways in which children can help each other and make use of the adult as a resource will become part of the curriculum.

Self-reliance and sharing ideas and skills with other children in appropriate projects will help lay the foundation for the more formal learning experiences he will have in future school years.

The Indian child who comes directly to kindergarten from his home and family needs a bridge which will help him make an easy transition between his two worlds. The curriculum of the kindergarten becomes the keystone of this bridge, whether the child goes into a Beginners class or a regular First Grade. Several ways are available to help the child bridge between his two worlds: (a) the accep-

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First Grade.
o help the child
s: (a) the accep-

tance of parents and siblings in the classroom; (b) the use of the familiar mother tongue to introduce new concepts and give instructions; (c) moving with the rhythm and pace of the particular children in the group; and (d) creating an environment which reflects the culture and using artifacts which are familiar to his natural environment.

The child is moving from one set of experiences to another. Social Studies, Mathematics, Natural and Physical Sciences, Health, Safety and Nutrition, Aesthetic Experiences (Art, Music, Body Movement and Rhythms) all have their rudimentary aspects in the kindergarten. These simple beginnings lead into more complex understandings and skills and the urge to mastery at the individual's own unique level.

THE ROLE OF THE STAFF IN A COMPREHENSIVE EARLY EDUCATION KINDERGARTEN PROGRAM

Staffing patterns vary according to the unique needs of each school community. Despite variations, each staff works together and the members complement one another in a unified way. The most significant complementary relationship arises when there is the opportunity to utilize the children's mother tongue in the living-learning setting because of the presence in each classroom of at least one staff member who speaks the mother tongue.

Usually the following people will be involved in carrying through the comprehensive program.

The Principal
The Teacher
The Teacher-Assistant (Aide)
The Auxiliary Personnel (maintenance,
food service, transportation, clerical
service)

**The Parent and the Community
The Supportive Services Personnel
(health, guidance, psychological
and social services)**

The coordinated efforts of each person involved influence the probable success or failure of attaining the desired goals. Each staff member has a specific responsibility in line with his position which supports the work of every other member of the staff. For example, the principal is responsible for facilitating the implementation of the total program; the teacher and teacher-assistants are responsible for planning and carrying out the daily activities with the children. The parents and community communicate their concerns and hopes for the education of their children to the school staff and participate in helping to realize their hopes.

AS MEMBERS OF THE SCHOOL, THE KINDERGARTEN STAFF:

1. Work cooperatively with all members of the school staff.
2. Function on educational committees, at local, tribal, and/or state and national levels.
3. Belong to professional organizations.
4. Participate in making decisions about school policy.

AS MEMBERS OF A CLASSROOM TEACHING STAFF, THE KINDERGARTEN TEACHERS:

1. Have a sound philosophy of kindergarten education. Respect play as a child's way of learning.
2. Remember that each child is unique.
3. Are accepting and understanding of all kinds of behavior.
4. Provide a friendly, challenging

5. Plan appropriate group needs.
6. Are imaginative approaches to
7. Stimulate a
8. Recognize the little or no program.
9. Understand the children.
10. Understand the child and the
11. Help children and to express themselves.
12. Set realistic
13. Help the childence, self-dependability.
14. Help each child success each day
15. Foster contin home and scho
16. Understand th and school id
17. Encourage po healthy body
18. Provide oppo pression and
19. Show consist the standards dren.
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* See section on Pa

**Community
Services Personnel
(e.g., psychological
services)**

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THE KINDERGARTEN

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TEACHING STAFF, THE TEACHERS:

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classroom environment.

5. Plan appropriately for individual and small group needs.
6. Are imaginative and creative in their approaches to teaching.
7. Stimulate a child's thinking.
8. Recognize that formal instruction has little or no place in the kindergarten program.
9. Understand the learning process of young children.
10. Understand the local culture of each child and the ways of his people.
11. Help children to inquire, to discover, and to experiment as they learn for themselves.
12. Set realistic standards and limits.
13. Help the child as he grows in independence, self-reliance, initiative, and dependability to assume new responsibility.
14. Help each child to experience some success each day.
15. Foster continued communication between home and school.*
16. Understand that adjustment between home and school is a gradual process.*
17. Encourage positive attitudes for a healthy body.
18. Provide opportunities for aesthetic expression and appreciation.
19. Show consistency in their goals and in the standards they hold for young children.
20. Encourage the use of the mother tongue throughout the school setting.

* See section on Parent Involvement.

**A GOOD KINDERGARTEN PROGRAM IS EXPRESSED
THROUGH THE KINDERGARTEN STAFF.**

AS A PERSON EACH STAFF MEMBER:

1. Has a positive view of self.
2. Knows himself, his abilities, and his limitations.
3. Maintains a high level of curiosity and of sensitivity to the needs of children.
4. Dresses appropriately for the kindergarten activities.
5. Enjoys working with young children.
6. Is open to change and to meet in positive ways the challenges of a new age.
7. Understands kindergarten children's interests and abilities.
8. Is well informed about current changes in education.
9. Gets along well with other people.
10. Has a sense of humor.

**AS MEMBERS OF A COMMUNITY THE KINDERGARTEN
STAFF MEMBER:**

1. Involves the community in the life of the schoolroom.
2. Makes a point of becoming well acquainted with parents.
3. Encourages parents and other interested persons to visit and become involved in the classroom.
4. Interprets the school program to the community in an understandable manner.
5. Is thoroughly familiar with the resources of the community and makes full use of them in the classroom.

SIZ S

The BIA is young children there is maximum parent interaction and findings of one teacher as follows:

morning
children
full s

Because the kindergarten number, plans selection of appropriate school in cooperation and persons* the kindergarten School Board

* See section Experiences

GUIDE FOR TE

The teacher work together other staff members various help contribute program. In many cases be remembered that the adult who speaks to the children. She is the staff. In the year she may will make the communicate

EXPRESSED
STAFF.

SIZE OF KINDERGARTEN GROUPS

The BIA is committed to the principle that young children learn best in small groups in which there is maximum opportunity for child - staff - parent interaction. For this reason BIA policy and findings of kindergarten groups with a minimum of one teacher and one assistant (aide) is as follows:

morning and afternoon sessions - 15
children each
full session - 15-20 children

Because the children whose parents may want kindergarten experience for them might exceed this number, plans for determining priorities in selection of applicants should be set up by the school in cooperation with appropriate agencies and persons* to help assure quality education for the kindergarten children. These could be the School Board and/or a Parent Advisory Committee.

* See section on Supervision, Objectives and Experiences.

GUIDE FOR TEACHER AND TEACHER-ASSISTANT (AIDE)

The teacher and aide (teacher-assistants) will work together as a team. The teacher will give other staff members clear information and continuous help concerning the children and the program. In many kindergartens it should be remembered that the teacher-assistant may be the only adult who speaks the native language of the children. She is a particularly essential member of the staff. During the first months of the school year she may be the person with whom the children will make their first away-from-home relationship, communicate and seek directions and assistance.

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KINDERGARTEN

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There will be a variety of tasks to do: preparing materials and snacks for the children; assisting with the activities and trips; observing and recording the children's responses to the program, other children and adults; cleaning and repairing equipment; occasionally collecting materials.

There will be specific information about the plan for the day, how supplies and materials are to be used, and what is the procedure to be used in case of an emergency, illness, and accident. Books and pamphlets will provide guidance in understanding your children.

Discussion of the work:

As a teacher-assistant you will be an important staff member. Each task will be a much needed part of the total program and everyone will be expected to complete her share. Teacher-assistants will attend regular staff meetings. It is important at the end of each school day that the teacher and the teacher-assistant talk together and share their observations, notes and experiences concerning the children.

Helpful suggestions during your hours with the children:

Warmth and friendliness with the children are extremely important. Sensitivity to children will make you aware of their needs and will give you clues to the best way of helping them. Do not feel that you must constantly be "doing something" to be useful. It is valuable to spend time watching and listening to children. Conversations with the children are important, but remember not to overwhelm them with too many words.

Your voice can be a tool to help a child feel at ease, use a soft tone of voice, look down and give him your interest. If the child is on your lap, do let him.

The children will be more relaxed when you are relaxed. Avoid sudden moves. Ask the child to sit on the floor, a chair while talking, or working with the child. Your sphere is easy and you are relaxed, a sense of setting limits, the feelings will be pleasant. When the children are relaxed; they are loud, etc.

You should realize that a child is not the worst thing to take and try not to re-think of what went right, and try to extend it.

Directions or suggestions in a positive rather than a negative way. Tell the child what you want rather than what you do not want. Example: If a child stands on the floor, "chairs are to sit on the floor." Give the child a warning when you intend to leave him.

When limits are necessary, they should be clearly defined and consistent.

Avoid using such words as "good," "bad," or "right" when talking to children about their behavior.

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Your voice can be a teaching tool. To help a child feel at ease, use a quiet, confident tone of voice, look directly at the child, bend down and give him your attention and interest. If the child wants to sit in your lap, do let him.

The children will feel more comfortable when you are relaxed. Avoid too many quick and sudden moves. As often as you can, sit down on the floor, a low block, or a small chair while talking, reading, singing or working with the children. When the atmosphere is easy and you show enjoyment of the children, a sense of humor and a fairness in setting limits, the feelings in the group will be pleasant. When you are relaxed, the children are relaxed; when you are loud, they are loud, etc.

You should realize that making a mistake is not the worst thing. Learn from the mistake and try not to repeat the error. Rather think of what went right, why it went right, and try to extend it a little more.

Directions or suggestions should be given in a positive rather than a negative way. Tell the child what you want him to do rather than what you do not want him to do. Example: If a child stands on a chair, say to him, "chairs are to sit on, you can stand on the floor." Give the child a choice only when you intend to leave the choice up to him.

When limits are necessary, they should be clearly defined and carried through.

Avoid using such words as "cute," "pretty," "good," "bad," or "naughty" when speaking to children about their behavior.

Avoid motivating a child by making comparisons between one child and another or encouraging competition.

Avoid making models in any art media for the children to copy. Remember that for this age child, the art process rather than the art product is the important thing. They are not able to be interested in drawing or molding "things." It is more appropriate to talk about the colors the child has used or the patterns he has made, or what fun it is to paint than to ask, "What are you making?" or "What is this?"

Treat spills and toilet accidents matter-of-factly. Extra clothes should be in the supply closet.

A child's work should be respected. Give him plenty of time; a warning must always be given before a change of activity or clean-up.

Give a child help when he needs it, do not complete the task for him. Often with a minimum amount of help, he can succeed in becoming more independent.

If you are helping one child, stand or sit so that you can see the rest of the group. Be aware of the whole group. Remember that your responsibility extends beyond the few children with whom you are working.



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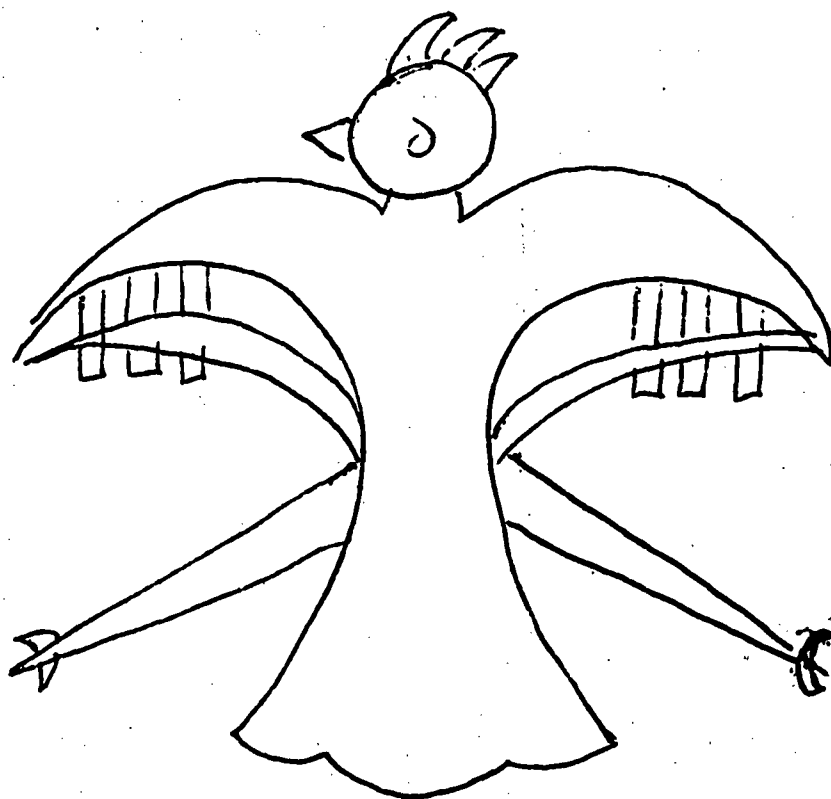
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SETTING THE STAGE FOR LEARNING

The people of the teaching team, the child's skilled teacher and co-teacher, (the aide), who work together, who speak his language, are the child's most basic resource for his life away from home. They create the environment and climate for enduring learning, indoors and out:

- . where the child feels a sense of trust
- . where learning takes place through living and doing throughout the daily cycle of his life, with his mind, feelings and body.
- . where teachers understand his thinking and feeling, respond and encourage with a respect which fosters his initiative, self-confidence and creativity.
- . where in a relaxed, warm, unhurried atmosphere, indoors and out, there is opportunity through play (the work and language of childhood - his serious efforts to structure reality) for a wide variety of motor and sensory experiences, for active first-hand investigation, for discovery, for stimulation of thought and curiosity, for developing skills of mastery, categorizing, seeing relationships and solving problems.
- . where such experiences and activities go on simultaneously in clearly defined "areas of interest"* or "learning centers" set up to provide:
 - creative art experiences with a variety of media, using the natural environment art form;
 - experiences with literature, making his own stories, pictures and books,

* See Guide for Planning Use of Space

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with special attention to language de-
velopment, utilizing the child's na-
tive tongue, where appropriate, with
an experimental approach to the teach-
ing of English;

- experience with sound and feeling of
mastery over his body as he moves to
music, runs, climbs, balances and
slides;
- experiences with relationship and con-
structural materials, e.g. blocks,
puzzles, and a variety of manipulative
toys to help develop ideas of space,
organization and association;
- exploration of the physical world
through simple cooking;
- experiments with water, sand, sun and
air, magnetism, through care of pets,
plants and other growing things;
- opportunities through dramatic family
and community life play and through
block building to relearn and recreate
home and community experiences - in
which he gains knowledge about himself
and the world - the basis of social
science.

where, as Dr. Barbara Biber says, "The
classroom itself is established as an ex-
ercise in thinking if the teachers per-
ceive the possibilities and utilize them.
Objects of a common class - blocks, trucks,
toy people occupy a common space; to take
them out and replace them requires sort-
ing. The whole space is divided into
functional areas, establishing a clarity
of pathways to goals. The shelf on which
the blocks are placed has a picture of a
block on the back, telling the first part
of the impressive story that for objects
there are symbols. Sorting, classifying,
symbolizing, action along gradients to-

ward a goal, are repeatedly rehearsed experiences in well-organized classrooms -- lessons without labels."¹

- . where the child can work and play alone or in small groups, in interest areas of his choice, in ways best suited to his interests, talents and style, where children talk with each other about their work-play and learning is a cooperative enterprise.
- . where there is a variety of equipment and materials, the raw stuff to stimulate exploration and discovery, close to the child's concerns and interests within the rich heritage of his Indian culture.
- . where total-group activities are kept to a minimum and direct teaching (instruction) is used only with an individual child or a small group when a skill is needed and the learner is ready.
- . where, as Ethel Thompson says, "one may have to search for the teachers - who may be at a table doing direct teaching with one, two, three or four children, on the floor as a consultant to a crew of block builders, or at the workbench supporting a piece of lumber a child wants to saw."²
- . Dr. James Hymes, well-known authority in Early Childhood Education, has said that he is more concerned about outside space than inside space. Certainly for Indian children, the familiarity and relevance of learning experiences out of doors are of special importance. Here teaching and learning go on in different kinds of situations, calling for different skills, with different methods of problem solving.

¹ Dr. Barbara Biber - Challenges Ahead for Early Childhood Education, National Association for Education of Young Children, Washington, D. C.

- . where parents in experiential learning;
- . where learning experiences trips within community, and thought
- . where food part of total pleasant so
- . where daily ing experiential himself with success.
- . where teaching observation a so that each tal joy and
- . where teaching bring to the of the kind of need for al, psychological
- . where indoor serve as supporting, teaching children, in structuring

² Ethel Thompson EKNE, 1201 S ton, D. C. 2

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periences, close to the
interests within the
Indian culture.

Activities are kept to
teaching (instruc-
tion) an individual
when a skill is
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Thompson says, "one may
expect teachers - who may
teach with
children, on the
part of a crew of block
teachers supporting
what he would want to see."

Thompson's own authority in
this area, has said that
learning outside space
is certainly for Indian
culture and relevance

Learning out of doors are
Here teaching
different kinds of
different skills,
of problem solving.

Challenges Ahead for
National Associ-
ation of Children,

- . where parents and children become involved in experiences which bring rich learning;
- . where learning takes place in extended experiences into the broader world through trips within his school, to his home and community, basic to language development and thought, which he reconstructs in play.
- . where food service and nutrition become part of total learning experiences, in pleasant social settings.
- . where daily routines become genuine learning experiences as the child cares for himself with feelings of confidence and success.
- . where teachers use their knowledge and observation about the child to plan his day so that each part will add up for his total joy and well-being.
- . where teachers use their observations to bring to the attention of other members of the kindergarten team any indication of need for additional health, nutritional, psychological, or social services.
- . where indoors and out the teaching staff serve as catalytic agents - giving, supporting, trusted persons - guiding the children, interacting, provisioning, and structuring the environment.

2 Ethel Thompson - Kindergarten Education -
EKNE, 1201 Sixteenth St., N. W., Washing-
ton, D. C. 20036

THE KINDERGARTEN DAY

The structure of the daily program builds upon the teacher's and her staff's understanding that five-year olds learn best through active, sensory participation with a variety of selected experiences with

things, people, and their relationships. Kindergarten children are interested in the concrete, however, with encouragement from the teaching staff, they begin to use language more and more to express their ideas. The teacher uses the children's home backgrounds to weave into the kindergarten program a blend of familiar experiences with supporting materials and a few unfamiliar ones that are introduced at appropriate times.

Programs to be flexible need thoughtful planning, allowing ample time for children to make smooth transitions between activities. Transitions should be planned so that children move naturally from one activity to the next, in small groups. Lining up and waiting should be avoided. Although teachers need to be aware of clock time, it is more important for them to be guided by child time. In order to have children feel free to discover, experiment, and explore, there should be large blocks of time that give them opportunities to work leisurely alone, or in small groups, as they select from the rich offerings of science, music, creative arts, woodwork, puzzles, block building, housekeeping, and books.

All programs, whether half-day or full-day sessions, should include indoor and outdoor work/play activity periods with easy procedures for arrival and departure. For many children, a minimum school day of four hours is long enough. However, the length of the kindergarten day depends upon the needs of the individual child and family.

DAILY PRO

9:00 a.m.

9:00 a.m. - 10:00

10:00 a.m.- 10:30

10:30 a.m.- 11:30

11:30 a.m.- 12:30

12:30 p.m.- 1:00

their relationships.
are interested in the
with encouragement from
they begin to use langu-
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ads upon the needs of
and family.

DAILY PROGRAM (Half-Day Morning)

- 9:00 a.m. Children arrive - Teach-
er's individual greeting.
Breakfast served (if neces-
sary).
- 9:00 a.m. - 10:00 Indoor or outdoor Work/Play
Activity Period. House-
keeping play, blocks, car-
pentry, creative arts,
books, story time, puzzles,
games, science, water play.
- 10:00 a.m.- 10:30 Snack. Routine activities
Quiet Time.
- 10:30 a.m.- 11:30 Indoor or outdoor Work/Play
Activity Period. Hollow
blocks, climbing apparatus,
dramatic play (rodeo, trad-
ing post, store, fishing,
sheep herding, family liv-
ing); cooking, wheel toys,
sand box play, water play,
science and nature, music,
creative arts.
- 11:30 a.m.- 12:30 Get ready for lunch and
toileting (if necessary)
and washing; setting lunch
tables, stories, records,
music, quiet time activi-
ties, lunch.
- 12:30 p.m.- 1:00 Get ready to go home.
Discussion of day's activi-
ties. Planning for the
next day.

KINDERGARTEN PROGRAM - HALF-DAY
(Afternoon Program)

12:00 - 1:00 p.m.	Getting ready for lunch. Toileting and washing, setting lunch table, eating.	
1:00 - 1:30 p.m.	Choice of quiet activities art, materials, puzzles, music, stories.	11:30- 12:30 p.m.
1:30 - 2:30 p.m.	Outdoor Work/Play activities. Hollow blocks, etc. (See morning schedule).	12:30- 1:30 p.m.
2:30 - 3:00 p.m.	Snack.	1:30- 2:30 p.m.
3:00 - 4:00 p.m.	Indoor play activities, etc. (See morning schedule).	
4:00 - 4:30 p.m.	Preparation for going home.	2:30- 3:00 p.m.

DAILY PROGRAM - ALL DAY

9:00 a.m.	Children arrive - teacher greets each individual.	GUIDE FOR PLANNING ARRANGEMENT OF EQUIPMENT
9:00 - 10:00 a.m.	Indoor or outdoor Work/Play activity period. House-keeping play, blocks, carpentry, creative arts, books, story time, puzzles, games, science, water play.	(Suggestions for Arrangement of Equipment)
10:00 - 10:30 a.m.	Snack - Routine activities Quiet time.	<u>The Children's Individual Program</u>
10:30 - 11:30 a.m.	Indoor or outdoor Work/Play activity period. Hollow blocks, climbing apparatus, dramatic play, (rodeo, trading post, store, fish-	The children's kindergarten should be considered their living quarters while they are at school, and the child's living quarters should be familiar surroundings. The child's living quarters should provide for his total work-play, rest, meals and snacks.

PROGRAM - HALF-DAY
(In Program)

Get ready for lunch.
Toileting and washing, setting
lunch table, eating.

Time of quiet activities
materials, puzzles,
books, stories.

Indoor Work/Play activity
(Hollow blocks, etc.
morning schedule).

Outdoor
or play activities,
(See morning schedule).

Preparation for going home.

PROGRAM - ALL DAY

Children arrive - teacher
sees each individual.

Indoor or outdoor Work/Play
activity period. House-
hold play, blocks, car-
r, creative arts,
books, story time, puzzles,
toys, science, water play.

Quiet - Routine activities
at time.

Indoor or outdoor Work/Play
activity period. Hollow
blocks, climbing apparatus,
athletic play, (rodeo,
sliding post, store, fish-

ing, sheep herding, family
living); cooking, wheel
toys, sand box play, water
play, science and nature,
music, creative arts.

11:30- 12:30 p.m. Get ready for lunch. Toi-
leting, washing, setting
lunch tables, eating,
stories, records, music,
quiet time activities.

12:30- 1:30 p.m. Relaxed activities - tran-
sition - rest.

1:30- 2:30 p.m. Outside Work/Play activity
weather permitting (see
morning suggestions).

2:30- 3:00 p.m. Preparation for going home.
Discussion of the day's
activities. Planning for
the next day.

**GUIDE FOR PLANNING USE OF KINDERGARTEN SPACE,
ARRANGEMENT OF EQUIPMENT AND SUPPLIES, INDOOR
AND OUT**

(Suggestions for Administrators and Teaching
Staff)

The Children's Indoor Area

The children's kindergarten room should be
considered their home, indoors, while they
are at school, and planned so that the
child's living goes on with friends, in fam-
iliar surroundings, with suitable, interest-
ing equipment on hand at all times to pro-
vide for his total daily activities, such as
work-play, rest, routines, and service at
meals and snacks.

The physical comfort, the warm friendly atmosphere, and aesthetic quality of the kindergarten, is of great importance in the lives of the children and their families. The soft color of walls with children's work used as decorations, and the uncluttered, orderly arrangement of equipment and furnishings can have lasting influence.

In creating an indoor environment, the equipment and its arrangement can make a significant contribution to the quality of the program for the children and their families, toward accomplishing the objectives of the kindergarten program.

Arrangement

Arrangement of furnishings, equipment and accessory material in orderly, clearly defined areas or zones of interest, is suggestive of activity and invites children to explore, to work and play in small groups or alone; it helps create a stabilizing environment where children and adults feel comfortable and at home.

Such arrangement of equipment and accessory material, in good supply and readily available, helps the child in his learning; to see relationships, organize his ideas, make choices, think, solve problems, and it frees the teacher to give guidance.

Sufficient space should be provided to assure satisfying experiences in each area of activity, such as housekeeping, block building, woodwork, music, creative arts, quiet activities with books, puzzles, games and science experiences, pets, and other growing things. Fifty square feet per child is recommended; thirty-five feet is minimal.

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s recommended;

Within each area of interest the equipment, together with open shelving designed to facilitate the activity and make materials easily accessible to the children, should be arranged so as to suggest its use and relationship, provide for the total process and make it easy for the child to meet success in what he chooses to do.

Playrooms should be arranged so that there is a smooth flow of experiences. There should be a convenient, orderly place for everything, for when play areas are inviting, children will seek them. For three seasons of the year (and now in some schools, four seasons), five days a week, several hours each day, teachers, staff members and children live closely together. To keep the environment stimulating, teachers must make appropriate changes in materials and room arrangement throughout the school year. In the beginning weeks of kindergarten, children need fewer pieces of equipment -- too much too soon can be overwhelming and confusing to five-year olds. Being aware of individual children's interests, teachers can select pictures for the bulletin boards (placed at children's eye level).

Teachers and children can work out "feeling" bulletin boards with materials perhaps of different textures. Science trays can be arranged with nature materials such as seed pods, twigs, or stones. However, part of the old, the familiar, should remain. Children do not outgrow unstructured materials; they discover new ways to use them creatively. The teacher's warm, friendly, accepting attitude toward a child does much to encourage and strengthen his confidence in himself to create.

Some principles to keep in mind when arrang-

ing areas of activity indoors and out, include:

Place things close together that are used together,

Areas of activity requiring close eye work should be placed in best light, out of glare,

Activities requiring most protection from traffic should be placed out of lanes,

Quiet activities should be placed together, and more active ones together,

Area should be arranged to allow for program flexibility, suggest a flow of activity and provide for ease in constant teacher guidance and supervision.

The Children's Outdoor Area

The playground for each kindergarten should be considered their home outdoors while at school. The outdoor area should be planned so that experiences are an integral part of the child's life, where teaching and learning go on -- in different kinds of situations calling for different skills with different methods of problem solving.

Creating a situation for children's growth and development outdoors must be as imaginative and purposeful as for indoors -- and for the same reasons.

Outdoor space that is interesting, with opportunities for adventure, challenge, and wonder in natural environment, should be planned with flexibility and imagination, suitable to different climates.

Sufficient for a variety of many needs a different base feet of outdoor, an area a lot equivalent of twenty ch

Location of

A safe, suitably readily accessible that play can be well drained parts are ea

The area should least four feet use in include Shade should surface should quarter hard if weather c

Installation of equipment should be suitable.

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Showers or a surable enjoyable weather. Wash cleaned daily

Arrangement

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Sufficient outdoor space should be provided for a variety of experiences to meet the many needs and interests of children from different backgrounds. Two hundred square feet of outdoor play space per child is optimum, an area of four hundred square feet or a lot equivalent to 50 x 80 feet for a group of twenty children.

Location of Outdoor Play Area

A safe, suitable playground area should be readily accessible to the kindergarten so that play can be interchangeable. It should be well drained and so designed that all parts are easily supervised.

The area should be protected by fencing at least four feet high. A covered area for use in inclement weather is highly desirable. Shade should be provided by trees or awnings; surface should be turf if possible, with one quarter hard surfaced for wheel toys, more if weather conditions make it necessary.

Installation of large climbing and other equipment should conform to safety regulations.

A convenient source of water, located so as to contribute to maximum safety and use, should be provided as a necessary accessory to activities.

Showers or an approved wading pool add immeasurable enjoyment to the program in warm weather. Wading pools should be emptied and cleaned daily.

Arrangement

Equipment and accessory materials, together

with facilities for storage, should be arranged in orderly, clearly defined areas of interest. Sufficient space should be provided to assure satisfying experiences in each area of interest, both active and quiet, such as for climbing and building with challenging things to climb on, large packing cases, ladders, walking boards, and sawhorses; large hollow blocks, kegs, play boards; space for wheel toys to travel; quiet areas for looking at books, digging, gardening, caring for pets, catching light with prisms, or examining a worm; experimenting with water, paints, sand and mud; or just pausing anywhere to feel the wind and watch the clouds. Within each area of interest, storage facilities should be provided, designed to protect and make equipment and ample supplies of accessory play materials easily accessible to the children, according to the same criteria used in setting up areas of interest indoors and to accomplish the same purposes for child growth and development. Additional storage space for seasonal equipment is desirable.

GUIDE FOR SELECTION OF INDOOR AND OUTDOOR EQUIPMENT AND SUPPLIES

(Suggestions for Administrators and Teaching Staffs)

The equipment listed is intended for one group of 15-20 children in a kindergarten, for either a half day or a full day program. Equipment will need careful selection to suit the particular children, their community and their BIA Kindergarten, the size and availability of indoor and outdoor space, climate, etc.

Understanding how children grow and learn is a basic prerequisite to choosing equipment

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and materials. Concrete experiences with materials and equipment and direct experiences with people precede any learning abstractions which will be needed for handling symbols. Children learn:

- Through direct experiences
- Through active experimentation
- Through manipulation
- Through their five senses
- Through the responses of people.

Children need experiences which:

- Stimulate large muscle activity such as climbing, lifting, pulling, pushing
- Promote cooperative play
- Encourage dramatic play
- Encourage language facility and language development and communication
- Stimulate expression of ideas and feelings
- Foster quiet activities

Equipment, furnishings and materials should be recognized as tools, for the performance of developmental tasks, in daily activities and experiences, that can help the child learn and grow, with feelings of adequacy, accomplishment and joy in himself and his world.

"Things" alone are not adequate teachers or carriers of learning and can never be used as a substitute for the sensitive teaching staff, in the child's imaginative, creative living and learning.

Raw materials and those which children can manage, move and change, such as paints, clay and blocks, contribute more to growth and development and feelings of adequacy and suc-

cess than those fixed, with limited use. Plants and pets to care for, provide opportunities for children to observe and enjoy life processes.

Much equipment can be improvised or constructed, much purchased; much needs to be invented. The most appropriate comes from the ingenuity and interaction of the staff, children and parents living and working together.

It is essential that learning materials be provided that are familiar ("of the family") to the young Indian child, that which is from his world: e.g. cradleboards, sheepskins, brush shelters, hogans, wagons, saddles; books, games, puzzles picturing the community; native crafts - if approved by the community - as well as those which will extend his world.

It is recommended that as far as possible equipment and supplies be constructed by the Indian community and purchased from them.

All equipment must be safe. There must be no sharp edges. Paint on toys must be nonpoisonous. Climbing apparatus is placed on soft dirt, shavings, grass or sawdust. Equipment is constructed simply and carefully.

Equipment should be selected for durability and suitability according to various developmental and age levels, interests and backgrounds of children both as individuals and as a group, and for its adaptability for a variety of uses. It must be the best construction in order to withstand much use, to avoid accidents, and to avoid high repair and replacement expenditures. Variety may be achieved in a program through changing materials frequently. As children's reactions are observed, some materials may be eliminated

and others introduced. A variety of equipment stimulates activity. Varied demands sufficient for the teacher can have the right place at the

Equipment, furnishings should be plentiful and attractive and other readily accessible for such activities as dramatic arts and so on. Materials are in

Furnishings, such as shelving, individual light stackable for play and food, appropriate to assure the development of health and safety living.

Adequate access is provided for clothing and for

Equipment, useful where there is vigorous activity in the world, may differ in doors, but the basic selection and arrangement

INDOOR EQUIPMENT is interchangeable

BLOCK BUILDING AND

Blocks are put at the meeting young children

limited use.
provide oppor-
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ials. Children's reactions are
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and others introduced. Often a rearrangement
of equipment stimulates more constructive
activity. Variety in materials and equipment
demands sufficient storage space so that the
teacher can have "the right things in the
right place at the right time".

Equipment, furnishings and accessory material
should be plentiful, in good repair, clean
and attractive at all times, and a sink or
other readily accessible source of water for
such activities as housekeeping play, crea-
tive arts and science, should be provided.
Materials are introduced as appropriate.

Furnishings, such as tables, chairs, low open
shelving, individual lockers for belongings,
light stackable cots and accessory equipment
for play and food service, should be accessi-
ble, appropriate in size, and designed to
assure the developmental needs, comfort,
health and safety of each child in his daily
living.

Adequate accessible storage space should be
provided for cots, extra supplies, emergency
clothing and for teachers' belongings.

Equipment, useful in an outdoor environment
where there is greater opportunity for vig-
orous activity and contact with the physical
world, may differ from that developed for in-
doors, but the basic purposes, criteria for
selection and arrangement, remain the same.

INDOOR EQUIPMENT BY AREA OF INTEREST (Much
is interchangeable with outdoor)

BLOCK BUILDING AREA

Blocks are put at the head of the list for
meeting young children's learning and de-

velopmental needs by most experienced teachers. Through use of blocks some of the skills developed and needs met include:

- Visual perception
- Skill in classification and categorizing
- Social skills in adjusting child's needs to others, in exchanging ideas
- Opportunity for self direction
- Development of spatial numerical concepts (mathematics beginning)
- Development of language skills as needs expressed, achievements explained
- Development of eye-hand coordination
- Opportunity for dramatic play, planning, creating, reliving experiences, mapping, for seeking information for dramatic play in books, "a reading readiness and social studies program."



Hardwood blocks with natural finish give the best and longest service. The basic block has proportions of 1:2:4. All others are either multiples or divisions of the unit related to it in width, thickness and length. A unit block measures 1 3/8 in. x 2 3/4 in. x 5 1/2 in.

Equipment:

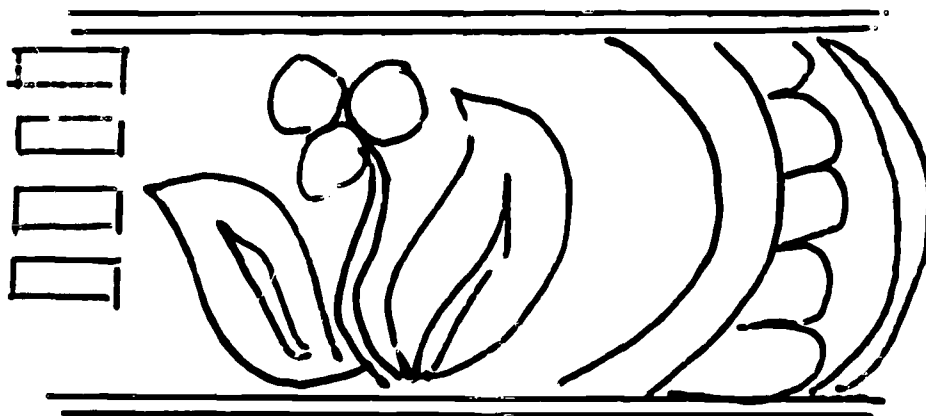
Quantity

Solid unit blocks

Unit.....	1	3/8 in. x 2 3/4 in. x 5 1/2 in.....	110 to
Half unit.....	1	3/8 in. x 2 3/4 in. x 2 3/4 in.....	70 to
Double unit.....	1	3/8 in. x 2 3/4 in. x 11 in.....	156 to
Quadruple unit.....	1	3/8 in. x 2 3/4 in. x 22 in.....	120 to
Small pillar.....	1	3/8 in. x 1 3/8 in. x 2 3/4 in.....	24 to
Large pillar.....	1	3/8 in. x 1 3/8 in. x 5 1/2 in.....	12 to
Small column.....	1	3/8 in. diameter x 5 1/2 in.....	16 to
Large column.....	2	3/4 in. diameter x 5 1/2 in.....	16 to
Small triangle.....	1	3/8 in. x 2 3/4 in. x 2 3/4 in.....	24 to
Large triangle.....	1	3/8 in. x 2 3/4 in. x 5 1/2 in.....	24 to
Quarter circle.....	1	3/8 in. x 2 3/4 in. x 7 3/4 in.....	12 to
curve			

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Quantity

in. x 2 3/4 in. x 5 1/2 in.....	110 to 200
in. x 2 3/4 in. x 2 3/4 in.....	70 to 80
in. x 2 3/4 in. x 11 in.....	156 to 200
in. x 2 3/4 in. x 22 in.....	120 to 180
in. x 1 3/8 in. x 2 3/4 in.....	24 to 40
in. x 1 3/8 in. x 5 1/2 in.....	12 to 16
in. diameter x 5 1/2 in.....	16 to 24
in. diameter x 5 1/2 in.....	16 to 24
in. x 2 3/4 in. x 2 3/4 in.....	24 to 30
in. x 2 3/4 in. x 5 1/2 in.....	24 to 30
in. x 2 3/4 in. x 7 3/4 in.....	12 to 16

Elliptical curve.....	1	3/8 in.	x	2 3/4 in.	x	13 3/4 in.....	12 to 16
Quarter circle.....	1	3/8 in.	x	2 3/4 in.	x	2 3/4 in.....	8 to 20
Half circle.....	1	3/8 in.	x	1 3/8 in.	x	2 3/4 in.....	4 to 8
Small buttress.....	1	3/8 in.	x	1 3/8 in.	x	4 in.....	8 to 14
Large buttress.....	1	3/8 in.	x	2 3/4 in.	x	5 1/2 in.....	4 to 8
Ramp.....	1	3/8 in.	x	2 3/4 in.	x	5 1/2 in.....	12 to 16
Large switch.....	1	3/8 in.	x	8 1/4 in.	x	11 in.....	4 to 6
Small switch.....	1	3/8 in.	x	5 1/2 in.	x	8 1/4 in.....	4 to 8
Arch.....	1	3/8 in.	x	2 3/4 in.	x	5 1/2 in.....	4 to 8
Half arch.....	1	3/8 in.	x	2 3/4 in.	x	5 1/2 in.....	4 to 8
Roof board.....		3/8 in.	x	2 3/4 in.	x	11 in.....	32 to 40
Floorboards.....		3/8 in.	x	2 3/4 in.	x	22 in.....	20 to 30

Total 23 shapes

700 to 1,022

3 Storage shelves 48" x 38 1/4 in. x 12 in. divided in sections.

Supplies: Accessories, Basic

	Quantity
Miniature family, community figures, including doctor and nurse, animals (appropriate to locale), wood or rubber	2 dozen or more
Boats, airplanes, trucks, cars, buses, wagons, (appropriate to locale, scaled to unit block size)	8 to 10 of each
Interlocking trains (wood)	2 sets
Miniature train and track set (Skaneateles)	1 set
Color cubes	Box of 100
Material, solid colors, washable, 1 yard square	4 - 5
Heavy twine, string	Several lengths

Additional Accessories¹.

Samples of tiles, linoleum squares, rugs. Children like to cover floor areas and walls of buildings with them, and enjoy making decorative patterns.

Shells, such as scallop or clam shells: they can be used for "plates" when a child builds a restaurant (with food made of plastecene); or again for decorative purposes.

Pebbles, small stones, little sticks for "cargo" on trains, boats and trucks. Children can collect these on walks to a nearby park.

Variety of small containers. They come in handy for all sorts of things, such as keeping "money" in a "store", providing water for animals in a farm or zoo, etc.

Variety of lumber scraps, especially flat pieces for roofs, wide bridges, etc.

Furniture. Very simple furniture can be made at the woodworking bench. (Commercially bought furniture is either very expensive or very flimsy!) Children, however, should also be shown how to improvise furniture out of the blocks themselves.

Familiar signs such as "one way," "stop", "school crossing", "bus stop", etc.

Popsickle sticks (for attaching signs, for making fences - they will stand up if stuck into a small piece of plastecene).

Thin pieces of rubber tubing. Tacked to a cylinder block, you can make a simple gas pump. Children will think of other uses.

Excelsior makes good hay for farm animals.

Red, white, pill contain hospital. is also popular to have scrub cover the p

Trees can be draw a tree a popsicle of plastecene

Pulleys, wonderful "elc

Drycell battery with 5

Any old picture has switched placed in e.g., or a will be used ways.

Save magazines constructi shirtboard for individuali fication w have seen. block area

Children 1 buildings. stored in again and some of the ing activi

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make a simple gas pump.
other uses.

ay for farm animals.

Red, white, or black beans put into plastic
pill containers can serve as medicine in a
hospital. (Colored water in small bottles
is also popular for this purpose.) Be sure
to have scraps of fabric so children can
cover the patients lying in bed!

Trees can be made very simply: let the child
draw a tree, cut it out, then staple it to
a popsicle stick and stick it into a piece
of plastecene so it will stand up.

Pulleys, with ropes and containers, make won-
derful "elevators".

Drycell batteries with lights are most popu-
lar with 5 year old boys.

Any old piece of machinery, especially if it
has switches, or knobs that turn, can be
placed in the blockcorner. An old TV antenna,
e.g., or a broken clock, earphones or radio,
will be used by the children in countless
ways.

Save magazine pictures of bridges, roads,
constructions, city scenes and mount them on
shirtboards or oaktag. Have them available
for individual children who may need clar-
ification when reconstructing something they
have seen. Display them on the walls of the
block area if your layout permits this.

Children love to have signs written for their
buildings. If these signs can be saved and
stored in a simple manner, they can be used
again and children may begin to recognize
some of them. This is an excellent pre-read-
ing activity.

Five-year olds are very capable and indepen-
dent. If manilla and colored construction
paper, a few crayons, scissors, masking tape,

and string are always available in or near the blockcorner, the children will begin to make their own signs, draw trees, people and other things they need, and use their imagination in a constructive, purposeful way.

Note: The above list is meant to be simply suggestive. Obviously, no teacher will ever put all these accessories out at once. However, the larger your supply of odds and ends, the better you will be able to help the children in the blockcorner when they begin to need accessories for specific purposes.

1 Blockbuilding - Maja Apelman, Bank Street College of Education.

MUSIC RHYTHMS DANCE AREA

Equipment:

	<u>Quantity</u>
Drums	2
Record player	1
Records, carefully selected	25-30
Rack for records	1
Open shelving, 12" x 30" x 48"	

Supplies:

Improvised instruments (see Louis Ballard "Music Education Syllabus")
 Materials for Rhythms (see Miriam Stecker "Rhythmic Movement as a Tool for Learning")

WOODWORKING AREA

Working with wood and simple tools with adequate supervision will provide experiences which help children to develop hand-eye coordination. Wood is also an art medium and

alone as with additional creat

Equipment:

Work bench 22"
 Tool board
 Table 21" x 24"

Tools:

Brace, ratchet
 Bits, 1/4", 1/
 Hammer, carpen
 Hand file, med
 Pliers, 6"
 Saw, 16" cross
 Screwdriver, f
 Square, Tri 6"
 C Clamp 4"
 Open shelving

Supplies:

Nails, assorted
 Wood, soft pine
 1/2" x 1/2" x
 6" x 1/2" x 36
 2" x 2" x 36"
 Wire
 Roofing tins
 Wheels
 Muffin tins for
 Magnets
 Screws
 Dowels - assort
 Carpet tacks (1
 Corks
 Cup hooks (box)
 Rope and string
 for hinges

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Maja Apelman, Bank Street
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	<u>Quantity</u>
	2
	1
selected	25-30
	1
x 30" x 48"	

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 Syllabus")
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 nt as a Tool for Learning")

and simple tools with ade-
 will provide experiences
 n to develop hand-eye coor-
 also an art medium and

alone as with other materials can provide ad-
 ditional creative experiences.

Equipment:

	<u>Quantity</u>
Work bench 22" x 42" top	1
Tool board	1
Table 21" x 24" x 24"	1

Tools:

Brace, ratchet	1
Bits, 1/4", 1/2"	1 each
Hammer, carpenter's 13 oz.	3
Hand file, medium	2
Pliers, 6"	2
Saw, 16" crosscut	2
Screwdriver, flat 1 1/4"	3
Square, Tri 6"	1
C Clamp 4"	2
Open shelving 12" x 30" x 48"	1

Supplies:

Nails, assorted sizes	10 lbs or more
Wood, soft pine in assorted sizes:	
1/2" x 1/2" x 36"; 1" x 1/2" x 36";	
6" x 1/2" x 36"; 1" x 1" x 36";	
2" x 2" x 36"; 4" x 1/2" x 36".	Several
Wire	4 balls
Roofing tins	400
Wheels	2 gross
Muffin tins for nails, etc.	4
Magnets	4
Screws	10 dozen
Dowels - assorted sizes	4 dozen
Carpet tacks (box)	8
Corks	40
Cup hooks (box)	48
Rope and string, pieces of leather for hinges	

Paint brushes 1"wide	12
Ice Tea holder with paint jars, for painting woodwork	
Sandpaper (Assorted)	
Elmer's glue	
Dust pan	1
Hand brush, broom	1 each
Aprons to protect children's clothing when painting woodwork	2

HOUSEKEEPING AND FAMILY LIFE PLAY AREA

Play in a housekeeping area enables children to clarify, organize, and practice understandings of what they see and hear in their own environment. Such play is their way of working to understand the roles of men and women as children "bathe the baby", "deliver the milk", "go shopping", or pretend to be the doctor. Language skills flourish, a sense of order can develop, and self-direction and leadership can take place in the housekeeping area. Social studies concepts of self and community are clarified.

Equipment:

	<u>Quantity</u>
Bed, doll Cradle, doll	1 each
Carriage, wood	2
Dish Cabinet	1
Dress Up Unit with Mirror	1
Ironing Board and Iron	1 each
Sink, with large water container, drainboards, shelves for water play	1
Stove, play	1
Table 21" x 24" x 36"	1
Chairs, stacking 12"	4

Supplies: Accessories

For real and play cooking, serving, dishwashing, cleaning, etc. all sturdy, life size (also see cooking)

Plates, cups, sa
forks, spoons
Kettle, creamer,
Plastic mixing b
Serving bowls
Colander, coffee
ladle
Baking tins
Frying pan
Cookie cutters
Towel rack
Egg beaters
Rolling pins
Wooden spoons
Measuring cups a
Small plastic co
dough, etc.
Muffin tins
Double boilers,
Cookie Sheets
Dish cloths
Dish towels
Sponges, brooms,
Plastic aprons,
Tablespoons
Large saucepan 4
Small saucepan 1
Can opener, vege
Paring knife, bu
strainers-large
Potholders
Rubber spatula

Doll Play:

Dolls (Indian ar
Baby, washable,
Wash cloths
Soap dish
Towels
Plastic aprons t
Blanket, doll
Doll nursing bot
Doll clothes

12	Plates, cups, saucers, knives,	6 each
ars, for	forks, spoons	
	Kettle, creamer, sugarbowl	1 set
	Plastic mixing bowls and basins	4
	Serving bowls	4
1	Colander, coffee pot, saucepan,	1 each
1 each	ladle	
s clothing	Baking tins	2
2	Frying pan	1
	Cookie cutters	12
<u>HOME PLAY AREA</u>	Towel rack	4
	Egg beaters	4
a enables children	Rolling pins	4
practice understand-	Wooden spoons	6
hear in their own	Measuring cups and spoons	2
their way of work-	Small plastic containers for salt,	4
s of men and women	dough, etc.	
y", "deliver the	Muffin tins	2
pretend to be the	Double boilers, sifters	2 each
flourish, a sense of	Cookie Sheets	4
of-direction and	Dish cloths	6
in the housekeeping	Dish towels	4
cepts of self and	Sponges, brooms, mops, dustpans	2 each
	Plastic aprons, to protect clothing	4
	Tablespoons	6
	Large saucepan 4 quart with lid	1
	Small saucepan 1 quart with lid	1
	Can opener, vegetable peeler	1 each
	Paring knife, butcher knife,	
	strainers-large and small	1 each
	Potholders	4
	Rubber spatula	3
	<u>Doll Play:</u>	
	Dolls (Indian and other)	
	Baby, washable, older	
	Wash cloths	4
	Soap dish	1
	Towels	6
	Plastic aprons to protect clothing	2
	Blanket, doll	2
	Doll nursing bottle	6
	Doll clothes	Assorted
Quantity		
1 each		
2		
1		
1		
1 each		
tainer,		
water play		
1		
1		
4		
erving, dishwasher-		
urdy, life size		

Dress Up (Including for male role)

Lengths of material (sq. yd.) washable cotton	6
Shoes, hats (for men and women)	Several
Stethoscope	2
Pocket books	Several
Kits of supplies used by fathers in work	Several
Shoe shine box	1
Jewelry	Assorted
Telephones	2
Shopping bags, neck ties, lunch boxes	

Camera, Polaroid

Books and pictures tied and the content experiences and int and illustrated by working together.

LANGUAGE AND LIBRARY AREA

A quiet, attractive area with a small table and chairs, a library rack or open book shelves with inviting books available to the children provides a foundation for interest in reading. The young child needs to handle books, linger over them, look at the pictures, figure out the story sequence from the pictures, and retell the stories to himself. It is a daily need for children to listen to stories in small groups that the teacher or aide or volunteer reads. Children begin to understand that we all learn from books, that we read from the left to the right, that we can guess about the story from pictures and that reading is pleasurable and exciting.

MANIPULATIVE AND QU

Each child needs some ties, sometimes also group. It may be w at a book or playing materials aid child hand coordination, and in visual perce

Equipment:

Tape recorder	1
Typewriter	1
Listening post and headsets	1
Telephones	2
Record player	1
Library display rack	1
Projector	1
Round table and 2 chairs 12"	
Rocking chairs	1

Quantity

Equipment:

Tables
Chairs stacking 12"
Open shelving 12" x

Supplies:

Manipulative materi games:
Picture lotto games other subjects rel experience)
Puzzles, wooden inl lated to child's e 20 pieces
Form boards
Puzzle rack
Hand puppets
Nuts and bolts
Pipe fittings, 3/4" tees, unions, 4" a
Flannel board, with flannel
Hole puncher

or male role)
 sq. yd.) washable 6
 and women) Several
 2
 Several
 by fathers
 Several
 1
 Assorted
 2
 ies, lunch boxes

AREA

rea with a small table
 rack or open book shel-
 ks available to the chil-
 ation for interest in
 hild needs to handle
 em, look at the pictures,
 equence from the pic-
 stories to himself. It
 hildren to listen to stor-
 hat the teacher or aide
 Children begin to under-
 rn from books, that we
 the right, that we can
 from pictures and that
 e and exciting.

Quantity

adsets 1
 1
 1
 2
 1
 1
 1
 1
 1
 1
 1

Camera, Polaroid 1

Books and pictures should be carefully selected and the content related to the children's experiences and interests. Many can be made and illustrated by the children and teachers working together. 50-80

MANIPULATIVE AND QUIET ACTIVITIES AREA

Each child needs some time for quiet activities, sometimes alone and sometimes in a small group. It may be working a puzzle or looking at a book or playing with hand puppets. Such materials aid children in development of eye-hand coordination, in spatial relationships, and in visual perception.

Equipment:

Quantity

Tables 2
 Chairs stacking 12" 8
 Open shelving 12" x 30" x 48" 2

Supplies:

Manipulative materials, table games:
 Picture lotto games (animals and other subjects related to child's experience) 4
 Puzzles, wooden inlay (subject related to child's experience) 12 to 20 pieces 10-12
 Form boards 6-8
 Puzzle rack 1
 Hand puppets Set of 5
 Nuts and bolts 15-20
 Pipe fittings, 3/4" pipe, elbows, tees, unions, 4" and 6" nipples Assortment
 Flannel board, with pieces of flannel 1
 Hole puncher 1 or 2

Scraps of different colors and textures, e.g., fur, wool, velvet, etc.
 Miniature furniture and family sets 2 each

SCIENCE AREA

Equipment:

Quantity

Aquarium	1
Terrarium	1
Cage for animals	1
Open shelving 12" x 30" x 48"	

Supplies:

Magnifying glass	4
Magnets, horseshoe, bars, each	4
Prisms	2
Dry cell batteries	4
Bell, light, switch	2-4
Balance board with fulcrum about 6" high	1
Balance scale 1 or 2 oz. weights	1
Large thermometer	1
Flower pots (small)	1 per child
Seeds and bulbs	Assorted
Watering can	1
Water play - corks, wood, small boats	Assorted
Large and small funnels	2 or 3
Rubber tubing 1/2"	3 ft.
	(approximately)
Measuring cup	2 or 3
Fish and turtles	2 or 3
Animals, pets	Several
Photography tray, (large) plastic	1

CREATIVE ARTS AREA

Most early learnings are related to children's sensory experiences. Painting, making dough, or molding clay provides sensory and creative satisfaction to children as well as relieves

ent colors and tex-
 , wool, velvet, etc.
 are and family sets 2 each

Quantity

x 30" x 48" 1
 1
 1
 be, bars, each 4
 4
 2
 4
 2-4
 th fulcrum about 1
 or 2 oz. weights 1
 1
 1) 1 per child
 Assorted
 1
 ks, wood, small Assorted
 funnels 2 or 3
 2" 3 ft.
 (approximately)
 2 or 3
 2 or 3
 Several
 , (large) plastic 1

tension. Language skills, manipulative
 skills, and social skills are by-products of
 art experiences. The purpose of art with
 young children is experimentation, discovery,
 the creative experience itself, the process -
 not a finished product.

Equipment:

Easel, paint, double
 Rack for drying children's
 painting
 Tables 21" x 24" x 36"
 Chairs stacking 12" high
 Open shelving, 2 units each 12"x
 30" x 48"

Quantity
 for 9 months
 approx.

2 2
 2 1
 2
 8
 2

Supplies:

Paints, Tempera, dry, red, blue,
 green, yellow, black, white, brown,
 purple, turquoise, orange.

20 cans
 of red,
 blue,
 green, yel-
 low, 12 cans
 of remainder

Finger paint (can be made with
 starch and tempera paint)

2 cases
 liquid starch

Brushes, long handle, sturdy,
 1/8", 1/2", 1/4", 3/4".

18 or more

EA

ings are related to children's
 ces. Painting, making dough,
 provides sensory and creative
 children as well as relieves

Collage material: odds and ends of cellophane tinfoil, feathers, ribbons, lace, wallpaper, cloth, cotton, felt	
Clay boards (if top of table not used) - masonite	8 of
Paste (can be made)	6 qu
Crayons (1 dozen box) 3/8" diameter	20
Easel paper, ream (newsprint)	8
Glazed shelf paper 16" x 22"	4 rd
Manila paper - 9" x 12" (1 ream) pkg.	16
12" x 18" (1 ream) pkg.	4
Construction paper (Color) 9" x 12" (100 sht. pkg)	14
12" x 18" (100 sht. pkg)	22 1
Finger paint paper (if used)	5 pk
Pipe cleaners (colored assorted sizes)	6 bo
Brown paper (Project roll 24")	3/3
Potter's clay (50 lb. can)	200
Tongue blades	1 bo
Sponges (for cleaning up)	4 do
Soap flakes (Ivory Snow or Flakes, Tide)	2 do
Food coloring - red, blue, green, yellow	1 pi
Paper punch	2
Plastic paint jars with covers	32
Plastic clay pail with cover	1
Plastic containers for finger paint	6
Plastic containers for paste	4
Scissors 6" pointed	12
Scissors (teacher)	1
Colored chalk (large)	2 gr
Crayons	12 b
Magic markers - red, green, blue, black, orange, purple, brown	4 of

s and ends of cellophane
ribbons, lace, wallpaper,
table not used) - masonite

3/8" diameter

sprint)

x 22"

" (1 ream) pkg.

" (1 ream) pkg.

lor) 9" x 12" (100 sht. pkg)

12" x 18" (100 sht. pkg)

used)

assorted sizes)

oll 24")

can)

up)

w or Flakes, Tide)

ue, green, yellow

h covers

cover

finger paint

paste

reen, blue, black, organe,

Variety

8 or 12

6 quarts

20

8

4 rolls

16

4

14

22 1/3

5 pkgs.

6 boxes

3/3

200 lbs.

1 box (500)

4 dozen (2/3 case)

2 dozen boxes - large size

1 pint of each color

2

32

1

6

4

12

1

2 gross

12 boxes

4 of each color.

MISCELLANEOUS

Supplies:

Quantity

Scotch tape, narrow	2 dozen rolls
Masking tape	4 dozen rolls
Stapler and staples	1 per room
Plastic mending tape, 1/2" red, brown, blue, green	3 dozen of each color
Shelf hooks	1 dozen cards (24)
Kleenex	1 case
Thumb tacks	6 boxes per room
Rubber bands	6 boxes per room
Tacks	3 pdgs. per room
Brown paper bags	100
Paper clips	6 boxes, large; 6 boxes,
Yard stick	1 per room
Rulers	3 per room
Tagboard, assorted colors	50 per room
Yarn	Sufficient

FURNITURE AND OTHER EQUIPMENT (also included in Interest Areas)

Equipment:

Basket, waste - round	4
Blanket, cotton, (for full day, one session, with cots for 20 children)	30
*Blender, Osterizer (for chil- dren's cooking experiences)	1
Bulletin Board	1
*Cabinet, storage, open shelv- ing, 2 units each, 12" x 24" x 48", (for creative arts, quiet activities, woodwork, music, housekeeping areas) Where shelving is built in along one wall	3 units
If not	5 units
Cabinet, file, 2 drawer, locked	1
Cabinet, teacher's storage unless built in (for personal belong-	

Quantity

2 dozen rolls
4 dozen rolls
1 per room

red,

3 dozen of each color
1 dozen cards (24)
1 case
6 boxes per room
6 boxes per room
3 pdgs. per room
100
6 boxes, large; 6 boxes, small
1 per room
3 per room
50 per room
Sufficient

NT (also included in Interest Areas and Curriculum Experiences)*

4
1 day,
for 20
30
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1
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helv-
x 24"
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as)
in along
3 units
5 units
1
locked
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belong-

ings, extra supplies)	1
*Camera, Polaroid, including wide lens attachment	1
*Chair, rocking, child (2 for housekeeping area, one for library book area)	3
Chair, rocking, adult	1
Chair, stacking, 12"	20
*Chair, stacking, 18"	4
Cots, aluminum stacking (if full day, one session, 20 children, provide sheets also)	22
*Hot plate - 2 burner, electric skillet, toaster, over rotisserie, refrigerator, small with ice cube maker, electric (for children's cooking experiences in their room)	1 each
*Library unit (for book area)	1
*Projector, slide (if not available in school)	1
Rug, 15' x 12' (depending on size of classroom)	1
*Storage shelves (for blocks) 48" x 38 1/4", divided into sections	3
Storage unit (lockers) 45" x 48" x 15" (to be placed in corridor if possible, for children's clothing and treasures) 4 unit	5
*Table, 21" x 24" x 36" (2 for creative arts; 2 for quiet activities, science; 1 for housekeeping areas)	5
* *Table, round, 30"-60" diameter, 21" high for library-book area	1
*Tables, 21" x 24" x 24", for food service, housekeeping area, other creative needs	2

OUTDOOR, AREAS (One outdoor area to be used alternatively by children.)

EQUIPMENT AND SUPPLIES

For example, saddle, saddle brush shelter, wagon, outdoor horse, etc., natural rock climbing

CLIMBING AND BUILDING

Equipment:

Barrels, Keg 10" x 14"
Blocks, large, hollow, with boards, set

Boards, walking, heavy with cleats, 6'
Climber, junior arcade
Ladder, 4' x 13', aluminum
Sawhorses, 24" high x 24" aluminum or wood
Native rocks, logs, tree stumps
Swings, of rubber tires

Supplies:

1 1/2 yard length of material in colors: black, red, blue, orange washable cotton

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 45" x 48"
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 eeping
 needs 2

OUTDOOR, AREAS (One outdoor playground can be used alternatively by two groups of children.)

EQUIPMENT AND SUPPLIES INDIGENOUS TO CULTURE

For example, saddle, sheep skins, hogan, brush shelter, wagon, outdoor oven, stick horses, etc., natural rocks, logs, trees for climbing

CLIMBING AND BUILDING

Equipment:

Quantity

Barrels, Keg 10" x 14"	8
Blocks, large, hollow, wood, with boards, set	28 squares; 16 double squares; 16 half squares; 4 ramps 8 boards 5/8" x 22"; 8 boards 3/4" x 5 1/2" x 44"
Boards, walking, heavy duty with cleats, 6'	6
Climber, junior arcade	1
Ladder, 4' x 13', aluminum	5
Sawhorses, 24" high x 24" wide, aluminum or wood	8
Native rocks, logs, tree trunks	Several
Swings, of rubber tires	3 or 4

Supplies:

1 1/2 yard length of material of solid colors: black, red, blue, green, yellow, orange washable cotton

Train signals
 Caps - engineer, fireman, cowboy
 Lengths of rope
 Large tube (for gas)
 Dowel sticks for pieces of material
 Bells attached to wood
 Wheel (steering)
 Ticket punch - paper for tickets

SAND PLAY

Equipment:

Sand pit, 15' x 15'
 Storage for sand toys

Supplies:

Sand
 Interlocking trains
 Tug boats (flat bottom)
 Roofing boards, flat
 pieces wood, assorted
 shapes and sizes
 Sieves
 Strainers, heavy colored
 plastic
 Colanders, heavy colored
 plastic
 Jello molds
 Muffin tins
 Sugar scoops
 Pails and shovels
 Wooden bowls and spoons
 Butter molds (big)
 Painted cans
 Pots and pie pans

HOUSEKEEP

Supplie

Clothes
 Line
 Soap (c
 Materia
 Dolls
 Tubs an
 Waterpr

SCIENCE,

Equipme

Wooden
 Prisms
 Magnets
 Magnify
 Jars fo
 Small n
 Binocul
 Blanket
 Books
 Musical
 Bells,
 Tuning
 Others,

WATER PLA

Supplie

Length
 Funnel
 Boats,
 Corks
 Wood
 Straws
 Cans w
 Large

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boys

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colored

colored

poons

HOUSEKEEPING AND LAUNDRY

Supplies:

Clothes pins
Line
Soap (cake)
Material to wash, and to wrap dolls in
Dolls
Tubs and washboards
Waterproof aprons

SCIENCE, QUIET ACTIVITIES, MUSIC

Equipment and Supplies:

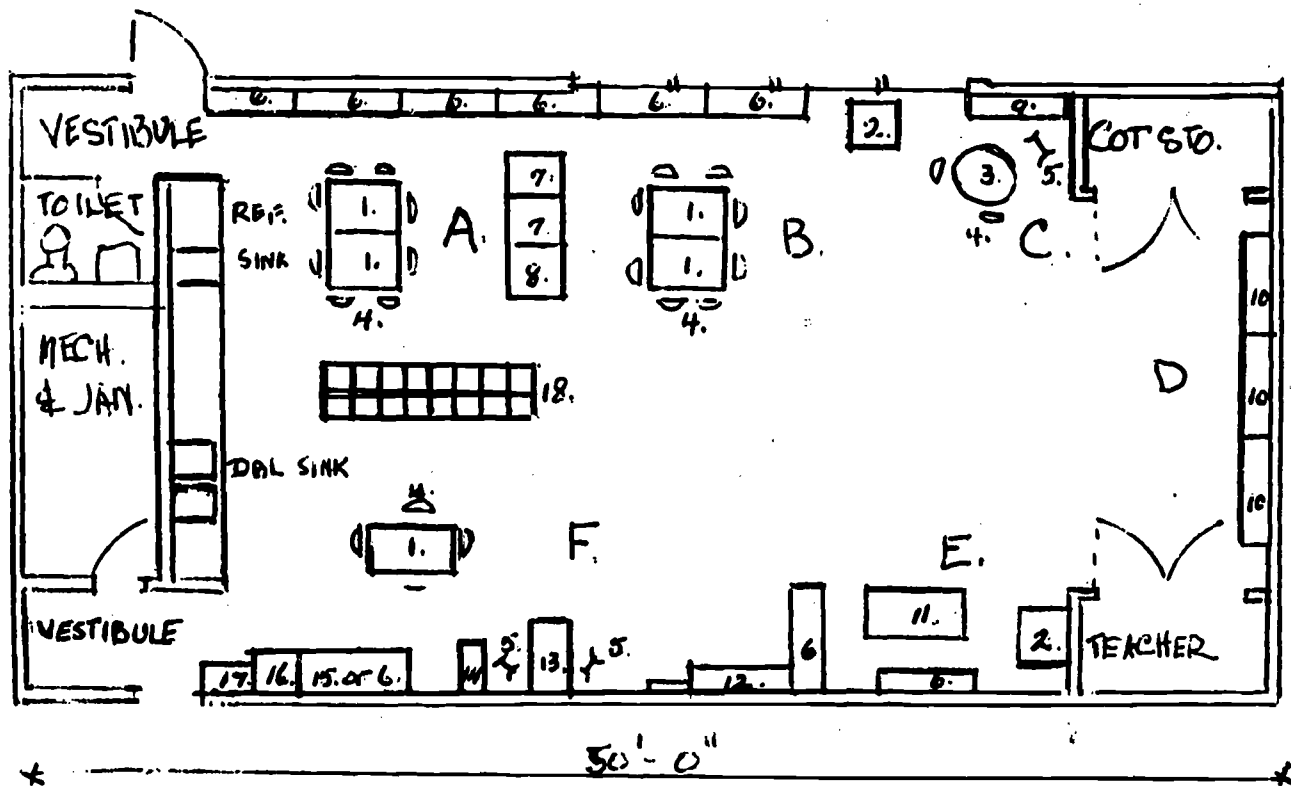
Wooden box with top
Prisms
Magnets, nails, screws, locks
Magnifying glass
Jars for worms, flies, butterflies, etc.
Small net to catch them with
Binoculars
Blanket
Books
Musical Instruments
Bells, Big drum
Tuning fork
Others, improvised

WATER PLAY, EXPERIMENTAL

Supplies:

Lengths of tubing or hose (different sizes)
Funnels (different sizes)
Boats, small (in box)
Corks
Wood
Straws for blowing bubbles
Cans with holes punched in bottom
Large tubs

ONE ILLUSTRATION OF PRINCIPLES, IN PLANNING USE OF SPACE AND ARRANGEMENT OF EQUIPMENT AND SUPPLIES, INDOORS



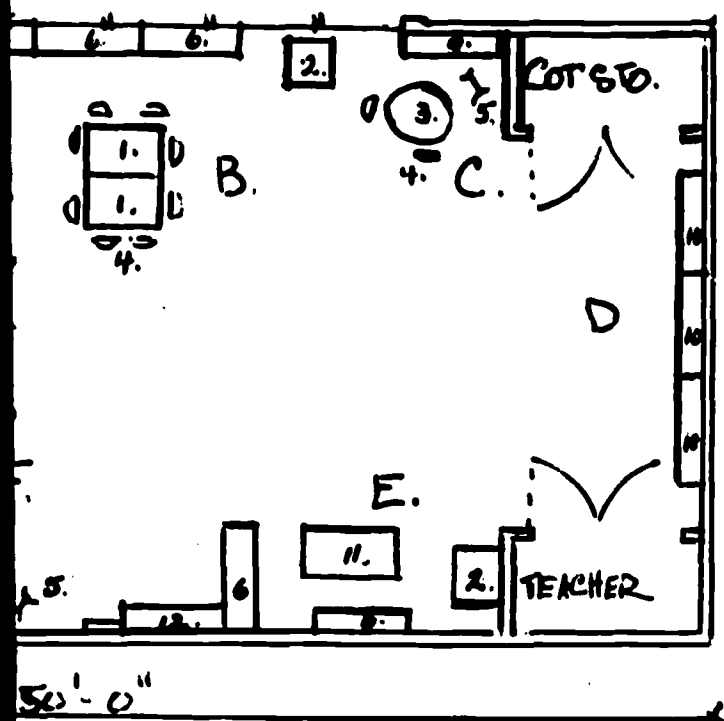
- AREAS
- A. C
 - B. S
 - C. L
 - D. B
 - E. W
 - F. H

- EQUIP
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 - 5. C
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 - 12. D
 - 13. D
 - 14. C
 - 15. S
 - 16. S
 - 17. D
 - 18. Ch

FLOOR PLAN
1/8" = 1'-0"

Food se
at tab

**S, IN PLANNING USE OF SPACE
AND SUPPLIES, INDOORS**



AREAS

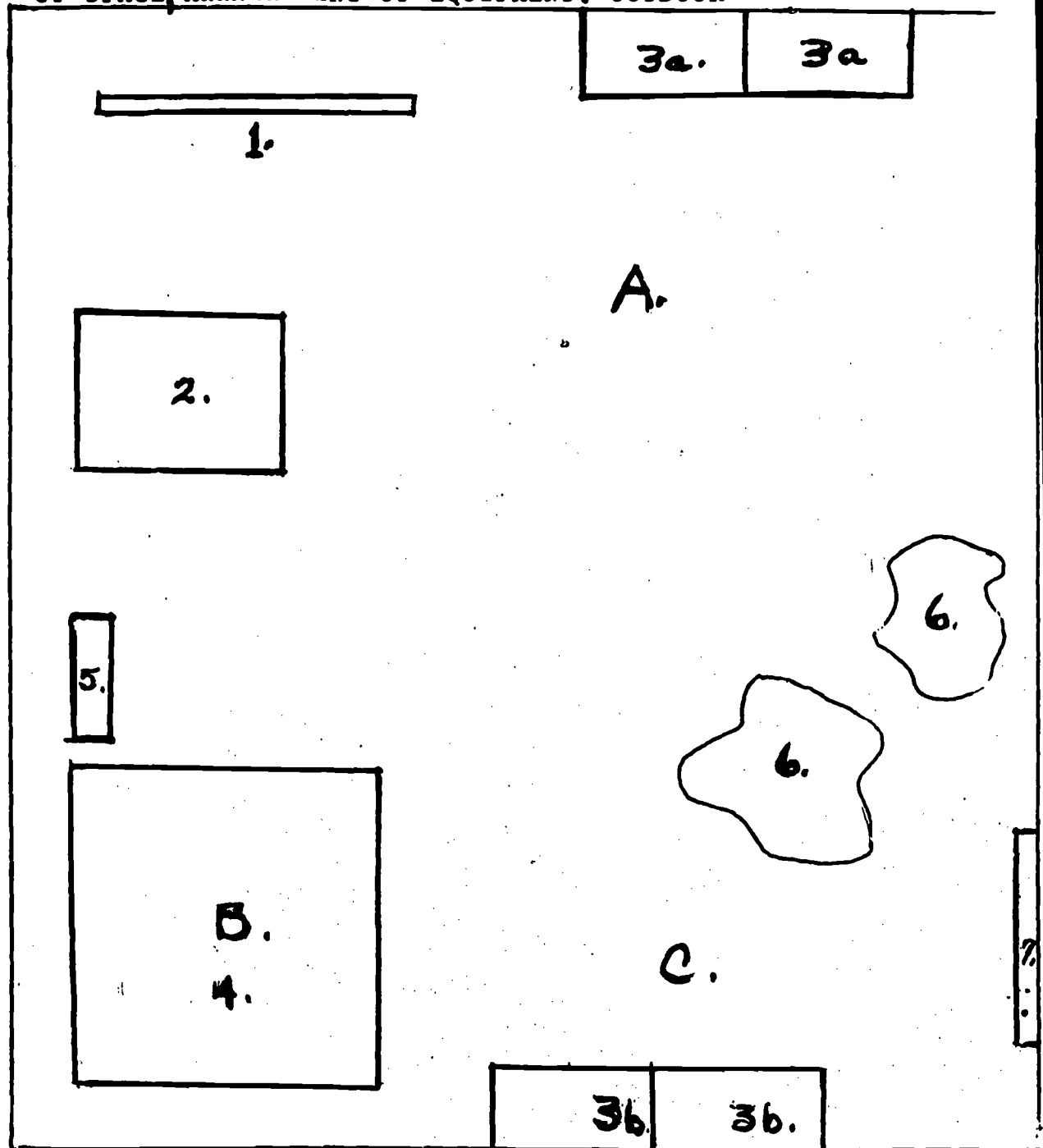
- A. Creative Arts
- B. Science and Manipulative Equipment
- C. Language - Library, Music
- D. Blocks
- E. Woodwork
- F. Housekeeping Family and Community Life.

EQUIPMENT

- 1. Table, 36" x 24" x 21"
- 2. Table, 24" x 24" x 21"
- 3. Table, round with chairs
- 4. Chairs, 12" stacking
- 5. Chairs, 12" rocking
- 6. Open shelving, 48" x 30" x 30" 48" x 30" x 12" (2 shelves high)
- 7. Easels, double
- 8. Rack for drying children's paintings
- 9. Library display unit
- 10. Open shelving, blocks, 48" x 42" x 12" (3 shelves high)
- 11. Woodwork bench
- 12. Dress up unit, full length mirror
- 13. Doll bed
- 14. Cradle
- 15. Sink (play) (or shelving 48" x 30" x 12")
- 16. Stove
- 17. Dish cabinet
- 18. Children's lockers

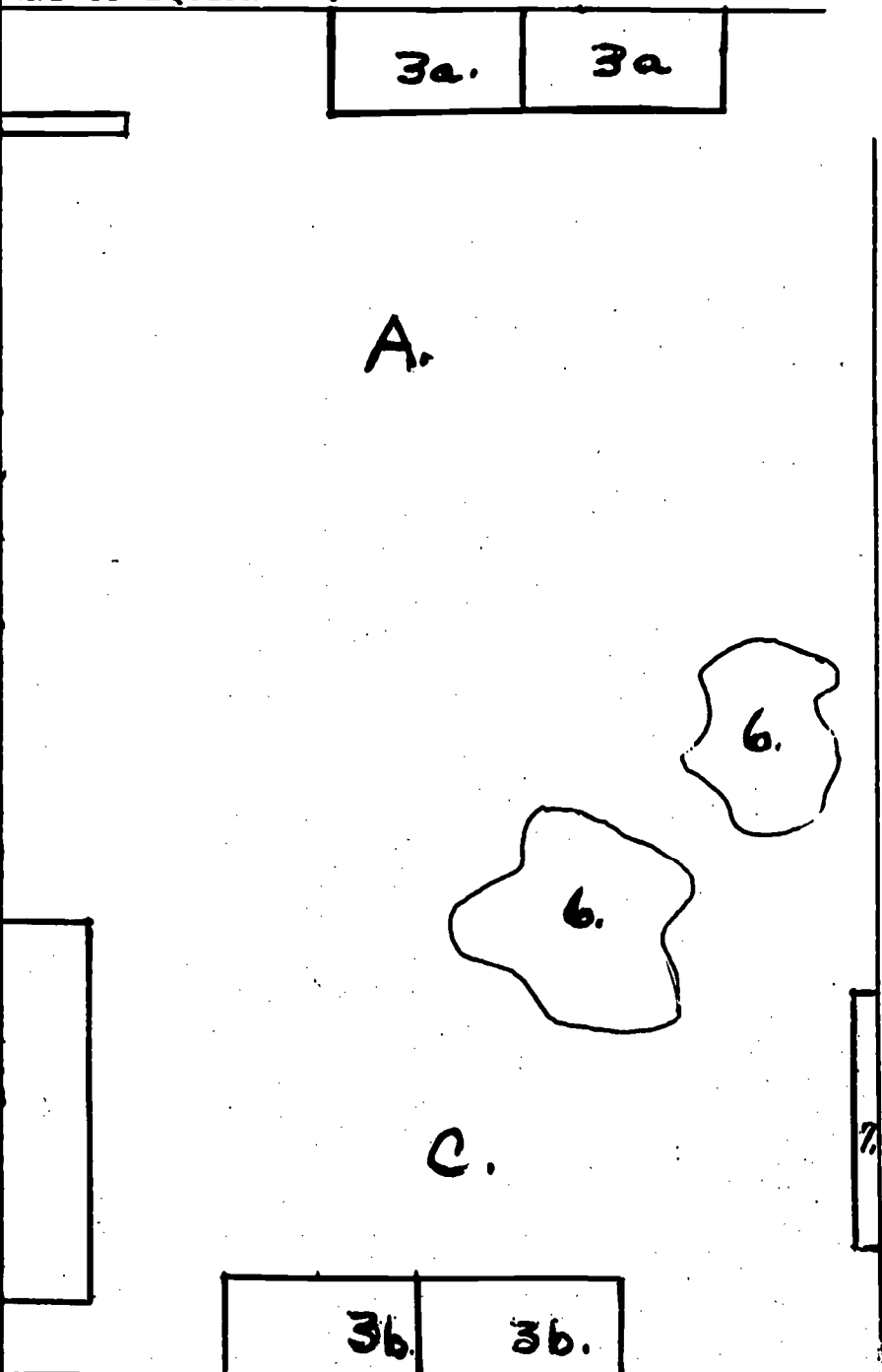
Food service family style at tables in Areas

ONE ILLUSTRATION OF PRINCIPLES IN PLANNING USE OF SPACE, ARRANGEMENT OF EQUIPMENT, OUTDOOR



Scale $\frac{1}{8}'' = 1'-0''$, 4000 ϕ

**PRINCIPLES IN PLANNING USE
OF EQUIPMENT. OUTDOOR**



AREAS

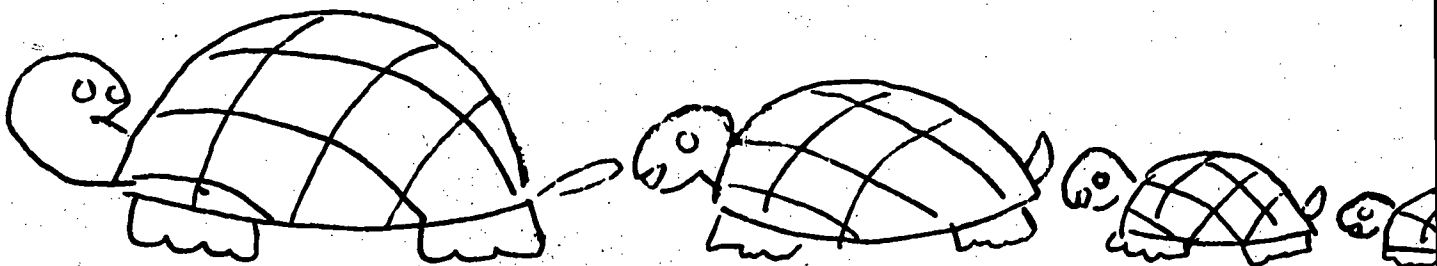
- A. Climbing, Sliding, Balancing, Swinging
- B. Sand - Work - Play
- C. Block Building, House-keeping, Painting, Quiet Activities

EQUIPMENT

- 1. Swings (old tires)
- 2. Climber
- 3a. Storage boxes for boards, saw horses, wheel toys, ladders, accessories
- 3b. Storage boxes for hollow blocks, play boards, kegs, accessories
- 4. Sand box
- 5. Storage for sand toys
- 6. Structures indigenous to Indian community
- 7. Easels

PLANS, SPECIFICATIONS AND IDEAS FOR CONSTRUCTION OF EQUIPMENT AND SUPPLIES

Storage Boxes - Outdoor Equipment
Climber, and Double Slide
Sawhorses, Large
Crates, large and steps
Work bench - Carpentry - Sawhorse
Jumping board
Outdoor, double easel
Indoor, double easel
Outdoor sandbox with hinged top
Sand toy cupboard
Ironing Board, play
Children's lockers
Shelving for Equipment, short
Shelving for Equipment, long
Stuffed toys: rag doll, caterpillar
horse, pig, turtle, butterfly, head
for stick horse.

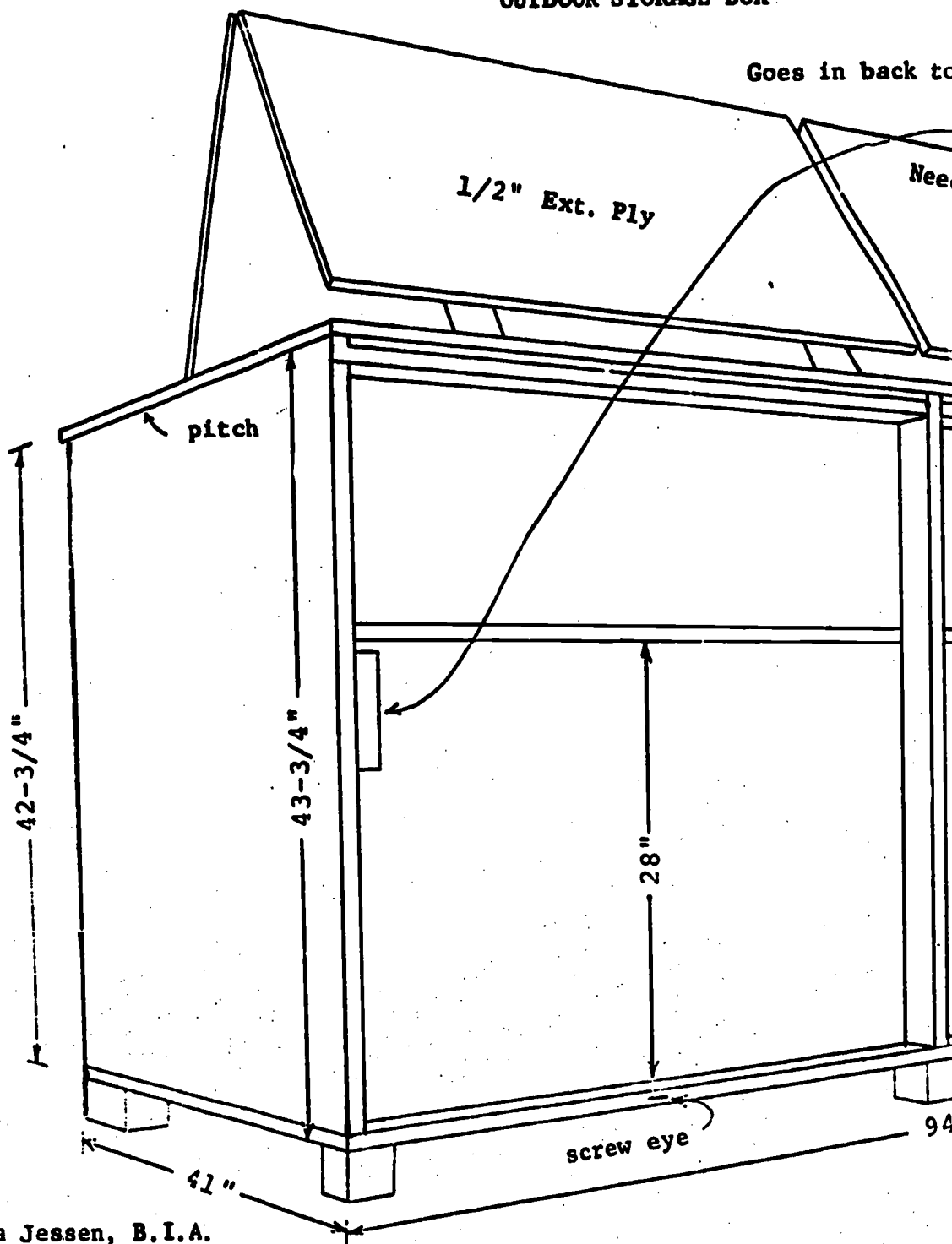


OUTDOOR STORAGE BOX

Goes in back to

Need

1/2" Ext. Ply



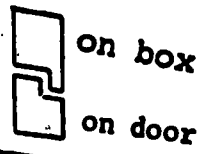
Mariana Jessen, B.I.A.

OUTDOOR STORAGE BOX

Goes in back to hold door on this piece. e.

1/2" Ext. Ply

Need 2 pieces



ch

43-3/4"

28"

94"

screw eye

1/4" floor flange (2)

1 1/4" x 3 nipple pipe

STORAGE FOR OUTDOOR EQUIPMENT

Storage Boxes - with locked fronts, 2 doors hinged on top*
or could be hinged from side and top and bottom shelves.

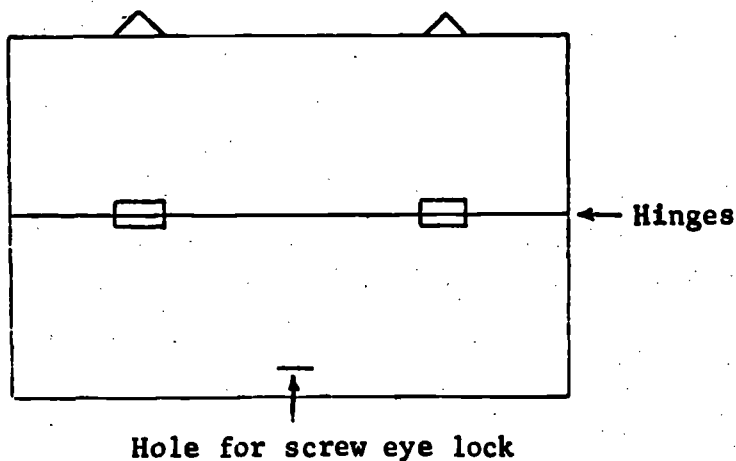
Dimensions - (see photograph)

Materials Needed

- 4 pc. 2 x 3 90 1/2" for top and bottom
- 4 pc. 2 x 3 42 3/4" for back
- 4 pc. 2 x 3 39 3/4" for top and bottom cross piece
- 2 pc. 2 x 3 43 3/4" for front
- 2 pc. 3/4" exterior ply for sides, 39 3/4" x 43 3/4"
- 1 pc. 3/4" exterior ply for back, 42 3/4" x 94"

Bottom and top shelf 1 x 12 white pine or plywood also 12 - 1 1/4
floor flanges - 6 - 1 1/4" pipe nipples 1 pc. galvanized sheet
metal or tar paper for top 42" x 96"

2 doors - 4 pcs. 1/2 ply from sheet 4' x 8' Sheet metal corner
2 x 2 for strength on back.

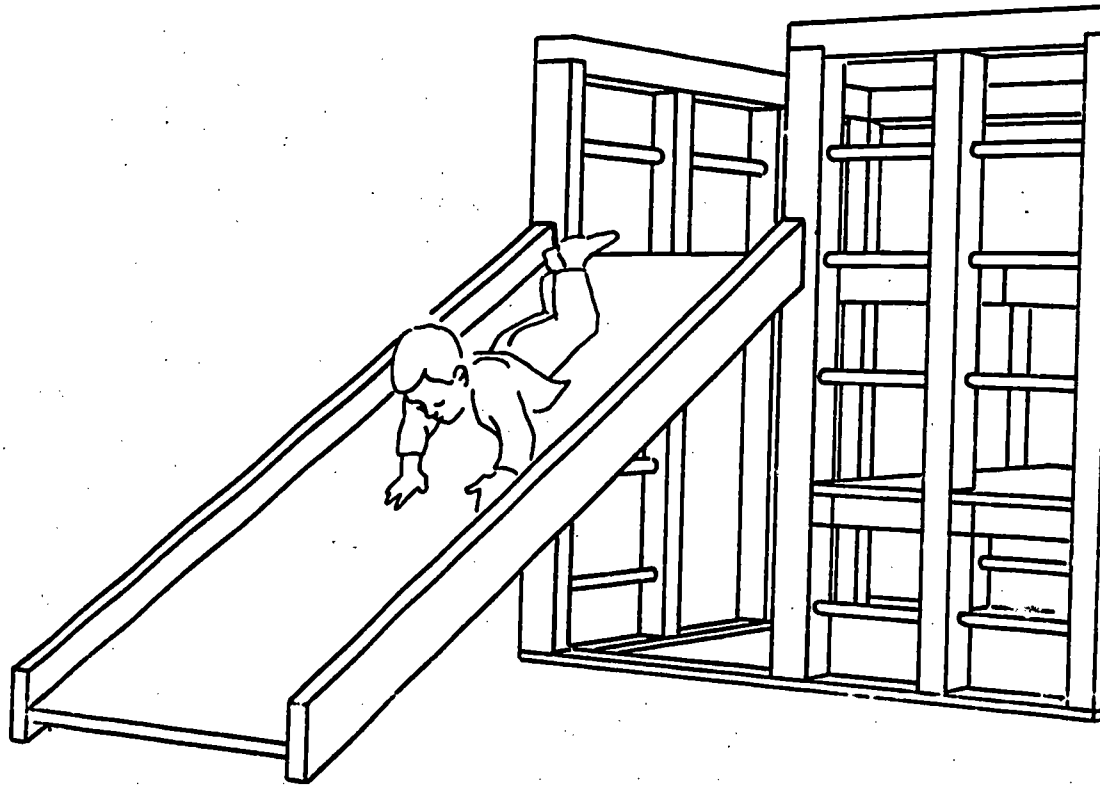


*Front hinged on top

Designed by Mariana Jessen

CLIMBER AND DOUBLE SLIDE

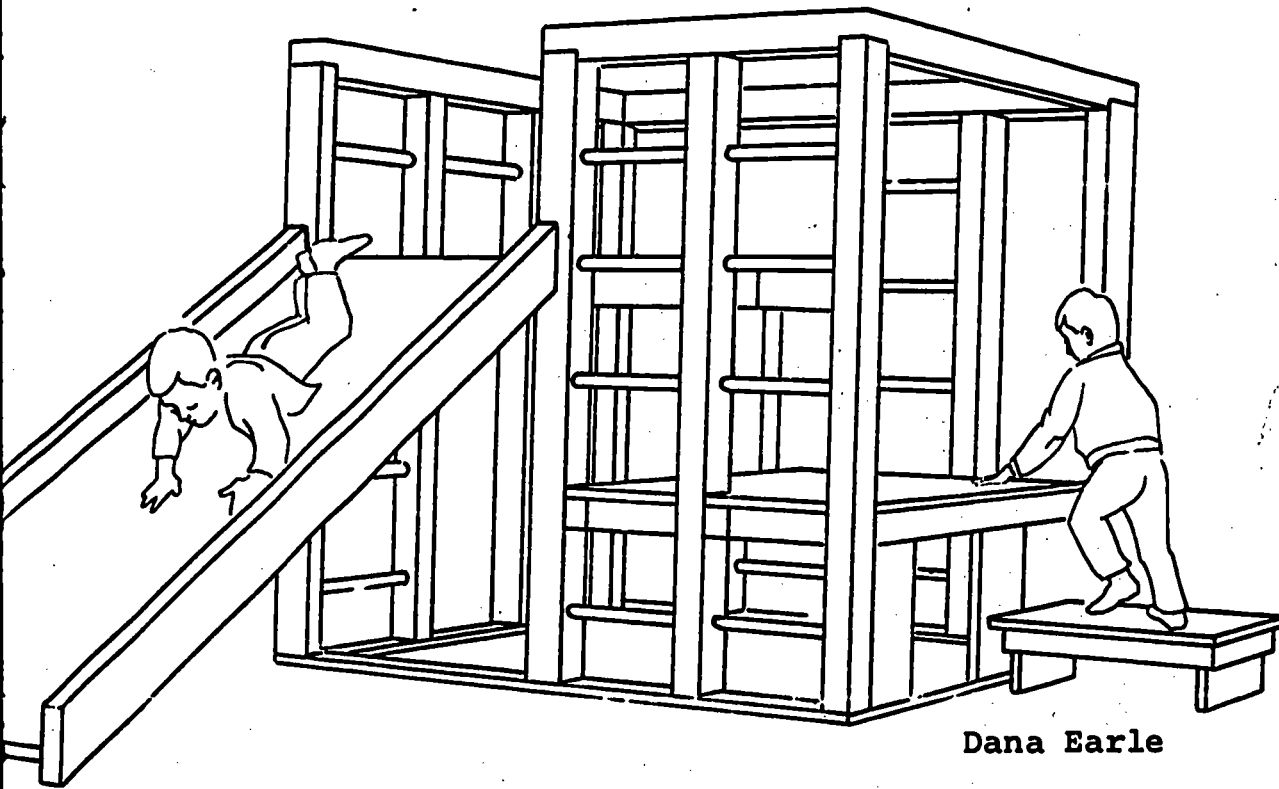
Back Side



Designed by:
Dorotuy Levens, Director, Vassar College Laboratory Nursery School
A roof or protective structure should be added in hot climates

CLIMBER AND DOUBLE SLIDE

Back Side



Dana Earle

Director, Vassar College Laboratory Nursery School, Poughkeepsie, New York
The structure should be added in hot climates.

Platform Climber with Double Slide

designed by -- Dorothy
Vassar Collee
School
Poughkeepsie

Dimensions:

• 5'8" high - 6' x 6' overall. All uprights and base are dressed fir 4" x 4"s. The base is placed on a foundation of brick. The climber is finished with a wood preservative and two coats of marine varnish. The metal rungs are painted with aluminum paint.

Lower Platform:

1' 10" from the ground
6' long, 3'2" wide
Boards (Arkansas pine 1" x 4")

Upper Platform:

2' from lower platform
Same length and width

Two Lower Crawl Spaces without Rungs

17" x 17" x 17"

Galvanized Pipe Rungs

3/4" pipe
11" between all rungs
Back side rungs: 17"
Two side rungs: 13-1

Permanent Double Slide

Galvanized sheet iron slide bed

7'6" long
2'7" wide

Metal sides: 6" high, 1-3/4" wide
Slide attached to top platform 3'7" from ground

Platform Climber with Double Slide

designed by -- Dorothy Levens, Director
Vassar College Laboratory Nursery
School
Poughkeepsie, New York

overall. All uprights and
r 4" x 4"s. The base is
ion of brick. The
with a wood preservative
rine varnish. The metal
ith aluminum paint.

Upper Platform:

2' from lower platform
Same length and width as lower platform

und
ne 1" x 4")

Planks without Rungs

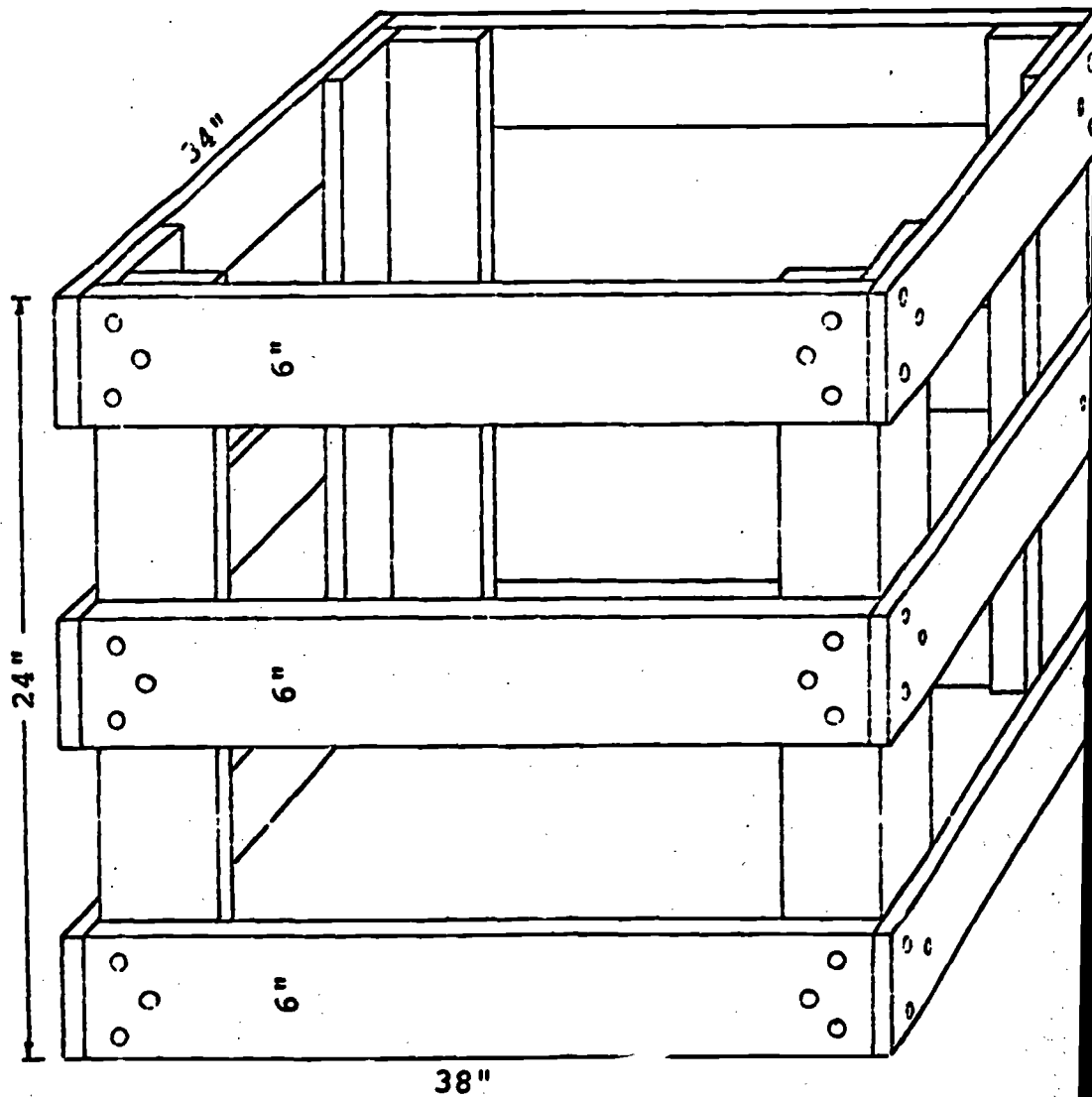
Galvanized Pipe Rungs

3/4" pipe
11" between all rungs
Back side rungs: 17" long
Two side rungs: 13-1/2" long

ide
on slide bed

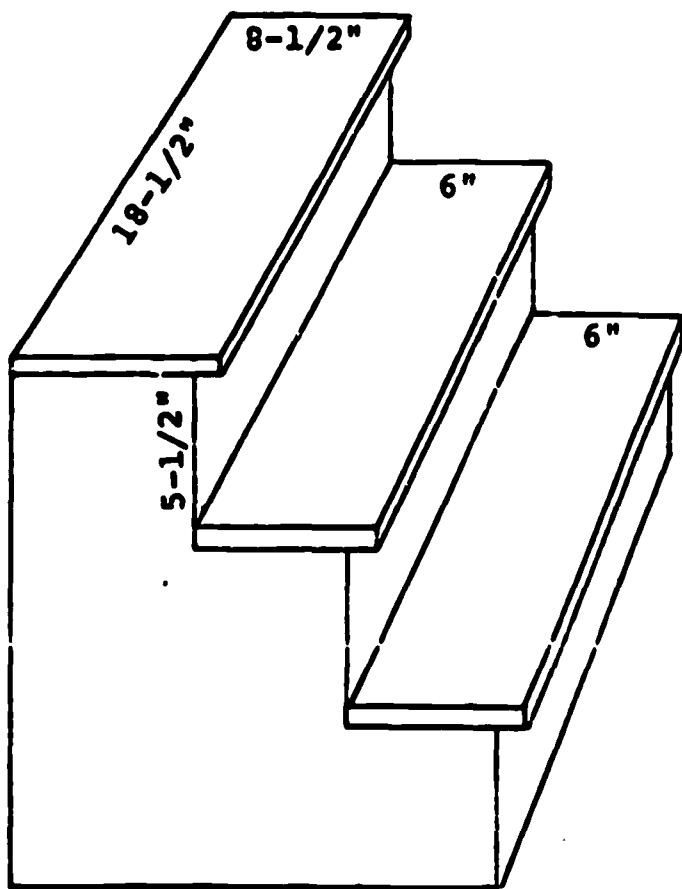
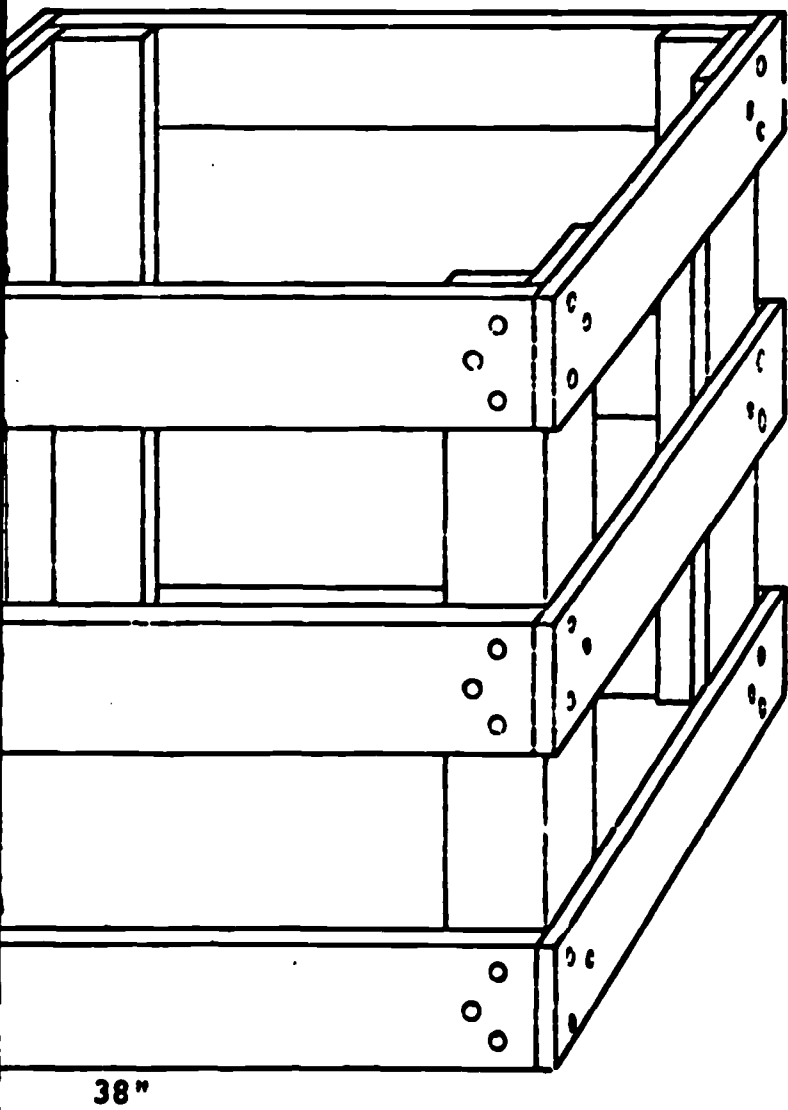
gh, 1-3/4" wide
op platform 3'7" from ground

LARGE CRATE AND STEPS

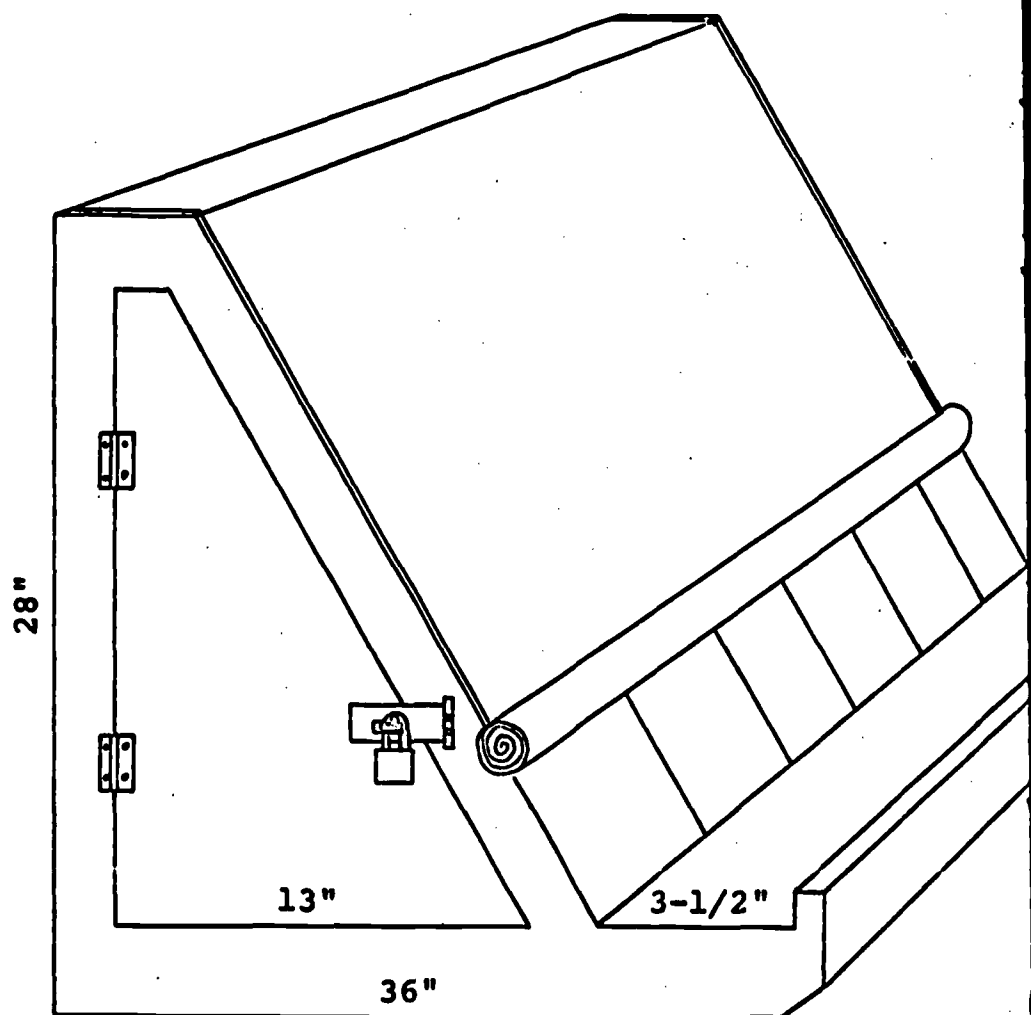


Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, Po

LARGE CRATE AND STEPS



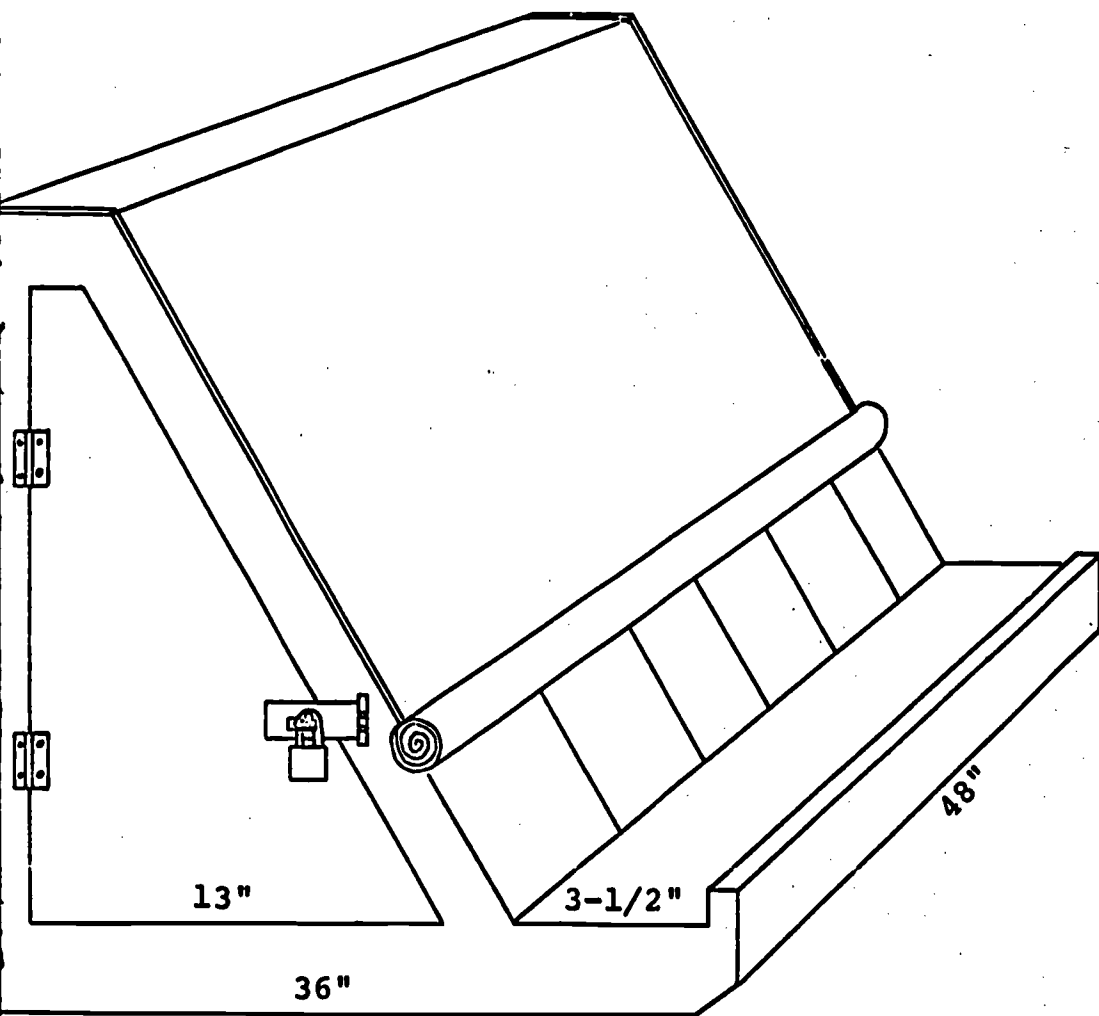
OUTDOOR EASEL



Plywood - (all weather)

Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, Poughkeepsie, N.Y.

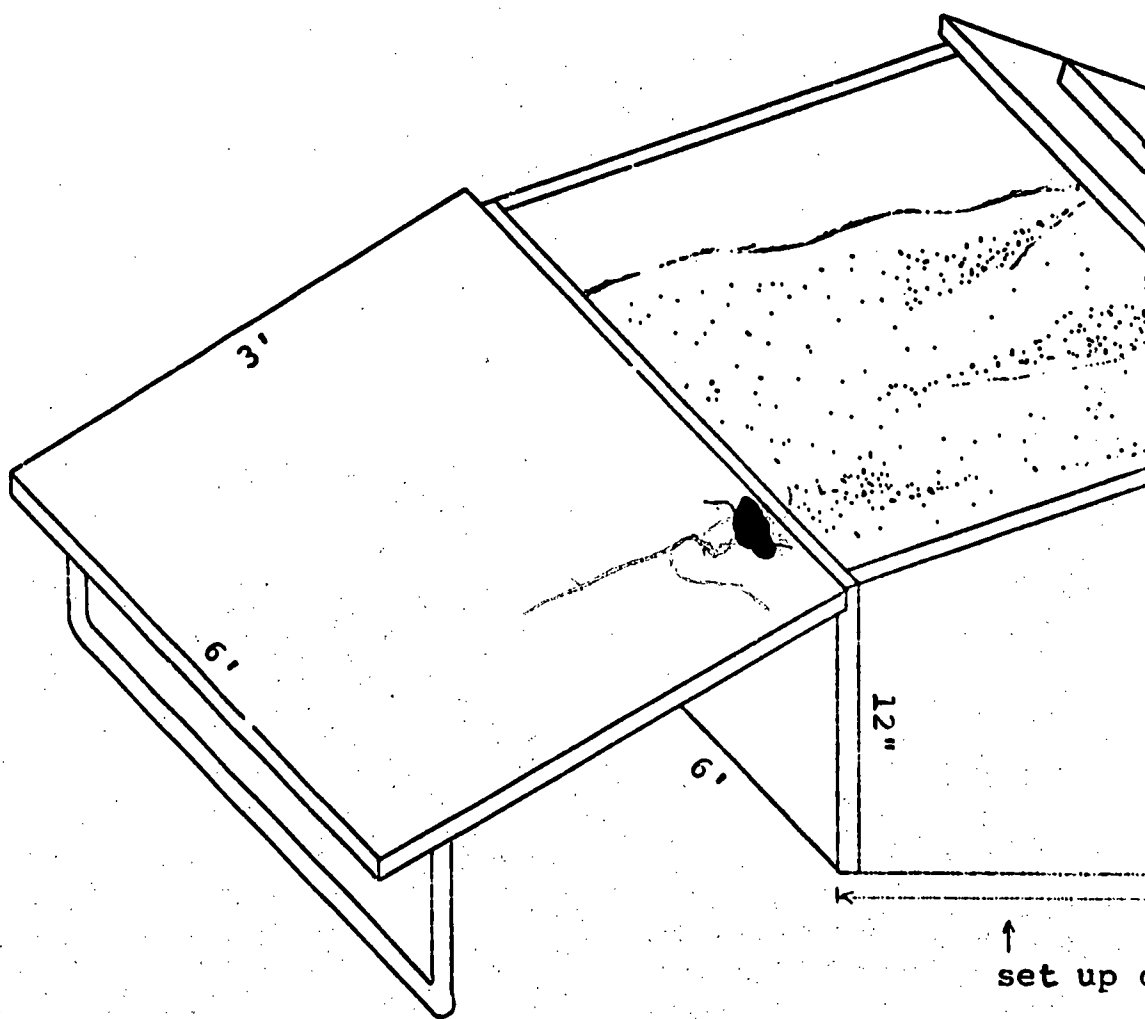
OUTDOOR EASEL



Plywood - (all weather)

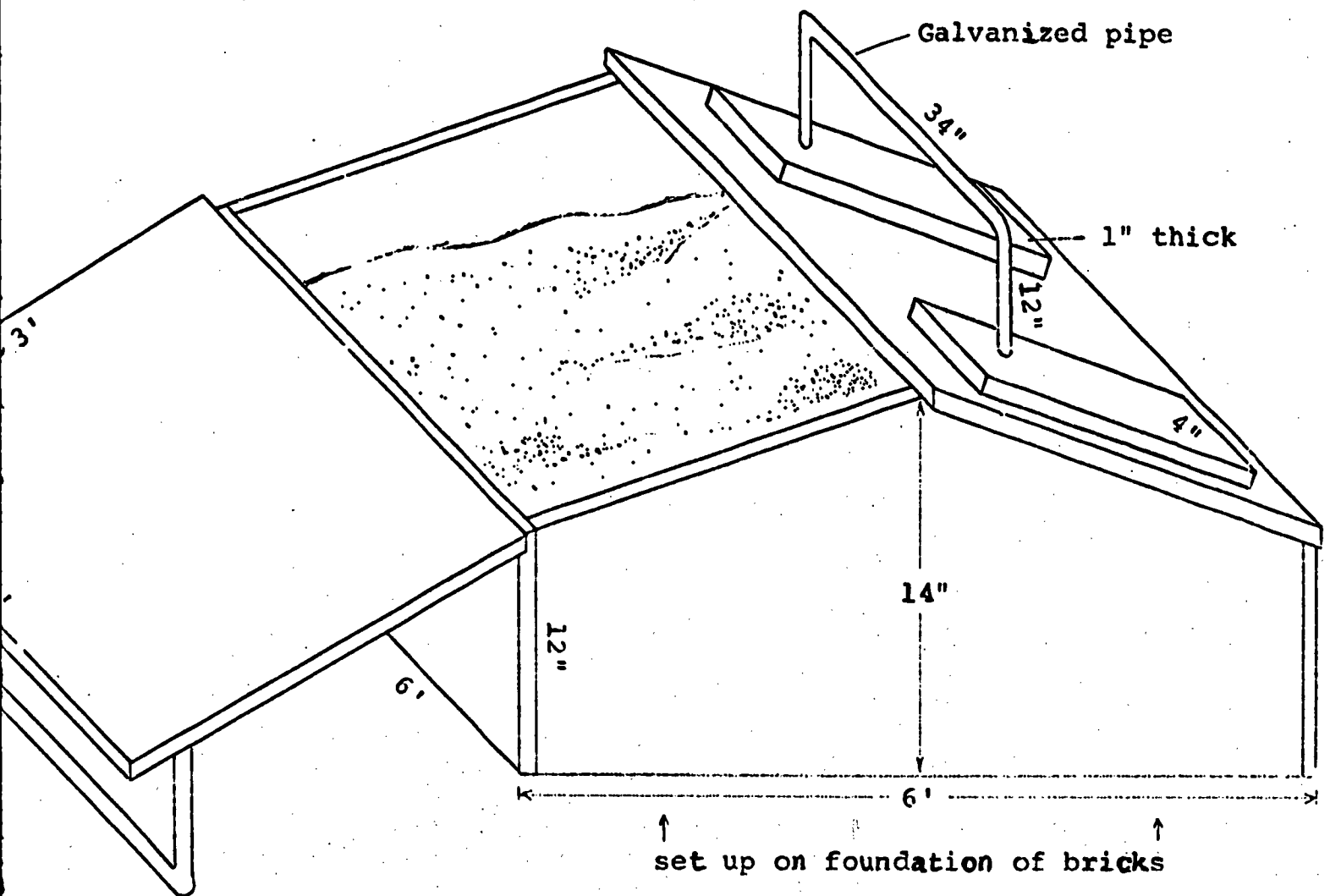
Vassar College Laboratory Nursery School, Poughkeepsie, New York

OUTDOOR SANDBOX WITH HINGED



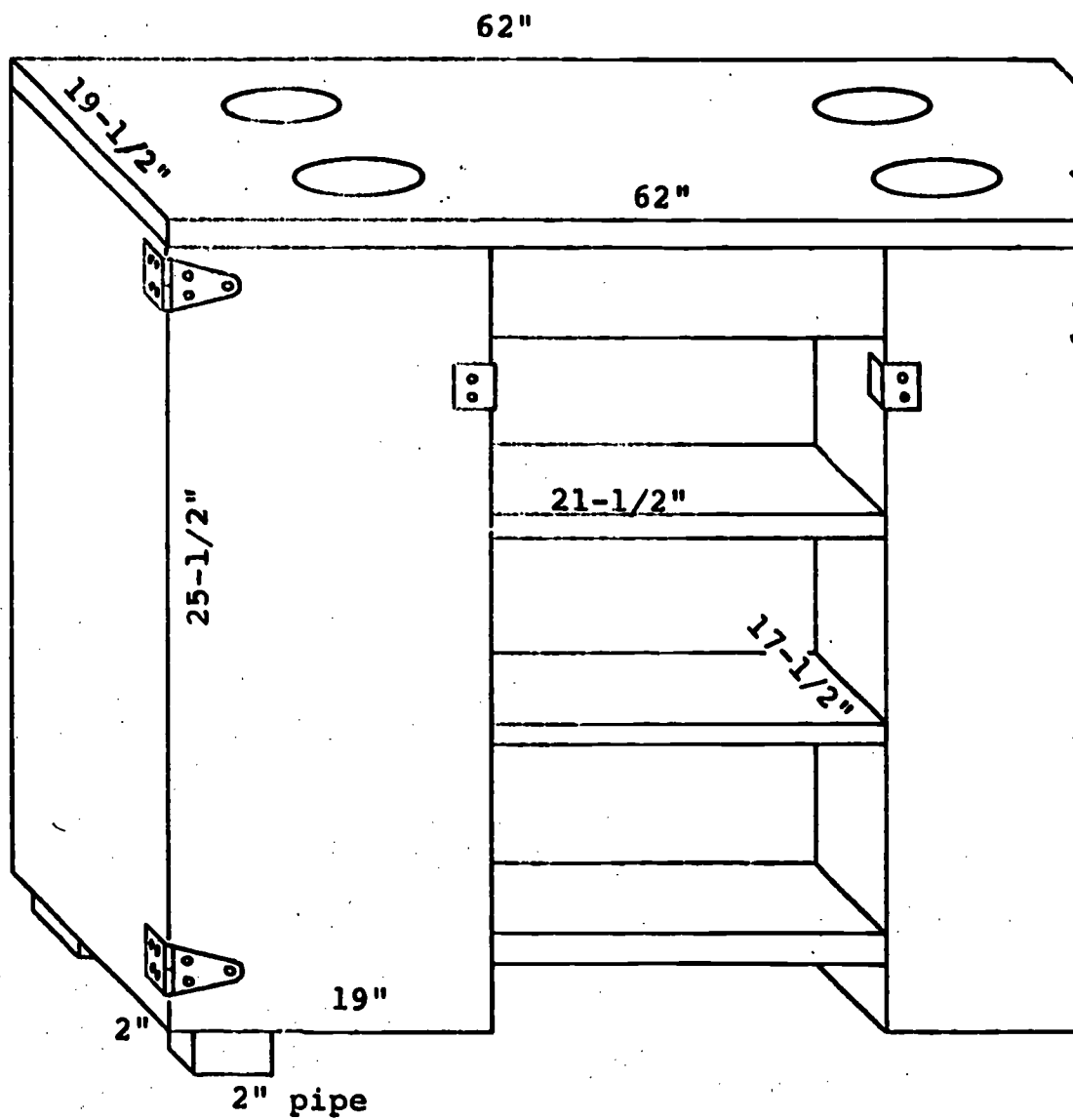
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery

OUTDOOR SANDBOX WITH HINGED TOP



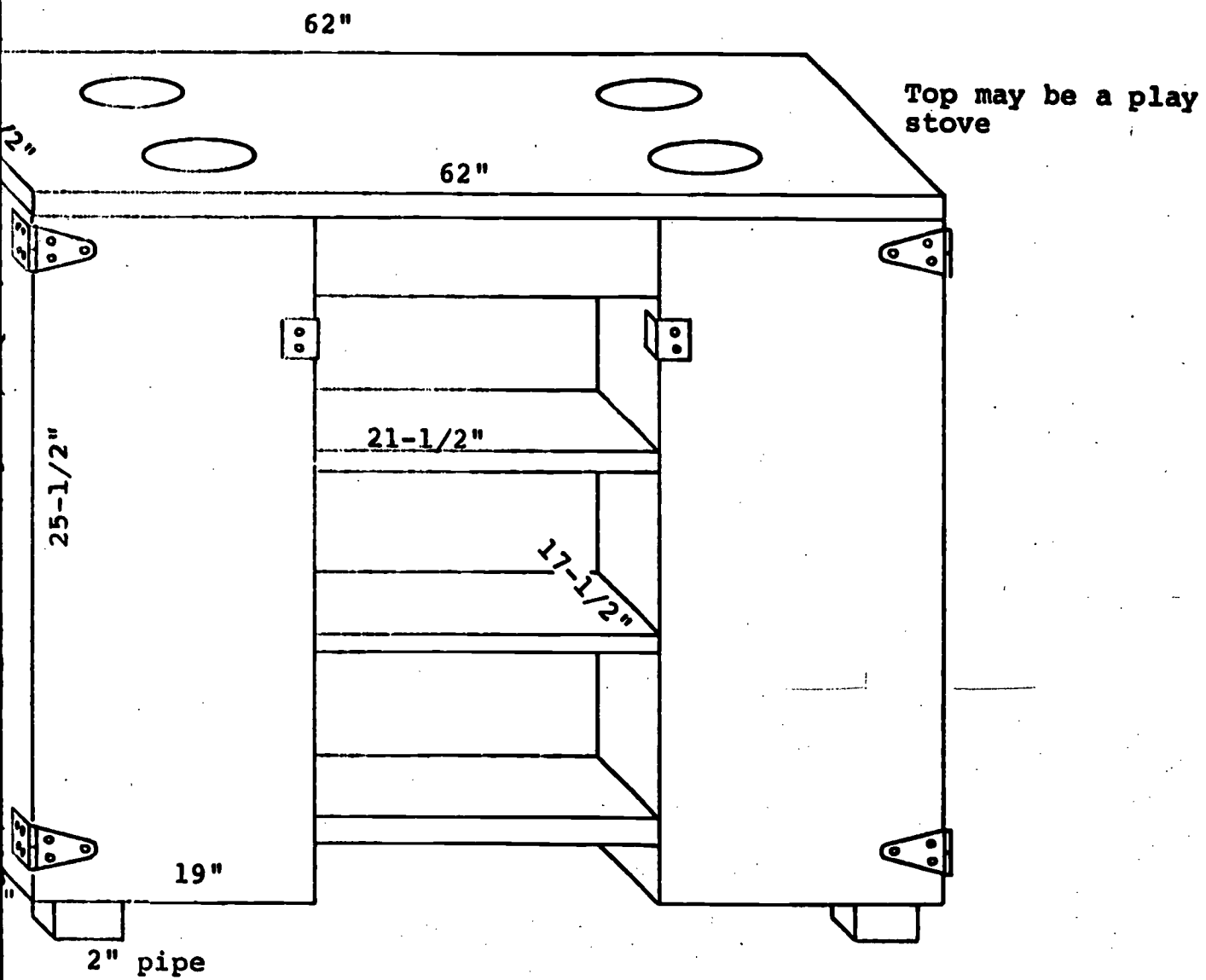
s, Director, Vassar College Laboratory Nursery School, Poughkeepsie, New York

SAND-TOY CUPBOARD



Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, P

SAND-TOY CUPBOARD



tor, Vassar College Laboratory Nursery School, Poughkeepsie, New York

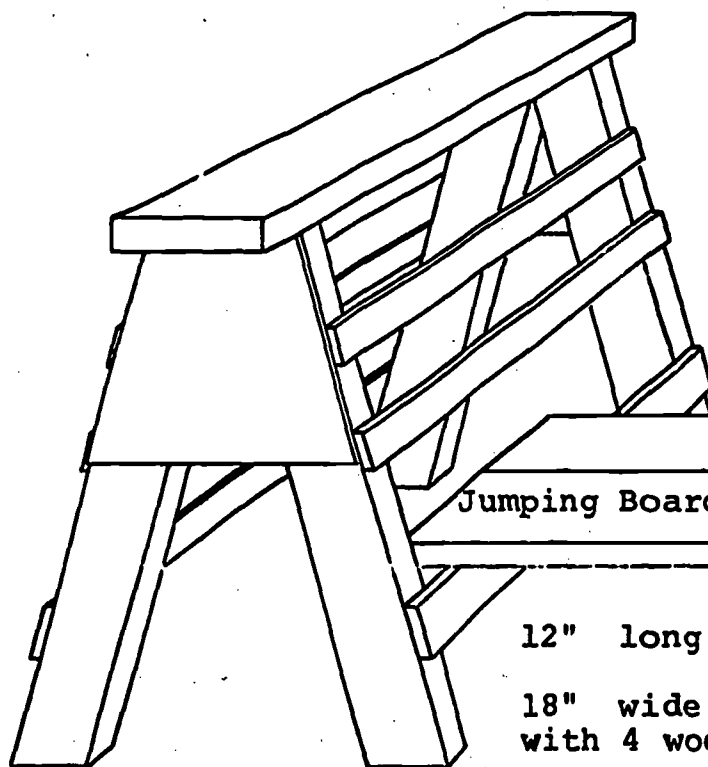
LARGE SAWHORSES AND JUMPING BOARD

Sawhorse Top: 4' long
9" wide
1-1/2" thick

Sawhorse: 31" high
26" wide base

Sawhorse Bars: 38" long
3" wide
1" thick

Sawhorse Uprights: 32" long
3" wide
1-1/2" thick



Jumping Board - Ash - or any well se

12" long

18" wide (2 boards cleated together
with 4 wooden cleats)

each board 9" wide, 1" thick

Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery Sch

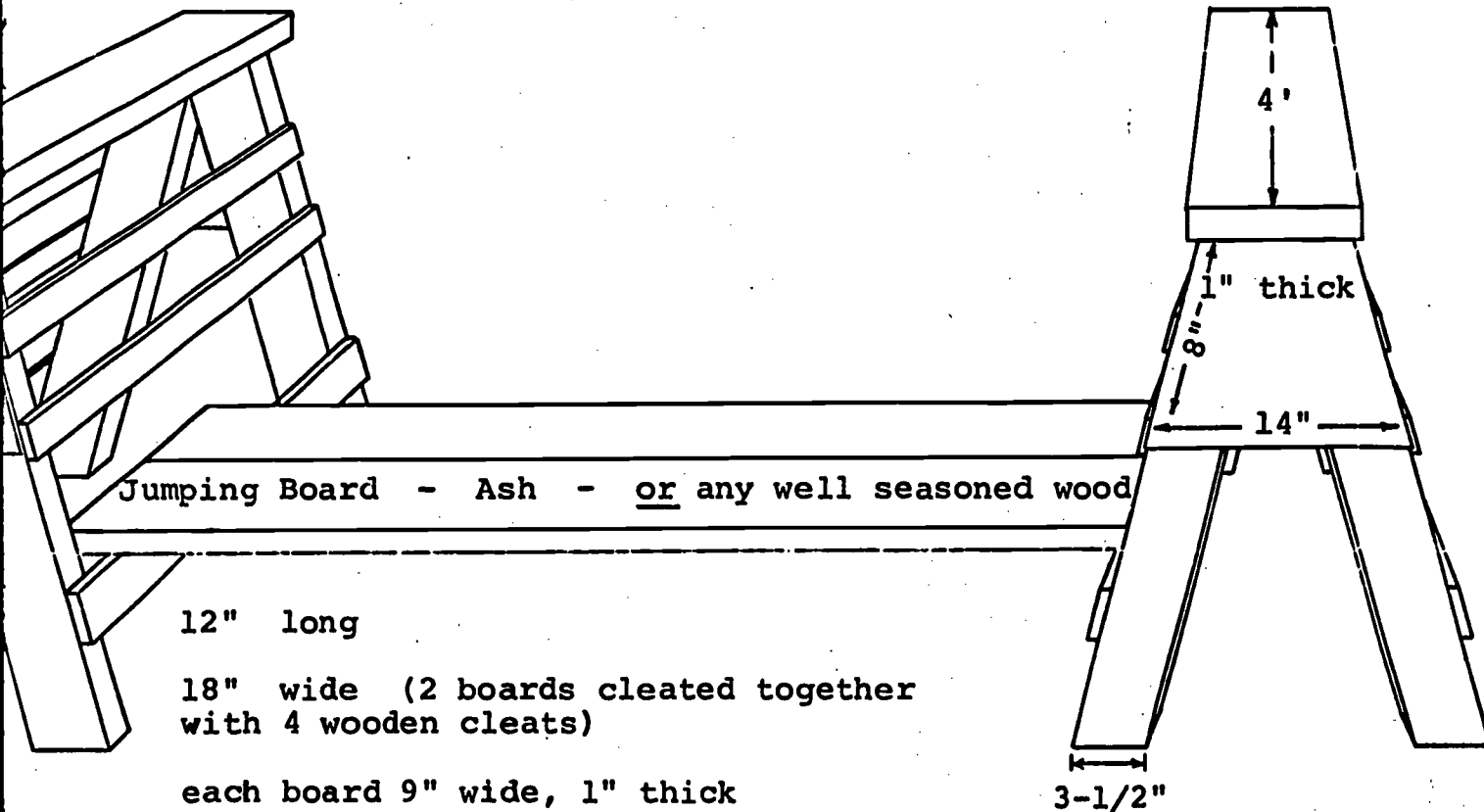
LARGE SAWHORSES AND JUMPING BOARD

4' long
9" wide
1-1/2" thick

31" high
26" wide base

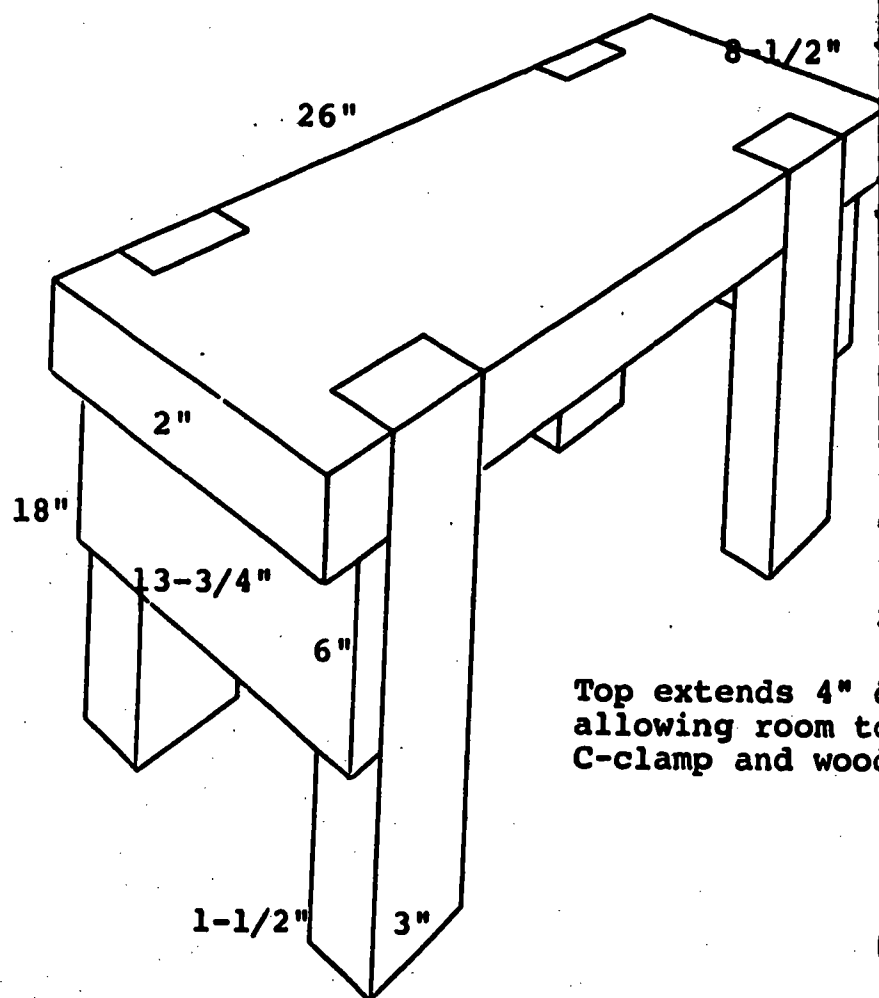
38" long
3" wide
1" thick

32" long
3" wide
1-1/2" thick



Director, Vassar College Laboratory Nursery School, Poughkeepsie, New York

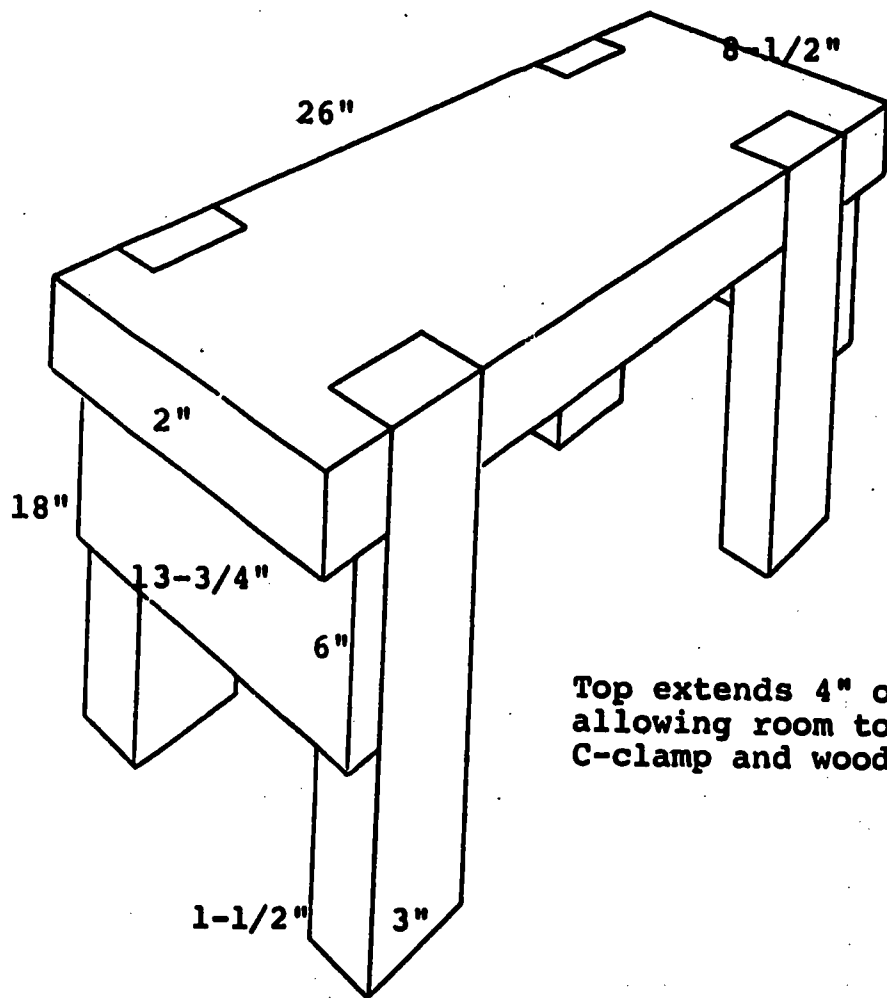
CARPENTRY SAWHORSE



Top extends 4" allowing room to C-clamp and wood

Designed by:
Dorothy Levens, Director, Vassar College Nursery School, Poughkeepsie

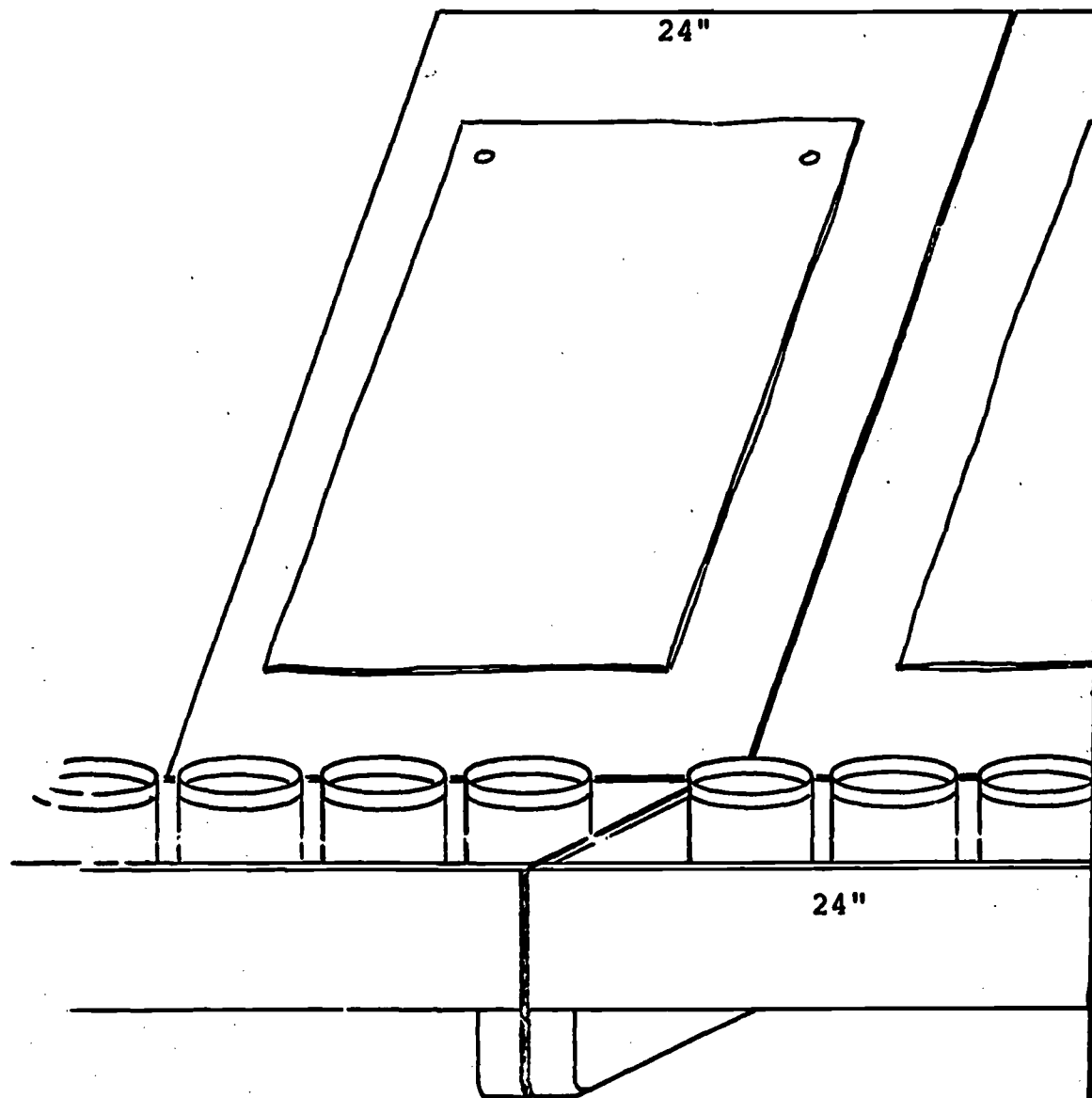
CARPENTRY SAWHORSE



Top extends 4" on each side
allowing room to fasten
C-clamp and wood to sawhorse.

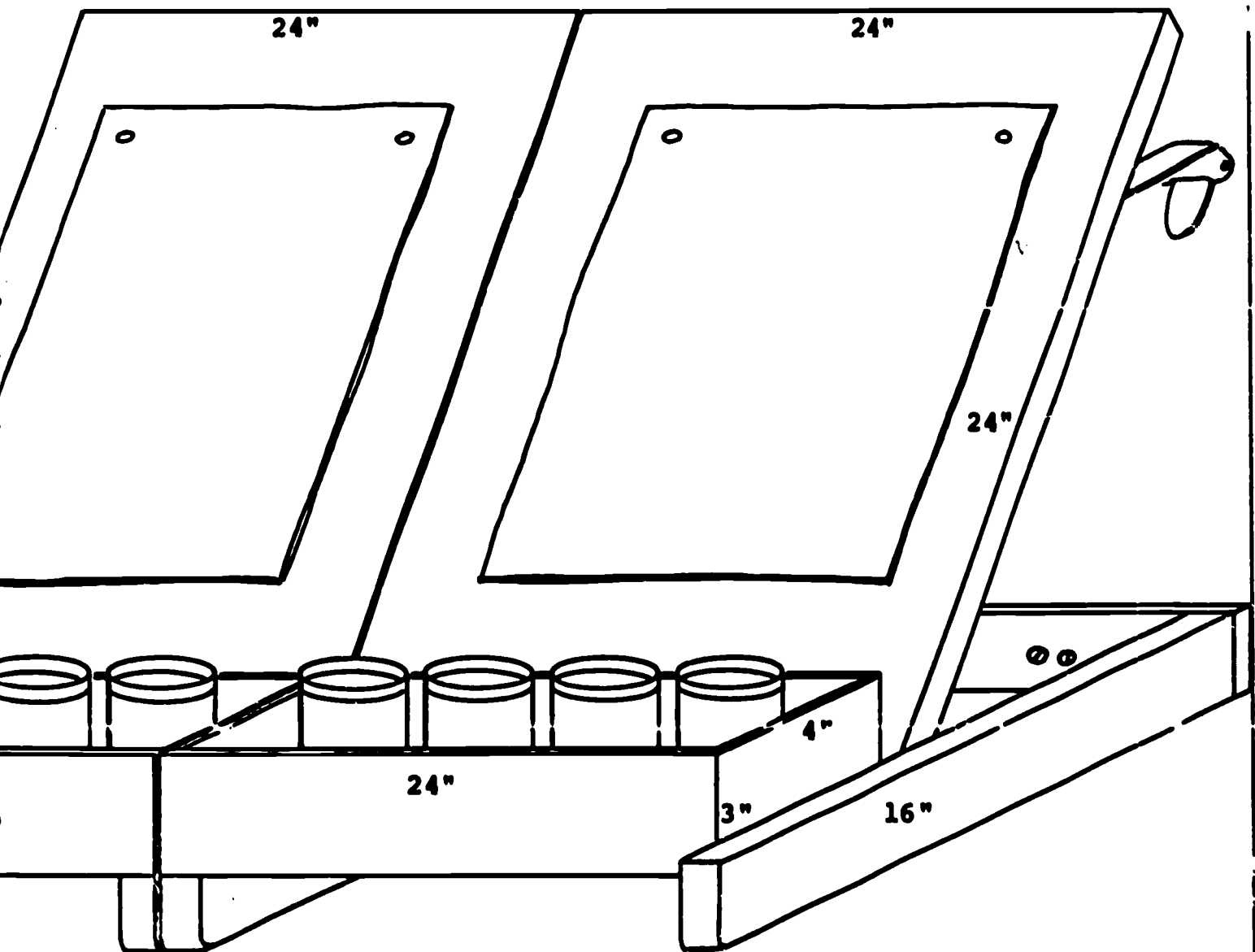
Director, Vassar College Nursery School, Poughkeepsie, New York

INDOOR DOUBLE-EASEL



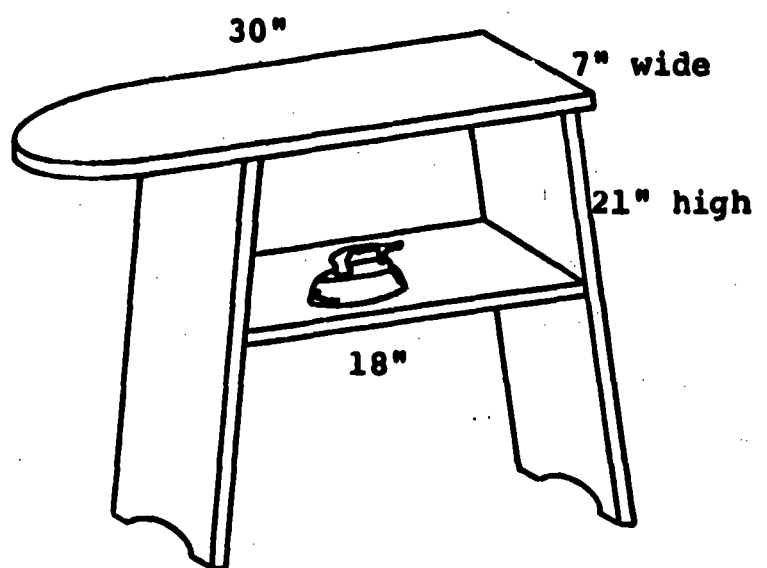
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nurse

INDOOR DOUBLE-EASEL



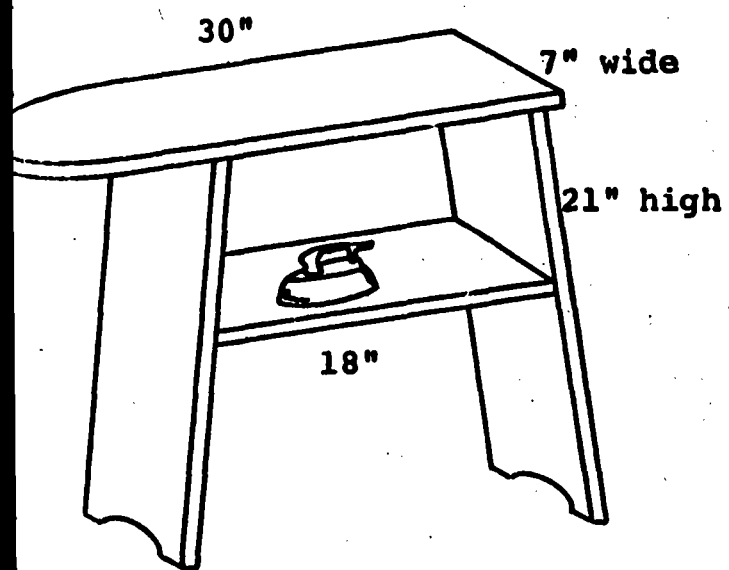
Director, Vassar College Laboratory Nursery School, Poughkeepsie, New York

IRONING BOARD



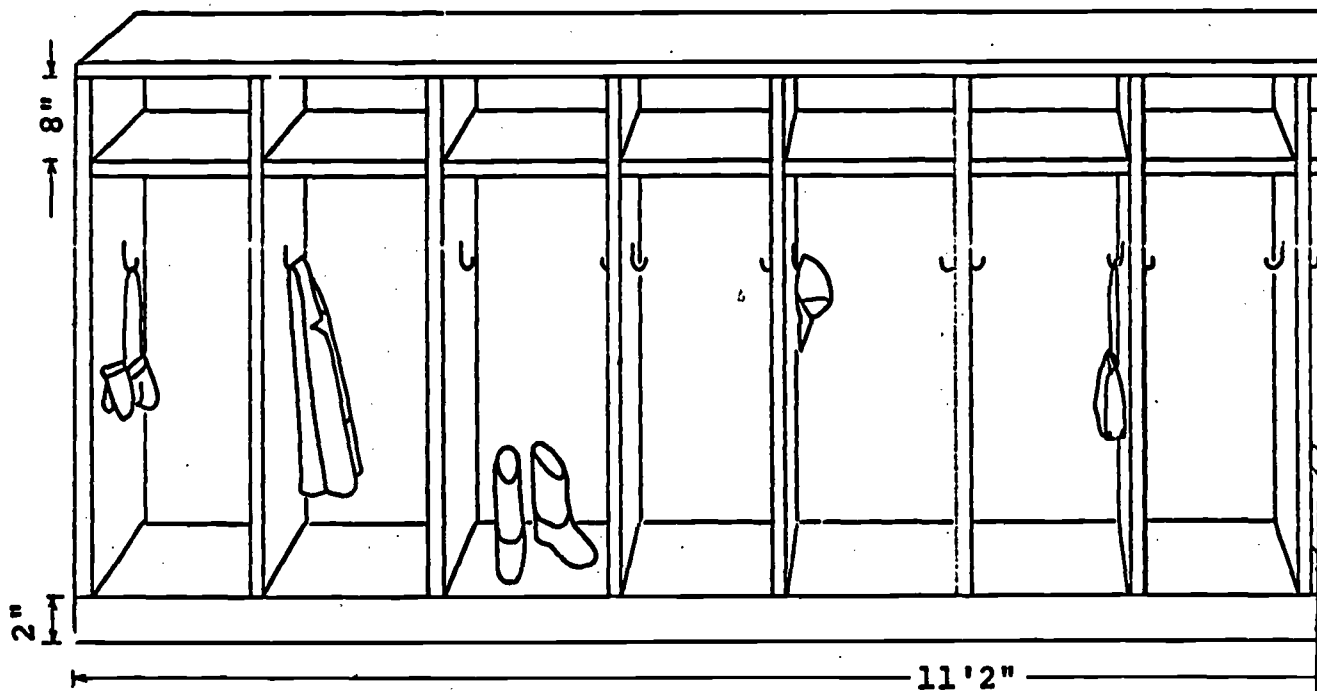
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, I

IRONING BOARD



Vassar College Laboratory Nursery School, Poughkeepsie, New York

CHILDREN'S LOCKERS



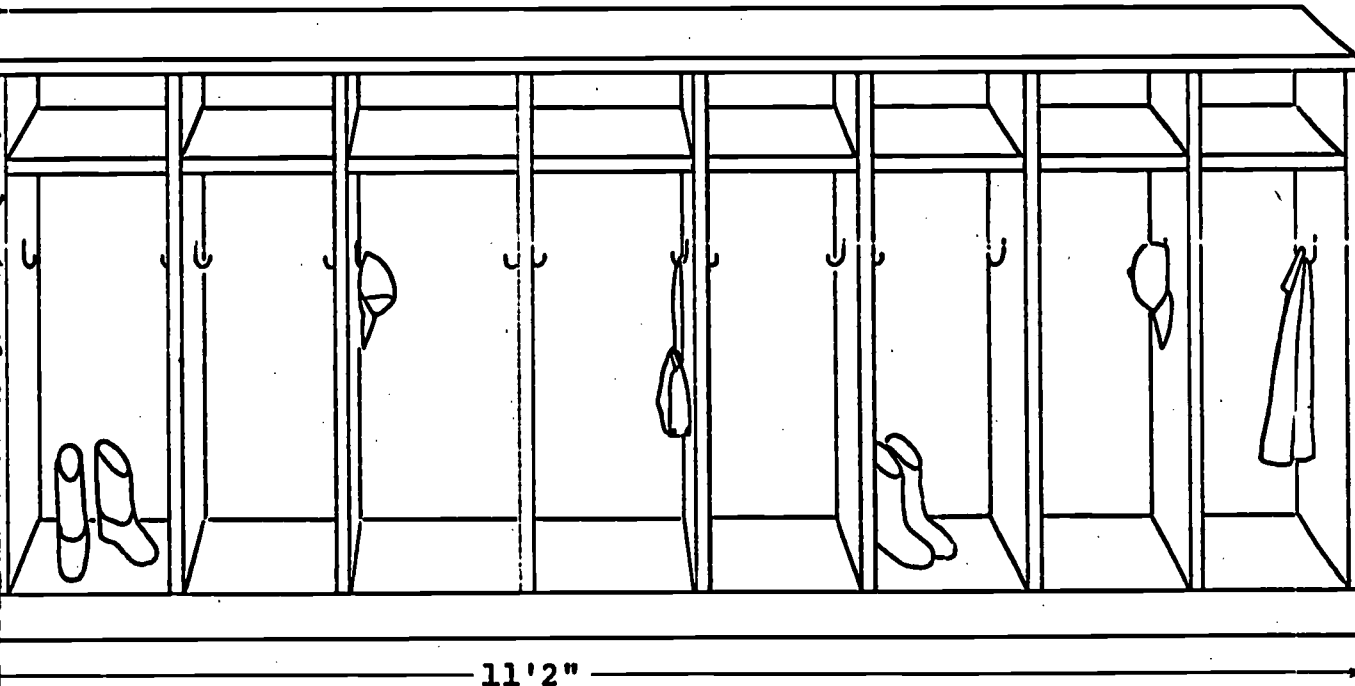
11'2" long

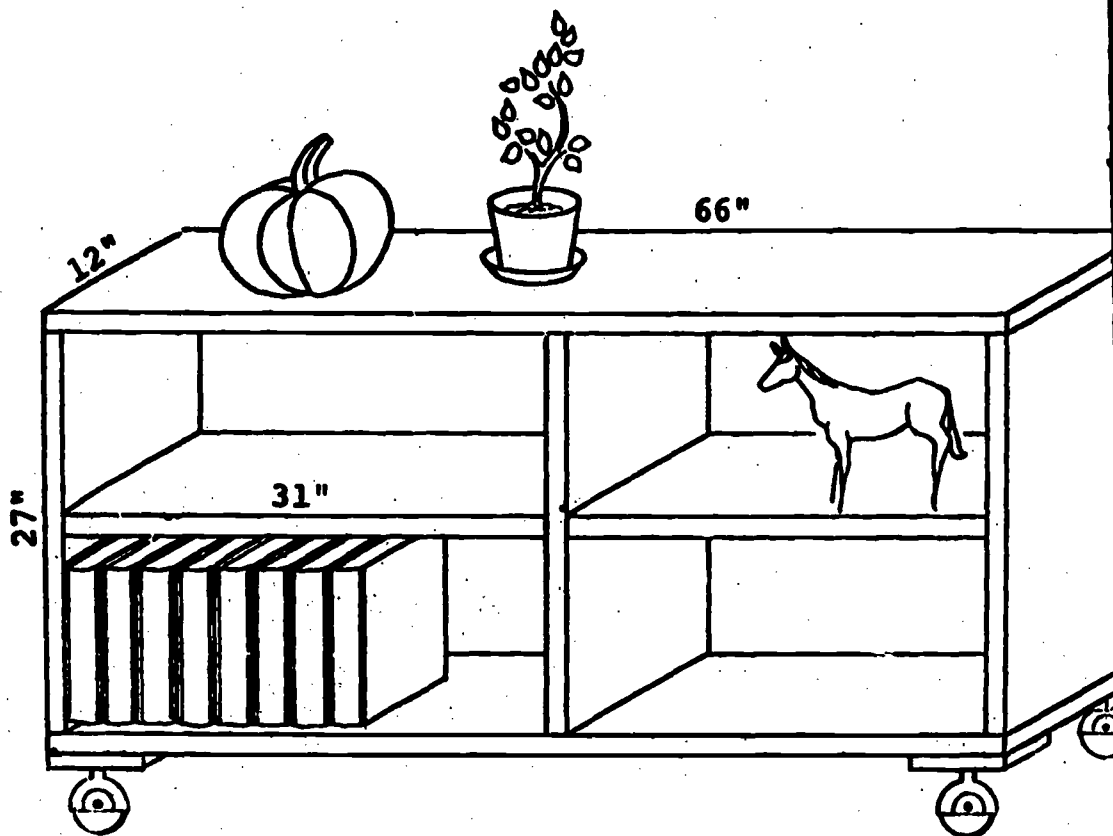
39" high

12" deep

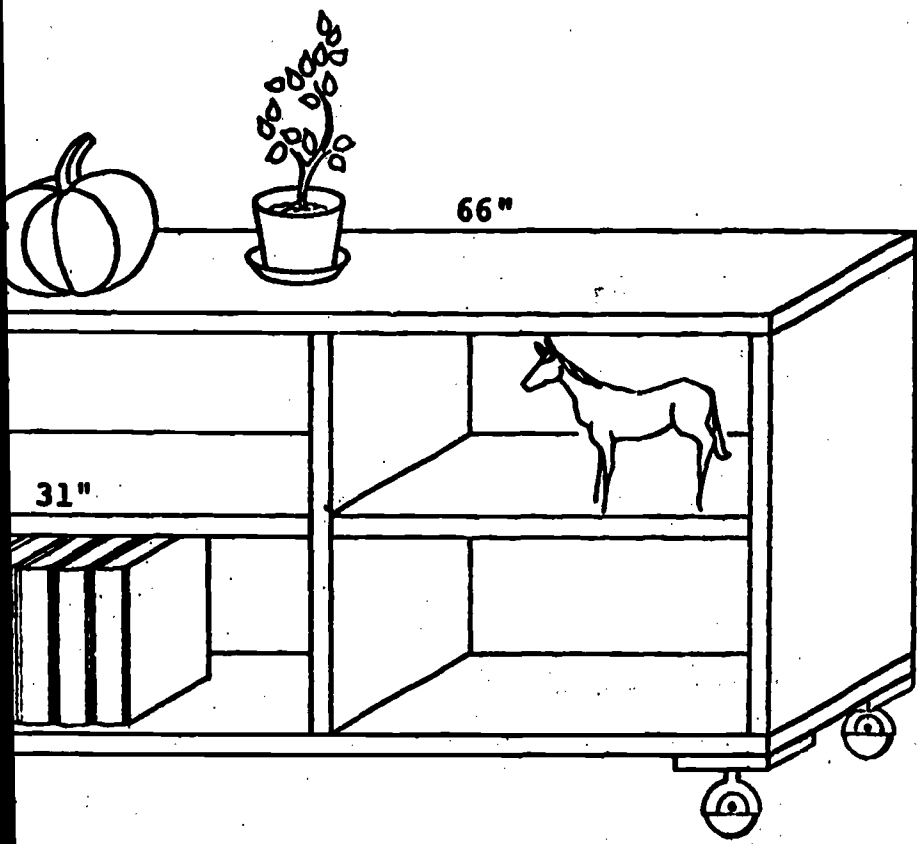
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School

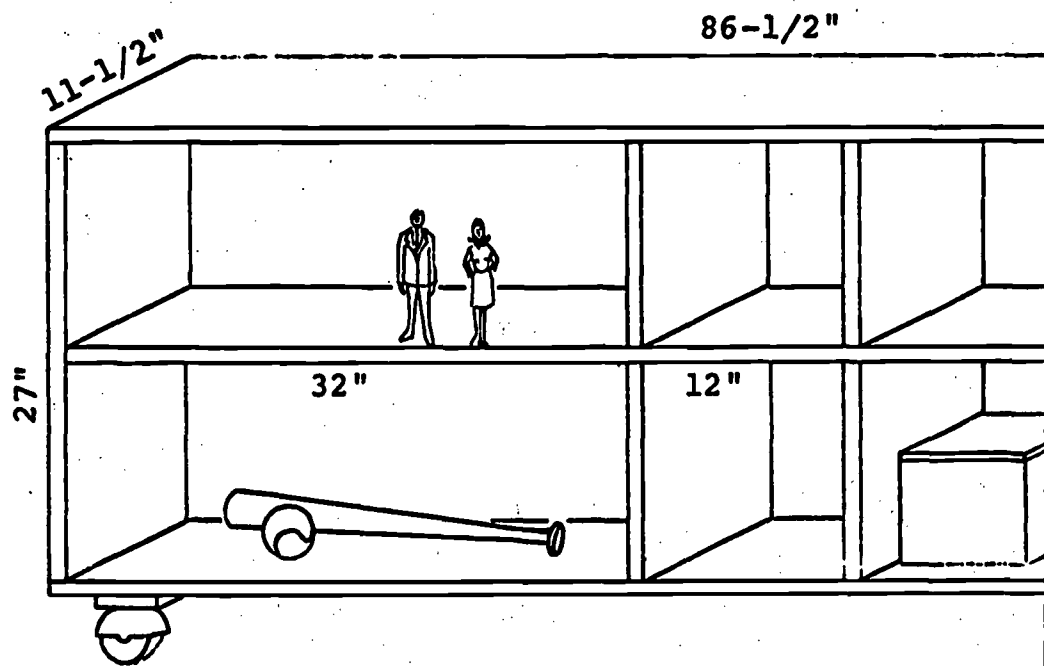
CHILDREN'S LOCKERS





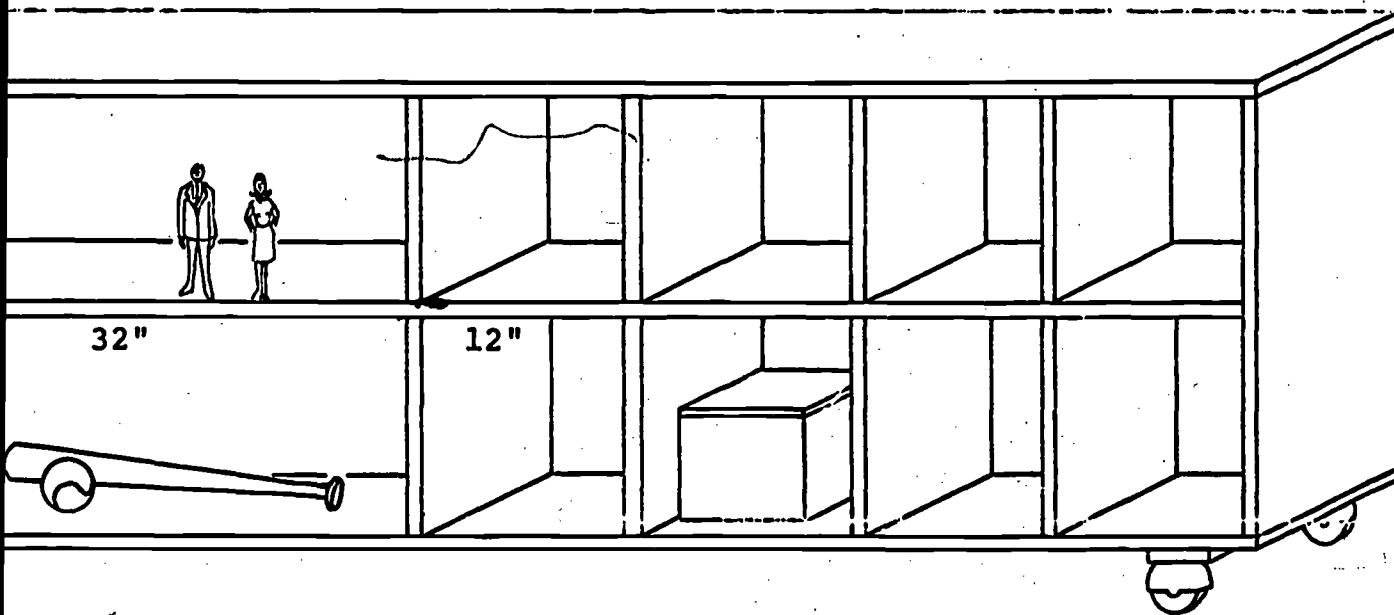
Designed by:
Dorothy Levens, Director, Vassar College Laboratory Nursery School, Poughkeepsie, N.Y.





Designed by:
 Dorothy Levens, Director, Vassar College Laboratory Nurse

86-1/2"

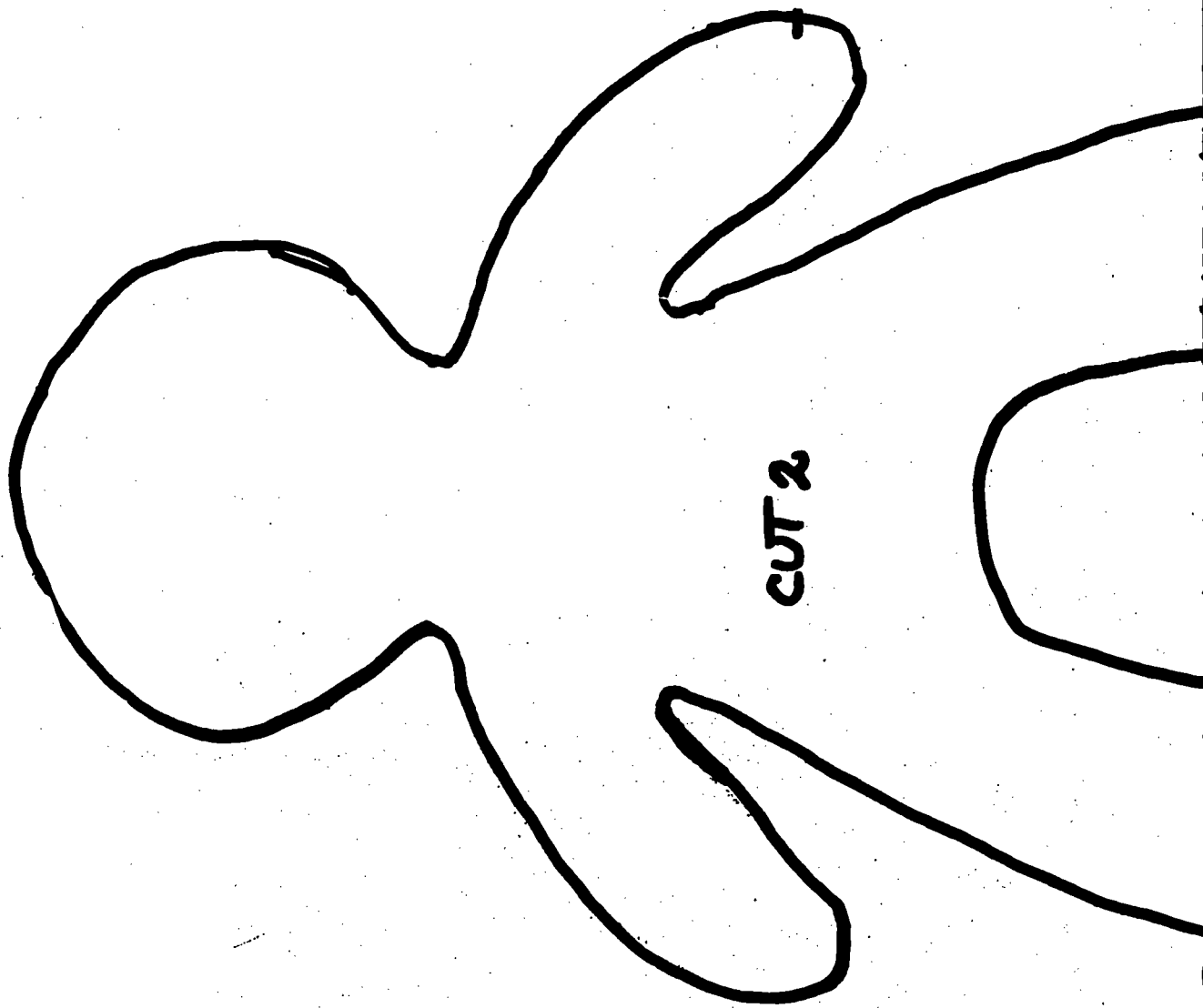


32"

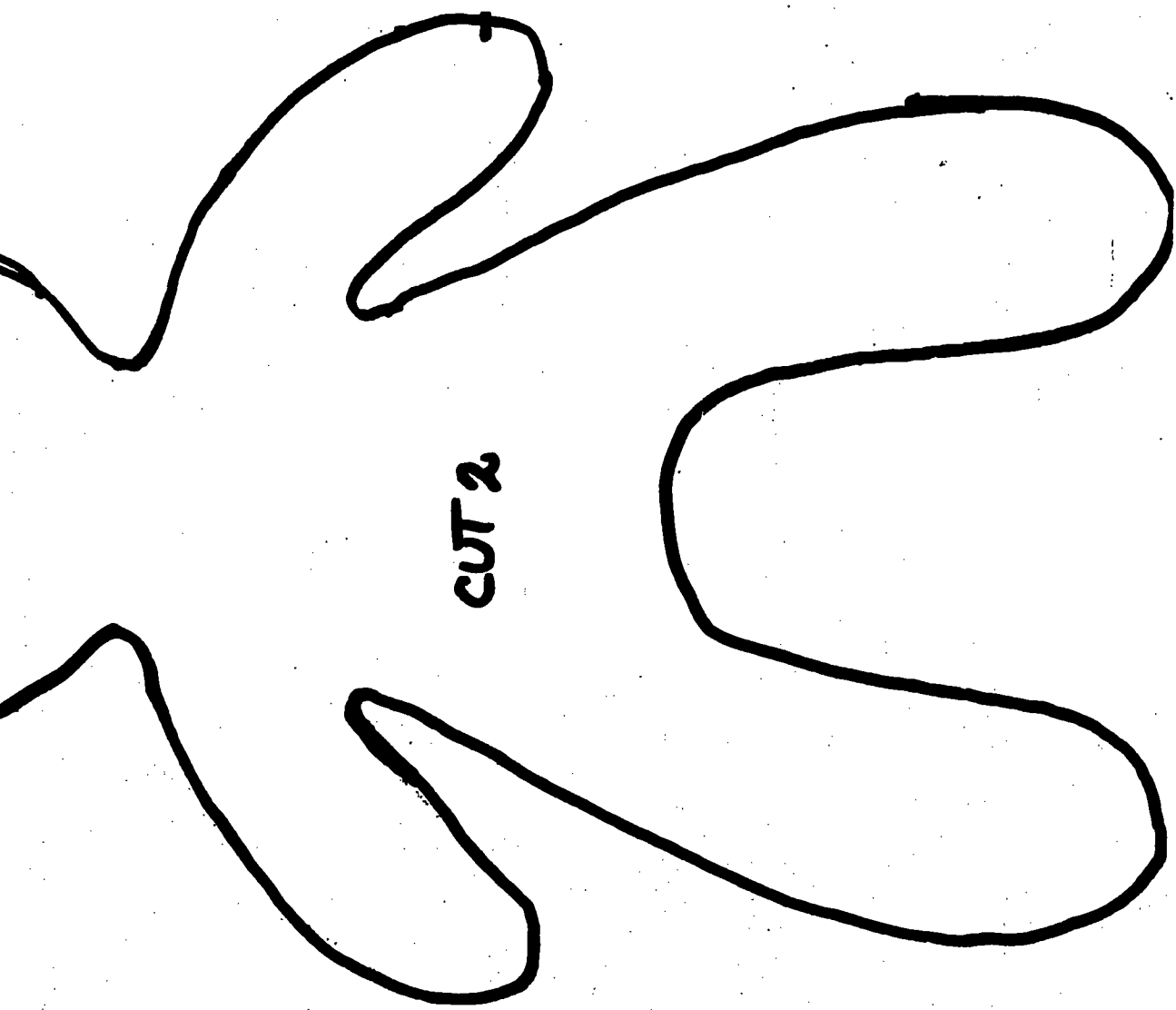
12"

Director, Vassar College Laboratory Nursery School, Poughkeepsie, New York

Rag Doll
half size



CUT 2

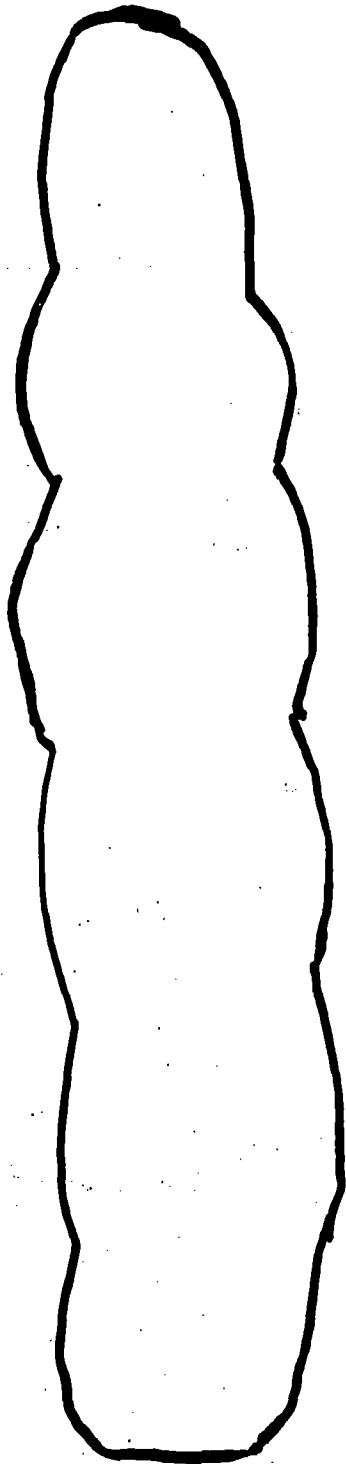


Mattie Mae Brown, Choctaw

CUT 2

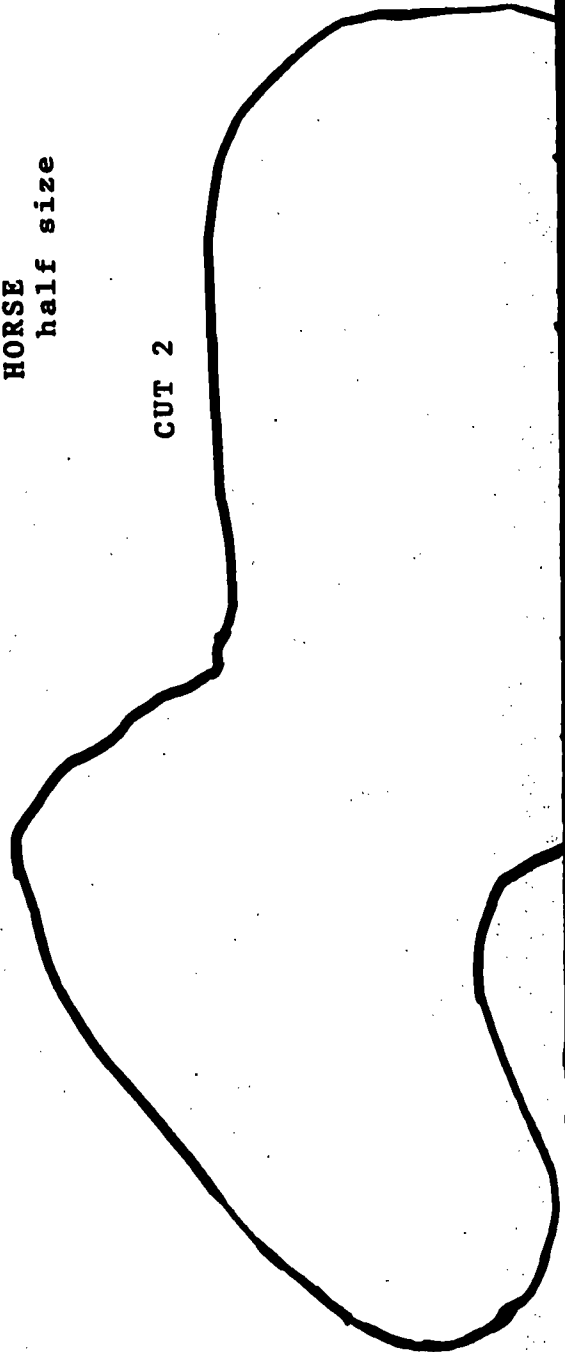
Caterpillar
half size

Scale 1/2" = 1 inch



HORSE
half size

CUT 2



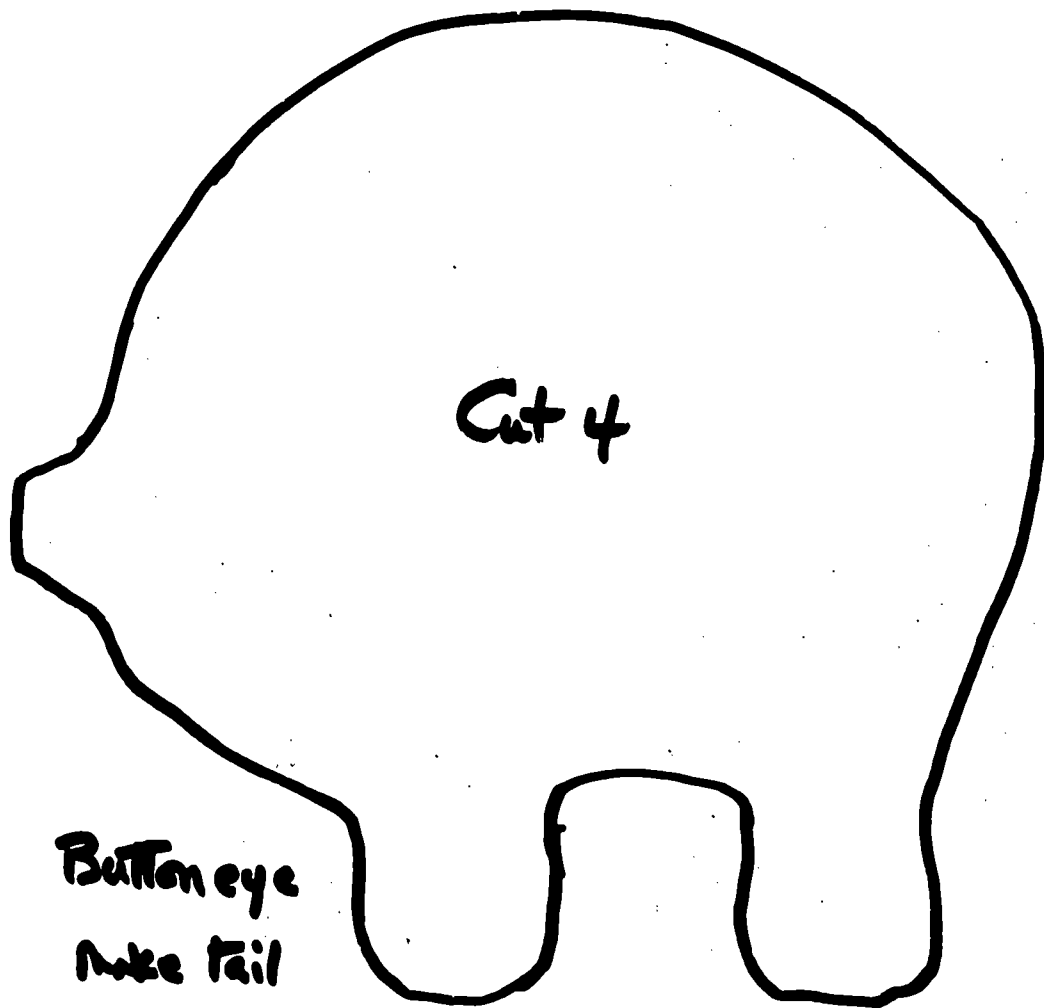
HORSE
half size

CUT 2

Sew on eyes
Make tail and
mane

Mattie Mae Brown, Choctaw

Pig, Half Size



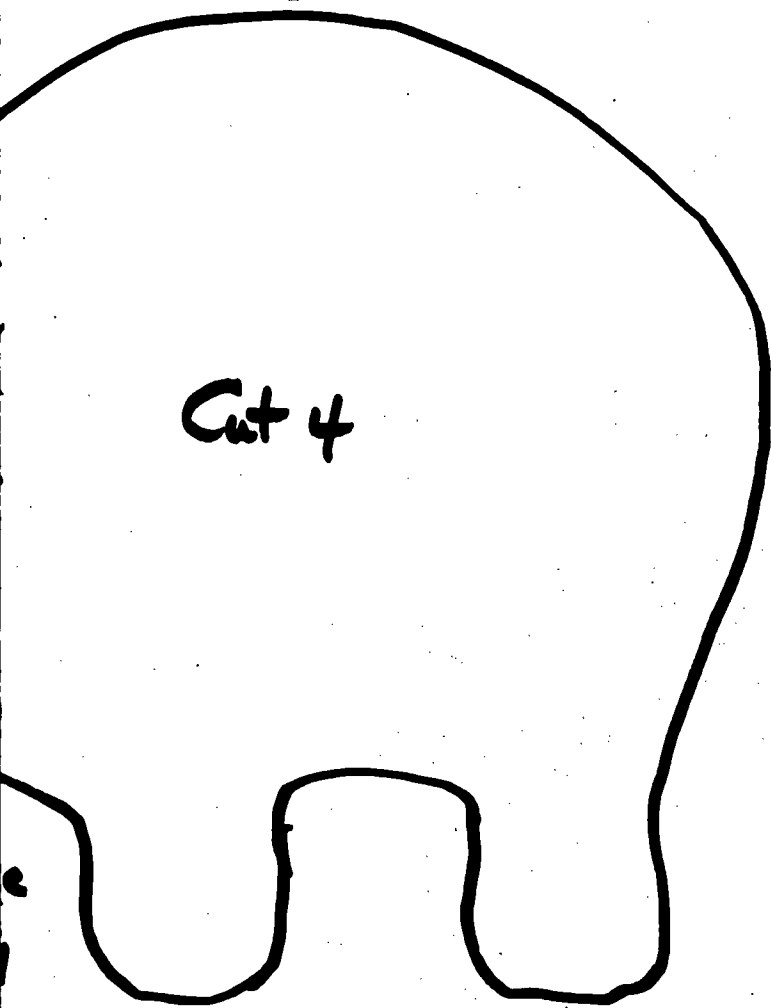
Button eye
like tail

Be

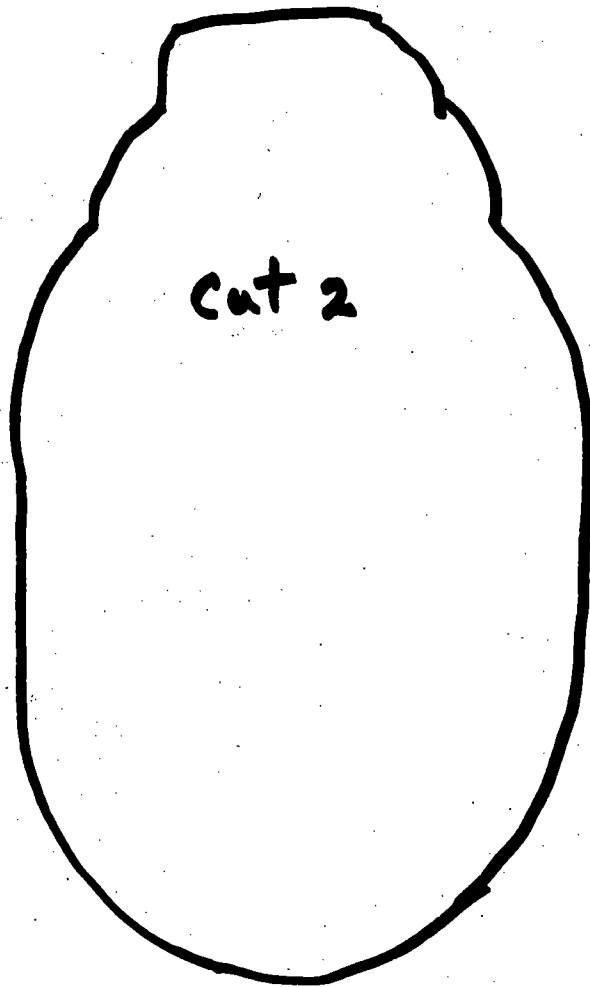
C

Scale

Pig, Half Size



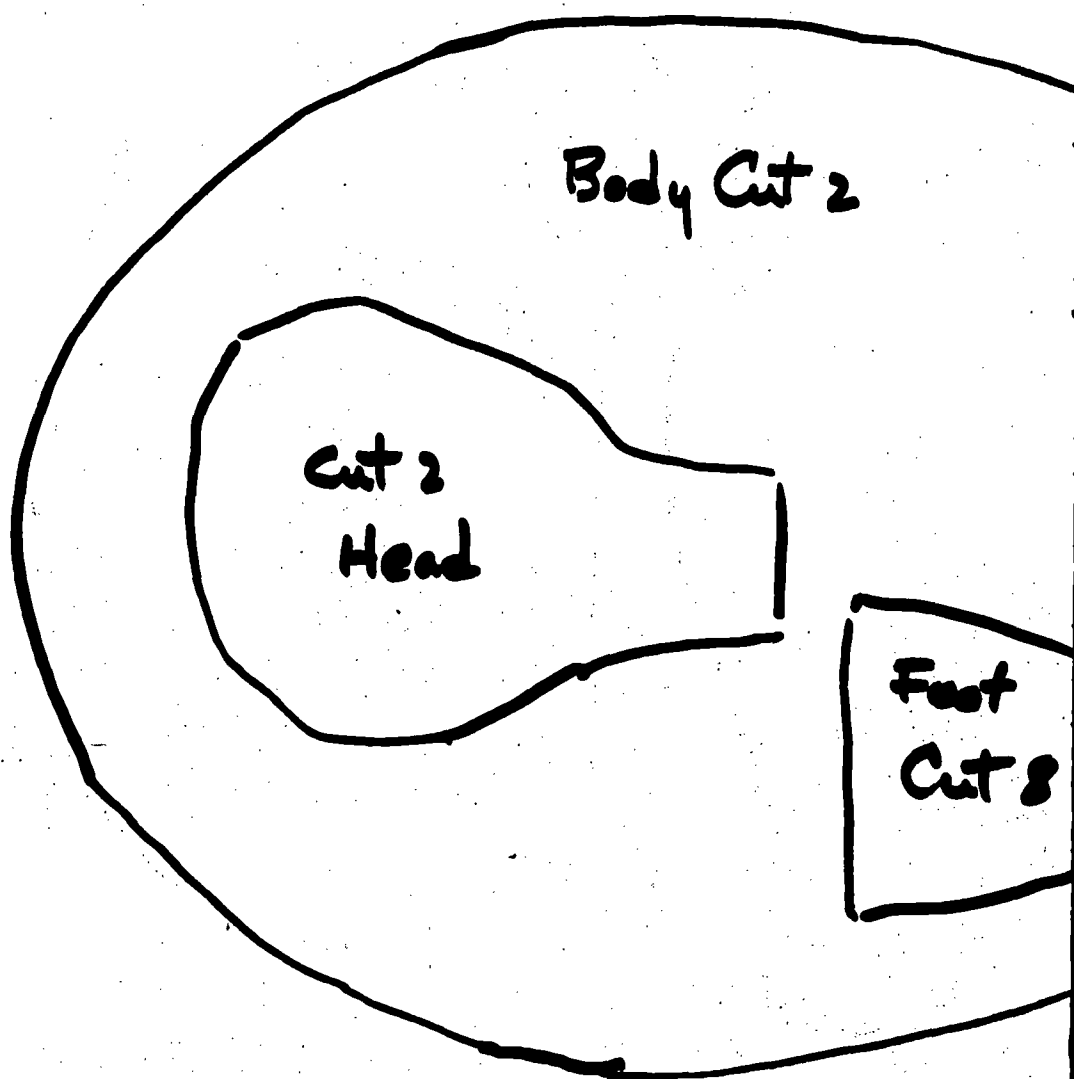
Beetle, Half Size



Mattie Mae Brown, Choctaw

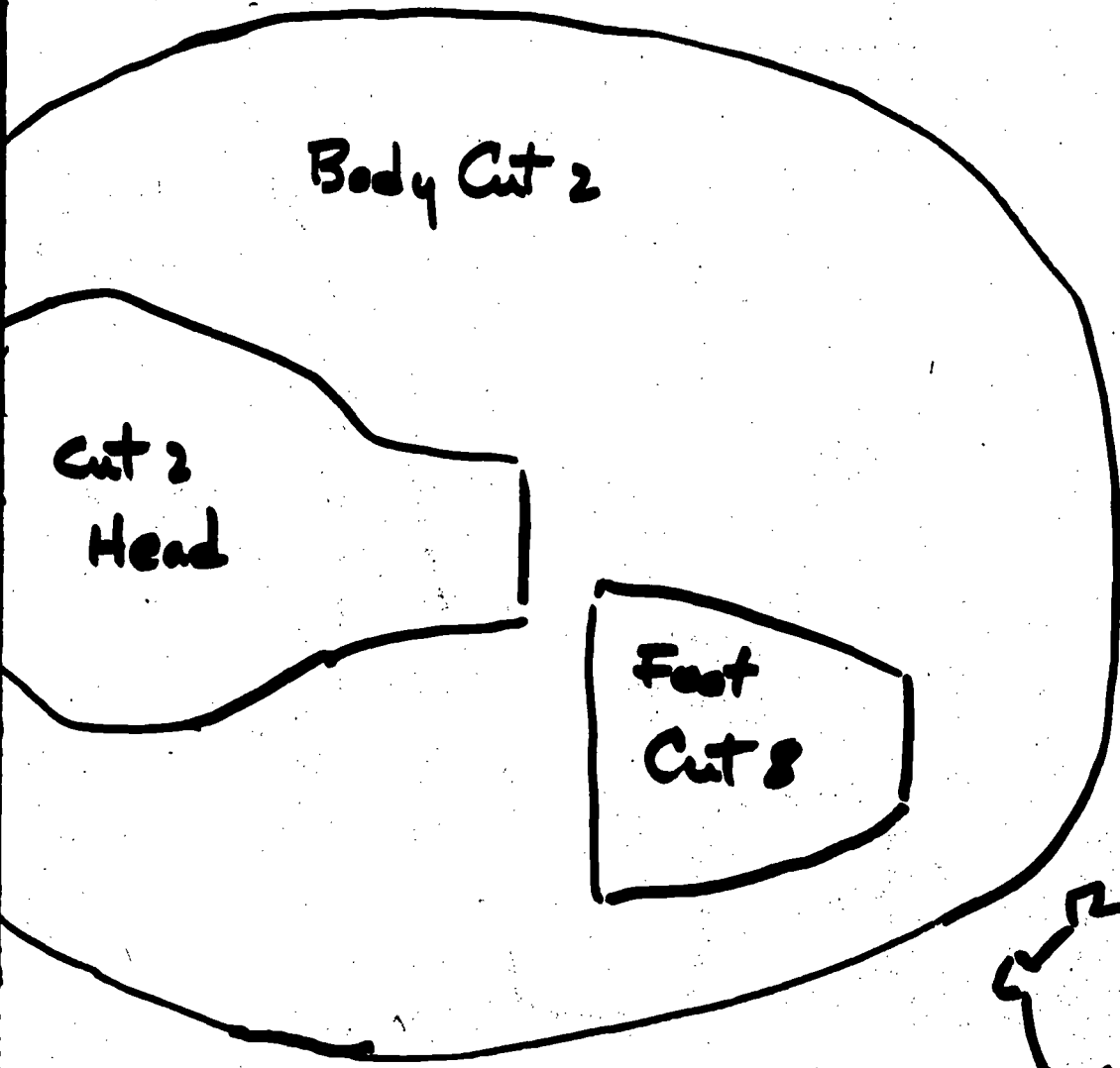
Scale $\frac{1}{2}'' = 1'$

Turtle

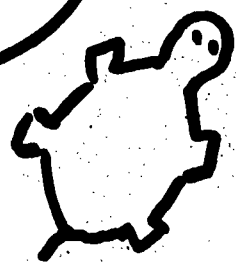


Scale $\frac{1}{2}$ in

Turtle



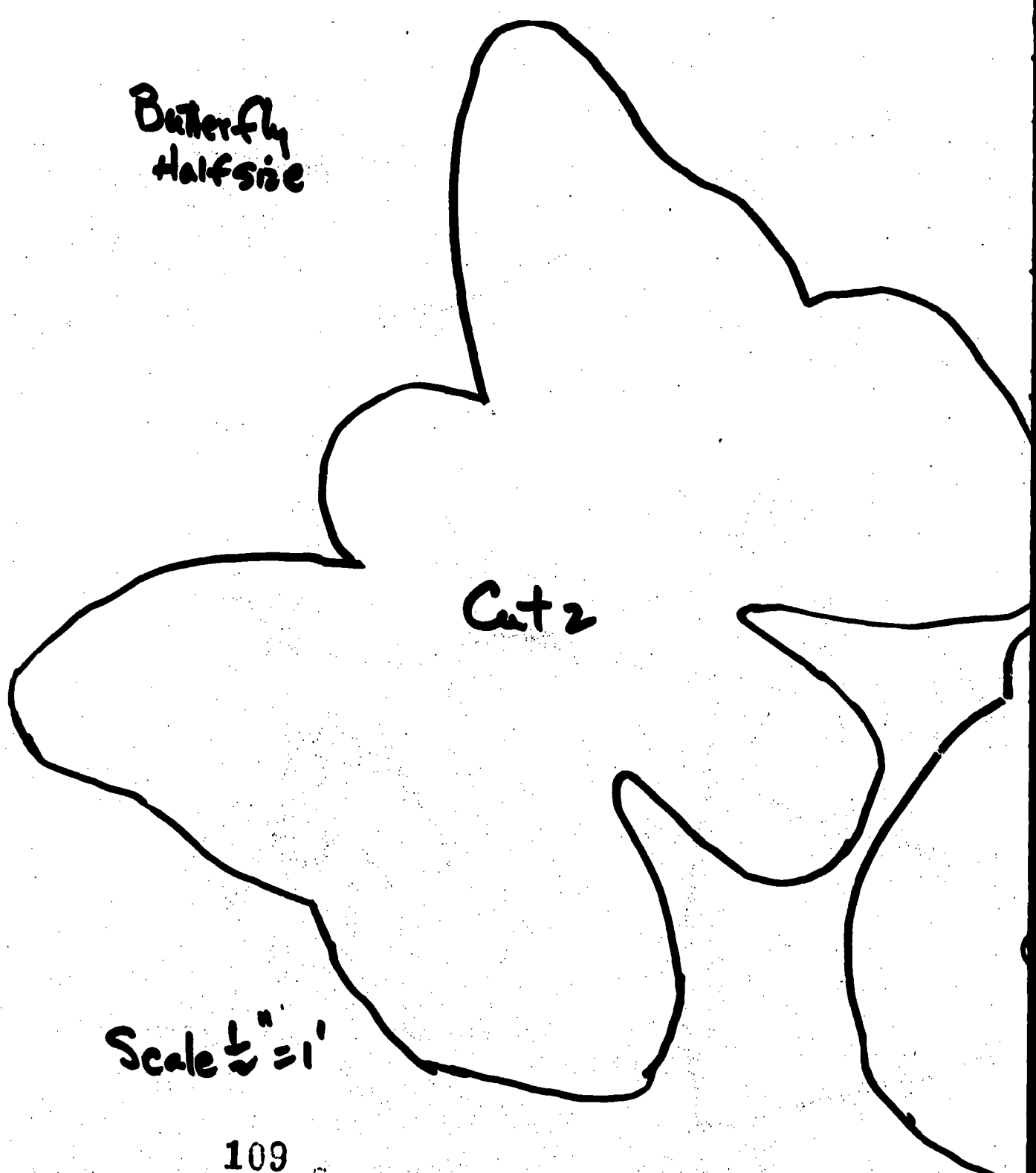
Mattie Mae Brown, Choctaw

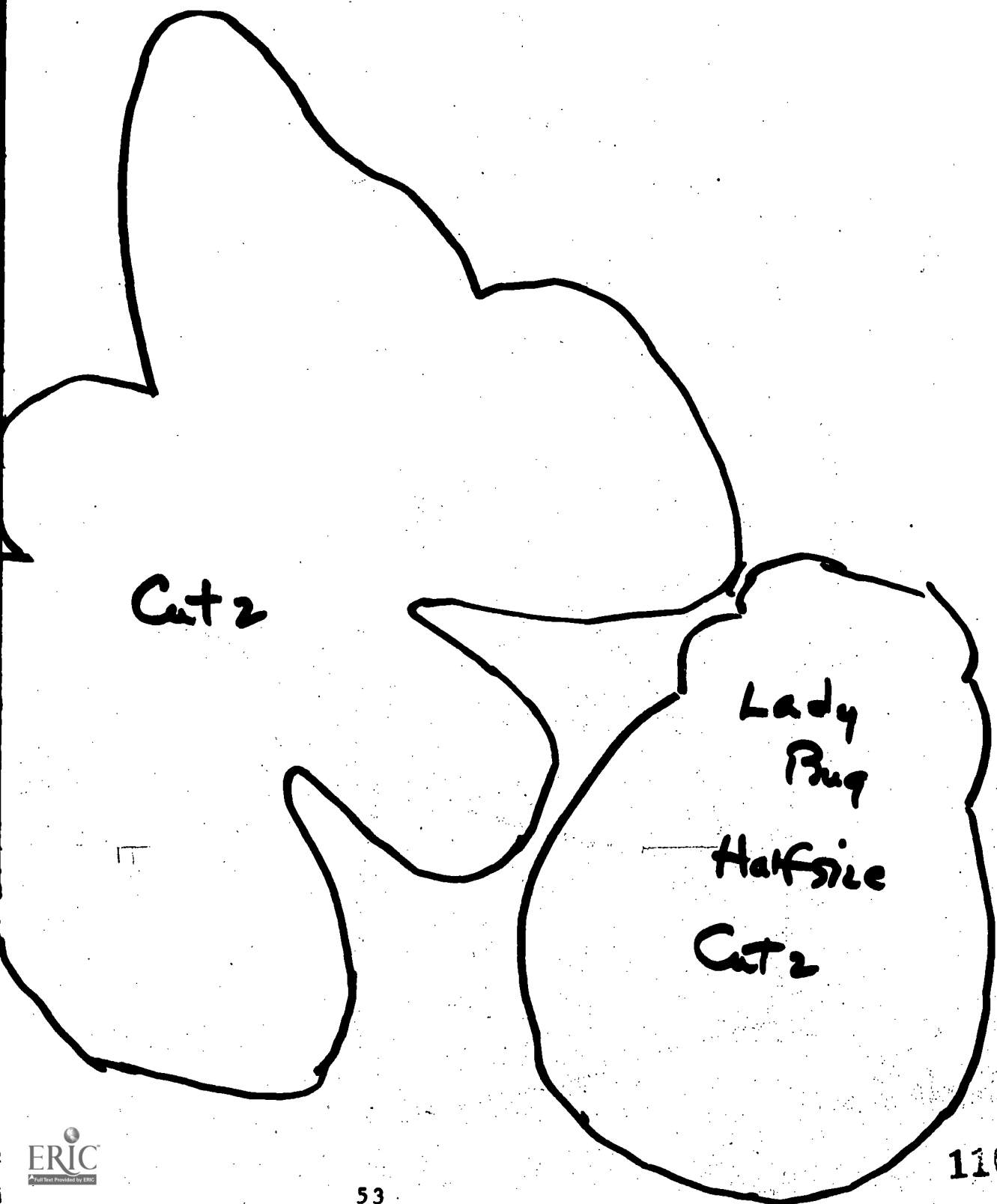


Butterfly
Half size

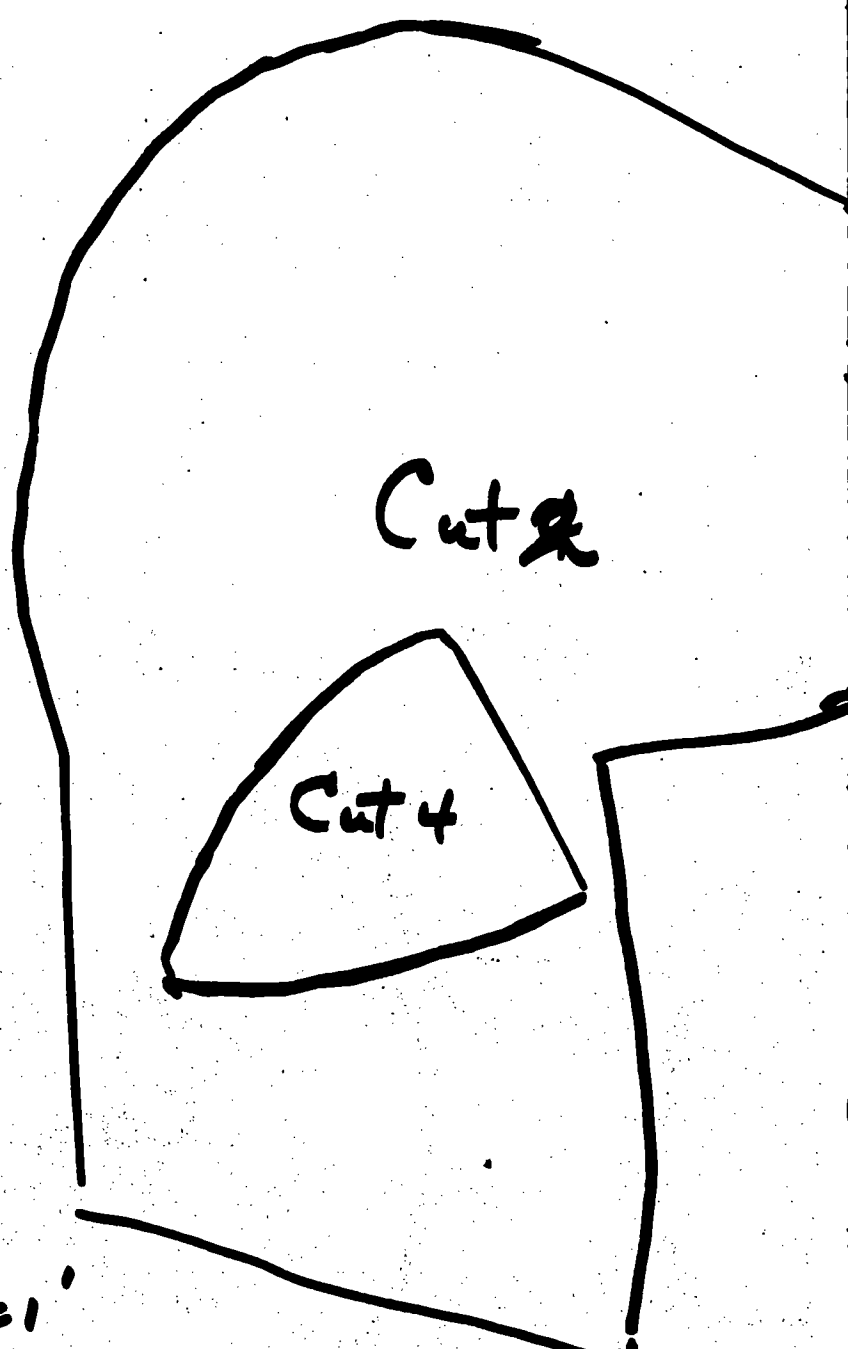
Cut 2

Scale $\frac{1}{2}'' = 1'$





Mattie Mae Brown, Choctaw



Scale $\frac{1}{8}'' = 1'$

Horse's Head for
Stick Horse
Half size

Cut &

Cut 4



Mattie Mae Brown, Choctaw

LOW BUDGET ITEMS

The following lists contain some materials that are inexpensive and are good parent projects, too!

Large boxes, wooden or cardboard, soft drink crates, egg cartons, T.V. boxes
Used pots and pans (can be sprayed with enamel for color) and other kitchen utensils
Magazine pictures (mount on heavy paper or cardboard) and magazines for browsing
Old clocks, scales, radios
Appliances: toaster, iron, waffle iron, etc.; (take out electric unit or cut off end of cord)
Used rubber tires for rolling, jumping on, sitting in (inner-tubes also)
Let children clean and scrub with soap first
Old automobile or boat
Large logs or trunk of fallen tree
Concrete pipe, 36" diameter
Old sheets (easel aprons, doll-bed sheets, capes)
Used toys of all kinds
Spools from thread
Shoe strings for beads
Macaroni for stringing and art use
Food coloring
Old eye glasses with lenses removed
Rope, 2-5" in diameter securely fastened to tree for swinging
Pieces of hose for gas station; oil can; gas station labels, hats, tire pumps
Coffee tins with plastic lids (can be sprayed or painted with enamel)
Plastic soap containers (make funnels, scoops, etc.)
Collection of bolts and screws to fit together
Pets: gold fish, a stray kitten, a tortoise, etc.
Small metal boxes (band aids, slide camera film)

Marbles
Wigs
Indian head dresses
Beans, rice, etc.,
Large rocks (too large upon and feeling
Stepping stones in
ing upon and jump
Indoor plants: get
and let children
fore planting
Wind chimes: inexp
make from tin, je
Series of long, low
etc. (Wooden and/
Painters' buckets -
Unlabeled liquor bo
place on ledge wh
Rhythm instruments,
Large animals or fi
riding made from
horses
Box of "junk" for t
collage
Box of fabric sampl
color
"Small bottles," ga
cologne, mouthwas
empty cologne bot
"Lock box" -- woode
latches and locks
will open when al
been opened.
Bean bags; easy and
Collection of disca
such as sifters,
suring cups and s

LOW BUDGET ITEMS

contain some materials that are inexpensive and easily obtained. They're
s, too!

or cardboard, soft drink
ns, T.V. boxes
(can be sprayed with enam-
other kitchen utensils
mount on heavy paper or
azines for browsing
radios
r, iron, waffle iron, etc.;
c unit or cut off end of

or rolling, jumping on,
tubes also)
and scrub with soap first
bat
of fallen tree
diameter
rons, doll-bed sheets,

ads

ads

ng and art use

lenses removed
er securely fastened to

as station; oil can; gas
ts, tire pumps
stic lids (can be
with enamel)
ers (make funnels,

and screws to fit together
stray kitten, a tortoise,

and aids, slide camera

Marbles

Wigs

Indian head dresses and feathers

Beans, rice, etc., for play house

Large rocks (too large to lift) for sitting
upon and feeling

Stepping stones in yard or garden for walk-
ing upon and jumping to

Indoor plants: get cuttings from friends
and let children watch roots develop be-
fore planting

Wind chimes: inexpensive on the market, or
make from tin, jewelry, etc.

Series of long, low boxes for train, trucks,
etc. (Wooden and/or cardboard)

Painters' buckets - plastic or cardboard

Unlabeled liquor bottles for colored water,
place on ledge where light shines

Rhythm instruments, homemade

Large animals or figures for climbing and
riding made from paper mache and saw-
horses

Box of "junk" for texture, for design and
collage

Box of fabric samples for texture, shape,
color

"Small bottles," garlic, cinnamon, cloves,
cologne, mouthwash, empty condiment boxes,
empty cologne bottles and powder boxes, etc.

"Lock box" -- wooden box with variety of
latches and locks attached to door, door
will open when all locks and latches have
been opened.

Bean bags; easy and inexpensive to make

Collection of discarded kitchen utensils
such as sifters, dish pans, funnels, mea-
suring cups and spoons, egg beaters, muf-

fin tins, spatulas, etc.
 Dried gourds, large and small, for form and color; can be painted
 Country mailbox outside nursery
 Newspaper (variety of uses in art experiences)
 Colorful wrapping paper, ribbons and bows
 Mirrors, variety of sizes and locations
 Discarded sink for outdoor water play
 Flannel boards for use by teacher and children
 Punching bag made from old pair of jeans
 Feathers, sheep wool, pieces of fur
 Walking or jumping boards, easily made
 Canvas, for tent
 Aluminum foil pans
 Cardboard tubes from rolls of paper
 Catalogs (Sears, etc.) (Good for categorizing objects)
 Sample drapery, carpet, wallpaper books
 Old holiday greeting cards
 Silk scarves
 Flour, corn meal, grains, etc., to sift, measure and feel. (Don't ever throw away cereals with weevils; send it to school!)
 Buttons; sort for size and color; string on heavy thread
 Zippers, snaps, hooks, tops of old tennis shoes; mount fabrics on board for manipulation by children
 Suspenders
 Wood scraps for building
 Sawdust
 Clothes pins
 Empty telephone cable spools (outdoor tables)
 Telephone wire (colorful!)
 Old furniture: paint with gay colors and use for work areas and storage
 3 gallon ice cream containers
 Ceramic tiles (and pieces of tile) from tile shop
 Scrap paper from printers (all colors and sizes)
 Paint color swatches from paint store

SOME SOURCE EQUIPME

Your Indian Communi

Brunswick
 Kalamazoo, Michigan
 Telephone - 616-349

Childcraft Equipmen
 155 East 23rd Street
 New York, New York
 Telephone - 212-674

Community Plaything
 Rifton, New York 1
 Telephone - 914-658

Creative Playthings
 Edinburg Road
 Cranbury, New Jersey
 Telephone - 609-448

or
 5757 West Century B
 Los Angeles, Califo

Greene Wood Product
 47-07 Vernon Boulev
 Long Island, New Yo
 Telephone - 212-ST6

Zia School and Offi
 Second Street
 Albuquerque, New Me

Milton-Bradley Co.
 Springfield, Mass.

Hardware, Stationer
 Stores

Much is available t
 if you can arrange

small, for form and
 nursery
 es in art experi-
 ribbons and bows
 s and locations
 or water play
 teacher and children
 ld pair of jeans
 eces of fur
 s, easily made
 ls of paper
 Good for categorizing
 wallpaper books
 is
 , etc., to sift,
 't ever throw away
 send it to school!)
 nd color; string on
 ops of old tennis
 n board for manipu-
 ools (outdoor tables)
 !)
 th gay colors and use
 rage
 iners
 s of tile) from tile
 s (all colors and
 m paint store

SOME SOURCES FOR PURCHASE OF EQUIPMENT AND SUPPLIES

Your Indian Community

Brunswick
Kalamazoo, Michigan
Telephone - 616-349-1521

Childcraft Equipment Co., Inc.
155 East 23rd Street
New York, New York 10010
Telephone - 212-674-4736

Community Playthings
Rifton, New York 12471
Telephone - 914-658-6561

Creative Playthings
Edinburg Road
Cranbury, New Jersey 08512
Telephone - 609-448-2221
 or
5757 West Century Boulevard
Los Angeles, California 90045

Greene Wood Products
47-07 Vernon Boulevard
Long Island, New York 11101
Telephone - 212-ST6-5699

Zis School and Office Supply
Second Street
Albuquerque, New Mexico

Milton-Bradley Co.
Springfield, Mass. 01101

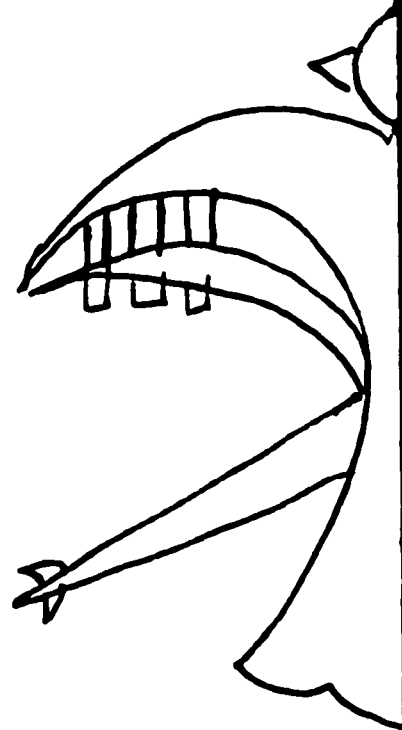
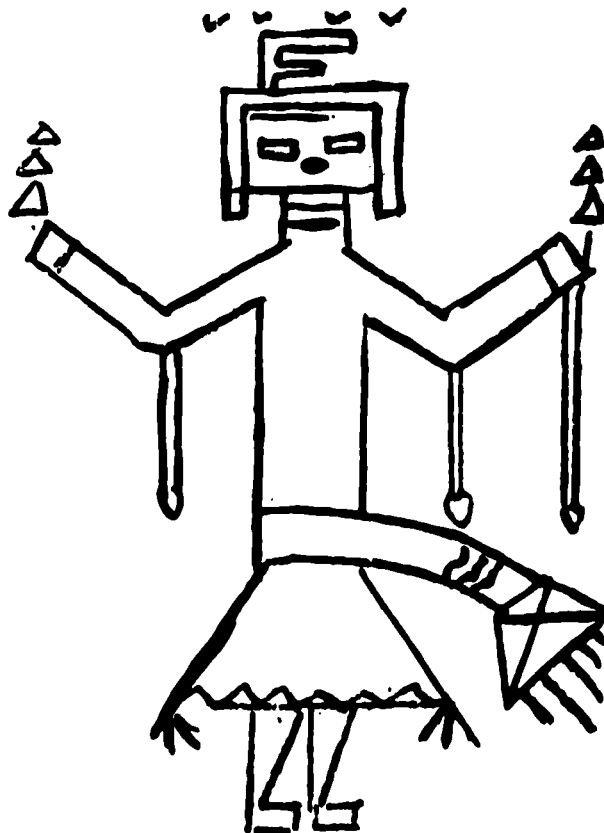
Hardware, Stationery, 5 cents & 10 cents
Stores

Much is available through army surplus depots
if you can arrange to get it.

SOME SOURCES FOR SECURING "BEAUTIFUL JUNK"

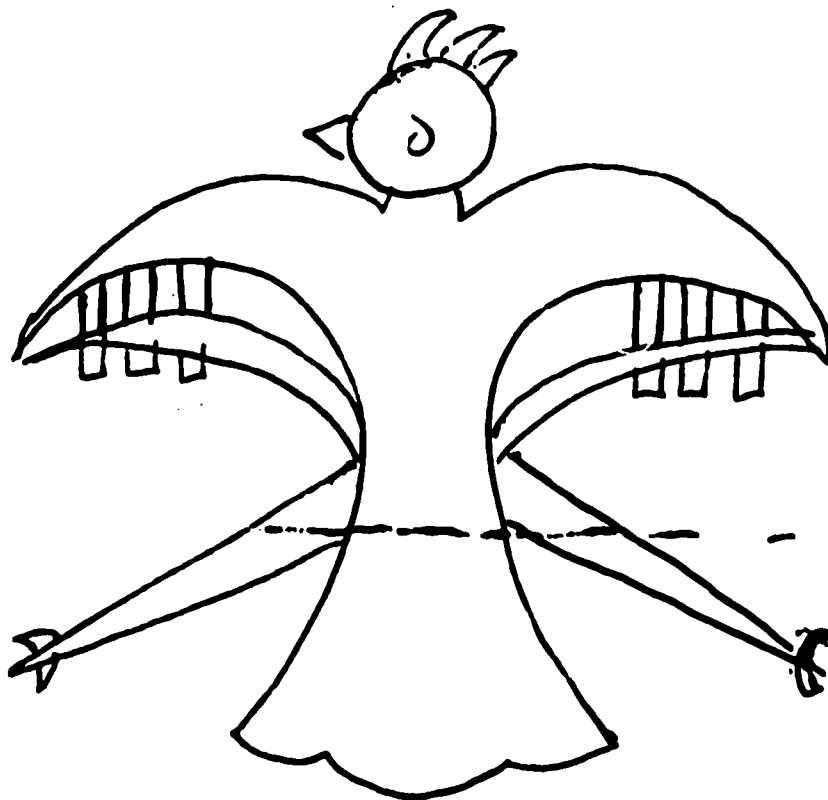
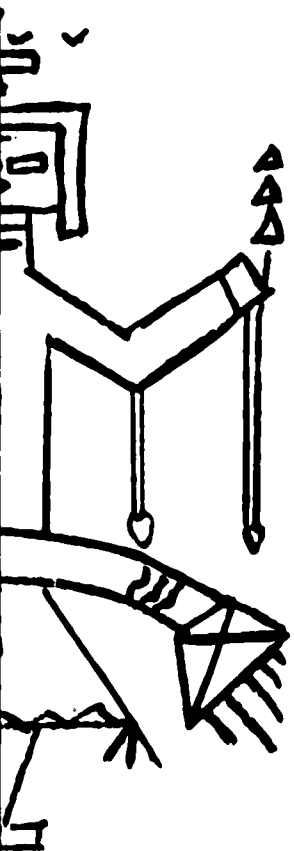
Your Environment

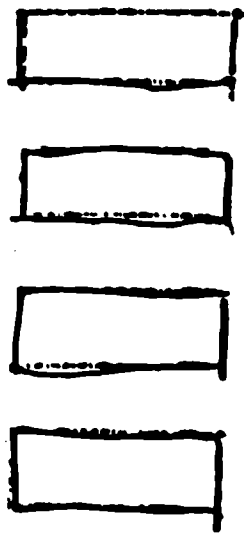
Millwork and Lumber companies, grocery stores
Telephone company, soft-drink companies
Ice cream stores, gas stations and garages
Wallpaper stores, carpet shops, tile stores
Boat Rentals and Marinas, moving companies
Print shops, fabric departments, home.

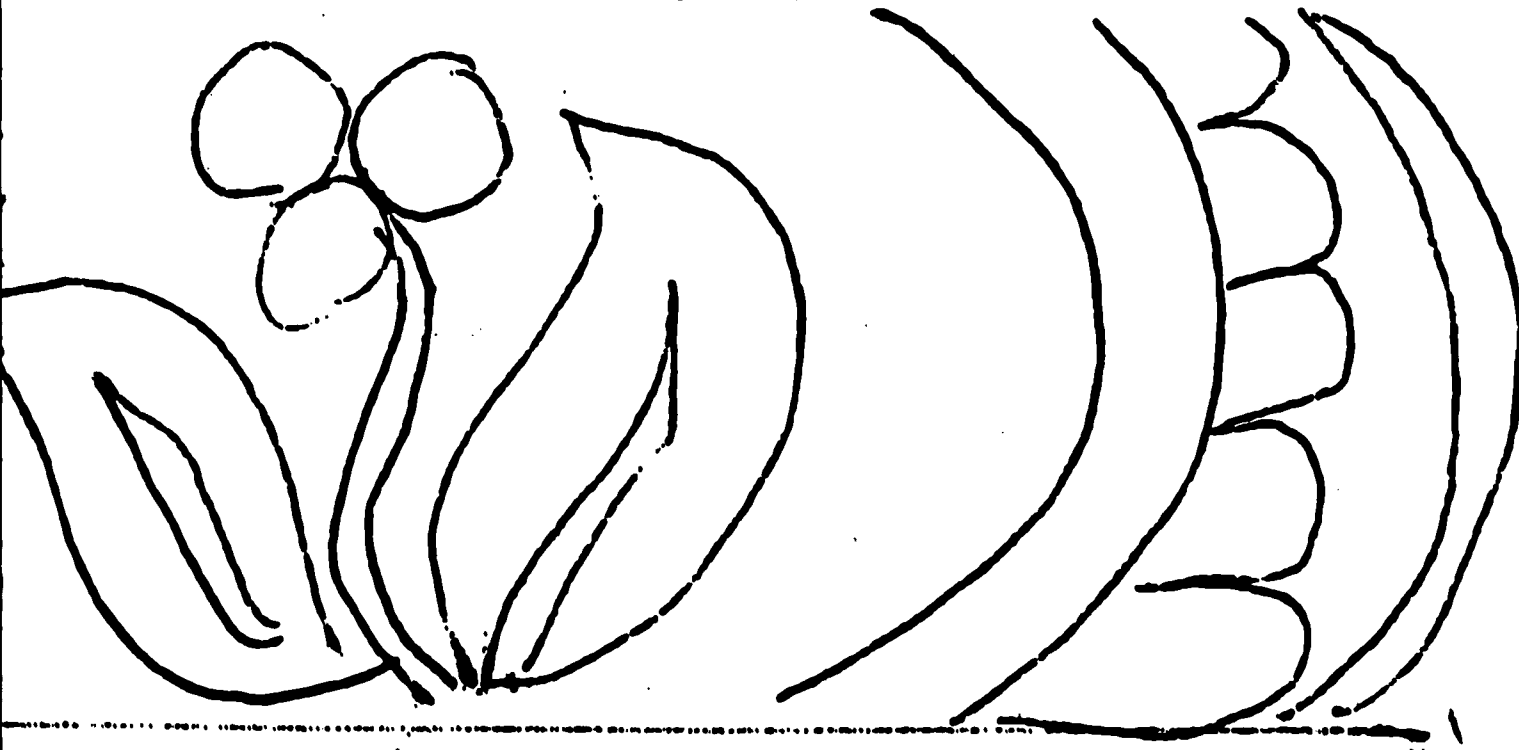


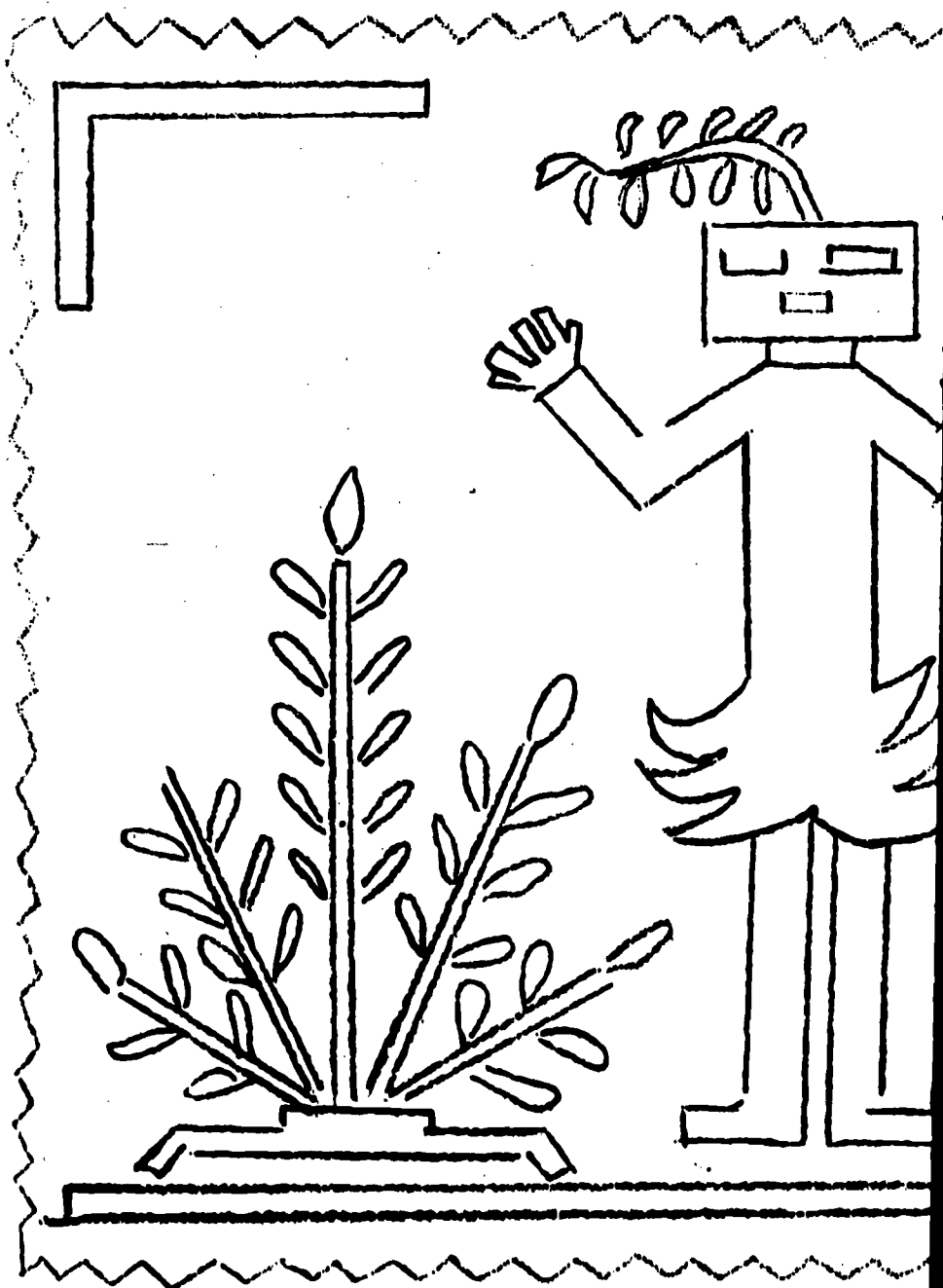
SECURING "BEAUTIFUL JUNK"

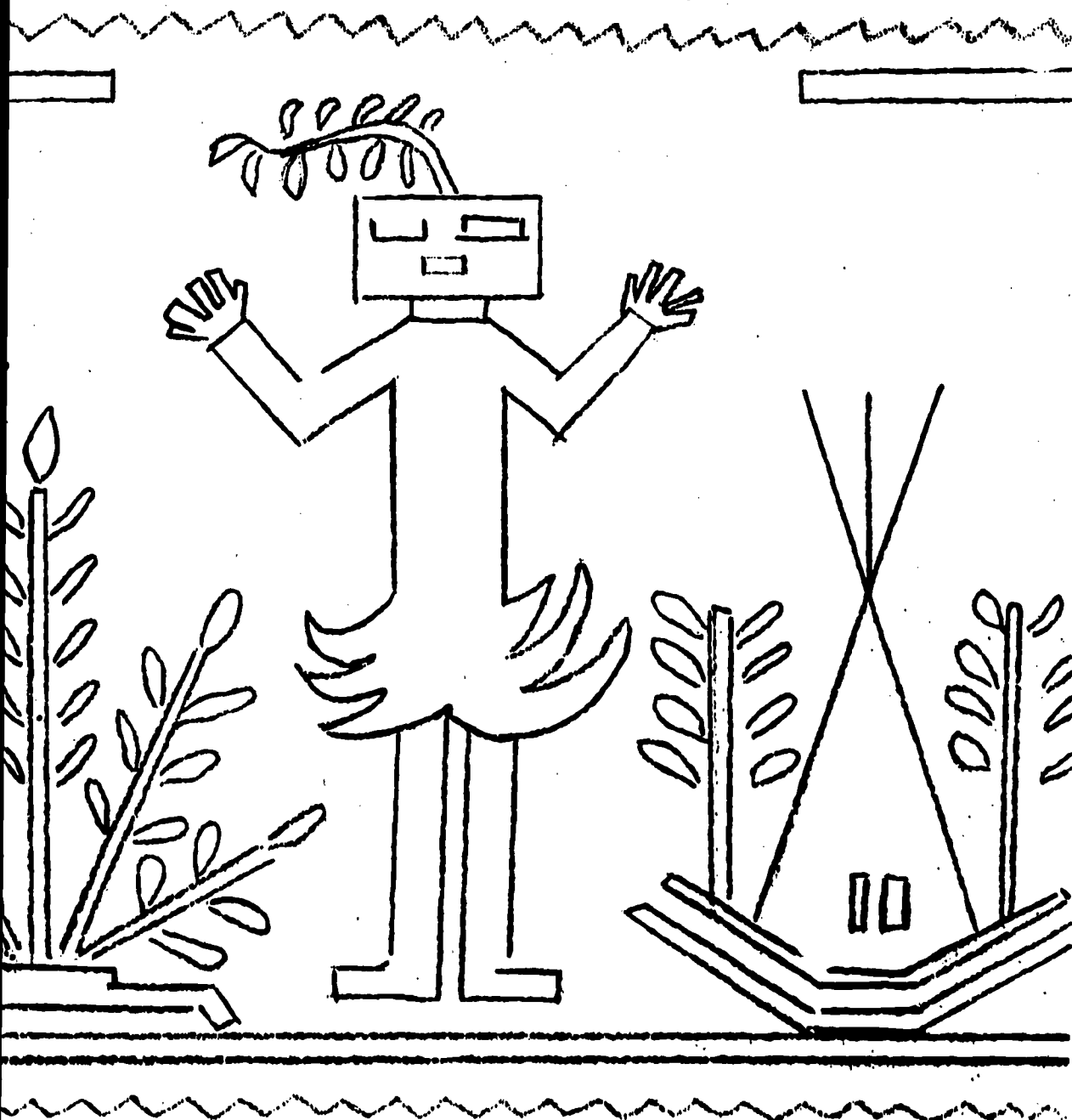
companies, grocery stores
soft-drink companies
gas stations and garages
carpet shops, tile stores
airlines, moving companies
department stores, home.











LANGUAGE AND CONCEPT DEVELOPMENT THROUGH CURRICULUM

The new kindergarten classrooms offer an exciting challenge in bilingual education to the teacher. Though the use of native Indian languages varies from community to community, basically a modern kindergarten for Indian children is centered upon two languages. There is often much disagreement among experts as to the most effective ways of introducing a second language to a young child while strengthening the use and full development of his native tongue. But all specialists stress the crucial years from 4-7 as basic to the development of communicative competence in the adult. The major overall goals in this context are as follows:

1. The development of the mother tongue for the purposes of communication, learning, problem-solving and fantasy.

2. Selective introduction and/or development of existing skills in the national language. An individualized approach is recommended.

Language plays a crucial role in communication as well as in the development of learning and thought processes. Children who are shifted from one language to another without the opportunity to effectively learn the use of language for varied functional aims, often remain "illiterate in two languages." To avoid such a hazard, teachers and aides are urged to become familiar with the use of language by the Indian community and with the resources currently being developed among different Indian tribes. (For instance, the acquisition of literacy skills in Navajo by an increasing number of aides and teachers at the Navajo Community College is one such opportunity.)

A. Children consisting of speakers in their native

1. The communication of materials to Indian children in their native tongue. (Materials should be available from the beginning on Indian children in the Appalachians.)

2. The development of the native language for the purposes of communication, learning, problem-solving and fantasy. This process should be individualized to the child's needs and abilities. (Materials should be available from the beginning on Indian children in the Appalachians.)

3. The development of the national language for the purposes of communication, learning, problem-solving and fantasy. This process should be individualized to the child's needs and abilities. (Materials should be available from the beginning on Indian children in the Appalachians.)

4. The development of the classroom language for the purposes of communication, learning, problem-solving and fantasy. This process should be individualized to the child's needs and abilities. (Materials should be available from the beginning on Indian children in the Appalachians.)

B. Children should have

LANGUAGE AND CONCEPT DEVELOPMENT THROUGH CURRICULUM EXPERIENCES

classrooms offer an exciting bilingual education to the use of native Indian language to community, kindergarten for Indian upon two languages. There is agreement among experts as to ways of introducing a second language to a child while strengthening development of his language. All specialists stress the importance of the mother tongue in 4-7 as basic to the development of communicative competence in the overall goals in this area:

of the mother tongue in communication, learning, and fantasy.

Introduction and/or development of the national language in the national language approach is recommended.

Special role in communication development of learners. Children who are able to communicate with one another without the use of a second language effectively learn the use of functional aims, often in two languages." To the teachers and aides are familiar with the use of language to community and with the language being developed among different groups. (For instance, the acquisition of Navajo by an aide and teachers at the College is one such opportunity.)

A. Children living in isolated communities consisting of predominantly non-English speakers should have a curriculum primarily in their native language.

1. The use of the mother tongue for communication and learning implies the preparation of materials in the native language as well. Indian children appreciate deeply the few materials which are available in their native tongue. (Lists of these materials are available from the BIA and the American Association on Indian Affairs; see also the bibliography in the Appendix.)

2. The teacher who does not speak the native language has the difficult job of learning to communicate non-verbally. Through this process, however, she learns to accept the children's own ways of conveying their needs and feelings to her by the languages of vision, motion and touch.

3. The introduction of the English language should be based upon the level of language development of each child in his native language. We prefer language development experiences instead of ESL for the kindergarten child. (See specific suggestions in Suggested Activities to Increase Language Power.)

4. The Indian teacher or aide in these classrooms is the one who can communicate with the children in their native language and thus, becomes the pivotal individual. Cooperative planning between the Indian and English-speaking staff members is of the essence.

B. Children living in mixed communities should have a curriculum in both languages.

1. The development of the mother tongue for all children who come to class speaking it, and the availability of experiences in the Indian language for children who have limited knowledge of it.

2. The sequential introduction of the English language for all children based upon an approach of individualized instruction. (See specific suggestions in Suggested Activities to Increase Language Power.) The role of child-to-child interaction is particularly important in a heterogeneous classroom; therefore, many opportunities for this kind of activity should be provided.

3. The concern expressed by many teachers for shaping the Indian child's grammar and pronunciation in the direction of Standard English is understandable. Our approach, however, suggests the importance of modeling (i.e., exposure to clear, child-directed, interesting language in stories, dramatic play, songs and conversation) instead of formal exercises or the correction of "grammatical and pronunciation errors."

C. Children living predominantly in English-speaking communities with a past history of Indian languages having been spoken.

1. The relationship between the cultural and linguistic aspects of the program in this kind of community is particularly important. The exposure of children to traditional songs, music, and older members of the community who still speak the language is recommended.

2. The development of skills in the English language from a functional point of view (i.e., children learn to recognize that through the use of language they can affect their environment in a powerful way.) We recommend

a child-centered occupation

3. Opportunities for language use for learning specific skills to Increase

The development as a unitary learning relying on communication structures, drawing planning of at different following relevant to language as second language from the beginning needs a part of words; the cause of the which he is community.

The four aspects in a kindergarten sound production and semantic development

Listening: listening skill help them focus attention to in rural environment discriminate as to interpret basis from distinction children tend to rather than

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Suggested Activities

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a child-centered approach instead of a pre-
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3. Opportunities to use the child's language for learning and problem-solving. (See specific suggestions in Suggested Activities to Increase Language Development.)

The development of language can be thought of as a unitary process, as the child's increasing reliance upon words, in addition to his communication by means of motion, touch, gestures, drawings and dance. However, in the planning of curriculum it is helpful to look at different components of languages. The following listing of aspects of language is relevant to development of the child's native language as well as to his acquisition of a second language. In all instances, the child from the bilingual and bicultural environment needs a particular sensitivity to the medium of words; this sensitivity is required because of the many conflicting demands with which he is confronted in school and in his community.

The four aspects of language to be included in a kindergarten program are: listening, sound production, the development of fluency, and semantic development in the context of the development of language for thought.

Listening: The objective in developing listening skills in bilingual children is to help them focus on and sustain a tenacious attention to sounds. Many children raised in rural environments have learned to discriminate among certain sounds of nature and to interpret them. This is an important basis from which to move to fine auditory distinctions in words. For instance, children tend to pay more attention to beginning rather than to the end of words; listening

games using natural and musical sounds can help them focus their attention on different segments of continued patterns of sound.

In addition, the matching of sound to sight is a critical skill being developed in these early years. The sensory integration of visual and aural patterns has been found to constitute an important prerequisite to reading. Matching games of sounds and pictures can strengthen listening and sensory integration.

Sound production: When learning to speak children constantly shift from listening to speaking; basic to the process of speech is a curiosity about the way sounds are made. One of the objectives of a kindergarten language program is to develop in Indian children an ease in imitating sounds; the use of instruments is one major avenue for accomplishing this aim.

Increasingly, psychologists and linguists believe that much early learning consists in the development of generalizations. For instance, the difference between low and high sounds can be shown by the tightness of a wire or string, similar to the tightness or laxness of muscles during sound production. Languages differ in this respect; in Navajo, for example, shoulder muscles as well as sounds, while in English shoulder muscles are seldom used. Teaching-learning games of sound production (as in the production of the th sound) can be developed with the help of feathers and mirrors, giving the child an opportunity to watch the impact of streams of air, or to observe the placing of the tongue between the lips when producing a sound.

Teachers may wish to draw up a checklist of substitutions and errors of omission characteristic of the children with whom they work.

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rrors of omission charac-
dren with whom they work.

Such a checklist would serve to discourage
teachers from the often unconscious tendency
to correct children's speech - a harmful
practice. Instead, by helping the teachers
develop a sensitivity to the regularities in
the speech of their children, this close ob-
servation may lead to a knowledge of how to
stress certain sounds in their own speech,
and most importantly to understand more of
what the children in their classes are say-
ing.

The objective, then, of developing a program
in sound production is to dramatize to the
children how sounds are made, not to correct
the speech of kindergarten students.

The development of fluency: Many teachers in
ghetto and reservation schools are concerned
with the "problem of the silent child." Such
children can be found in many communities
where the home language and the school langu-
age are different. It is particularly impor-
tant to give the shy, quiet child a chance
to hear and communicate in his native langu-
age. I would like to suggest that language
and library corners be set up in the kinder-
garten classrooms, similar to block and dress-
up areas. In these areas, materials in the
child's native language would be made avail-
able (Particularly in classrooms where not
all children come from a non-English speaking
home.) If only a minority of children speak
an Indian language, the availability of re-
sources such as taped stories would help
community aides in working with the child in
his native language.

The greater the leap from home to school, the
bigger the geographic and emotional distance,
the less likely the children (even if they
are not bilingual) will enter into verbal
exchange with their teachers. Therefore,

teachers need to know how to develop the skills of responding to the non-verbal efforts at communication on the part of young children.

The goal of verbal fluency is to add to the child's non-verbal ways, skills which will enable him to convey to others what he wants and how he feels and also allow him to re-shape and re-experience his own experiences which may become less painful, or more poignant, when savored once more by means of words. Novelty of experience does not usually lead to verbal expression on the part of young children. It is for this reason that the emergence of verbalizations accompanying action, ritual or familiar play is of such importance.

Specific activities for the development of fluency in the child's dominant language (i. e., the language which he uses spontaneously for communication) include "meal-talk," story re-telling and dramatic play.

(a) Meal-talk. The physical proximity of teachers and children at meal-time allows for casual, but at times repetitive, conversation. Some teachers use this setting for conceptual training as well: talking about solid and liquid foods, different colors, etc. Questions such as, "Who is sitting with us today?" "Who is wearing a red sweater today?" allow for the repeated use of a sentence frame while changing individual words. This type of verbal interaction in the child's native language can easily be transferred, at a later stage, to learning experiences in a second language.

(b) Dramatic play. The imaginative teacher can capitalize on children's experiences for dramatic reenactment. Settings that children are familiar with (stores or trading

posts) lend themselves to these kinds of language. Dramatic play does not require the whole class; particularly interesting activity can be invited with props; others may be invited. In dramatic play children re-shape their experiences in a specific idiom, which may be verbal language, or non-verbal language, or a linguistic dialogue.

(c) Story re-telling. Children can be trained to use language to children in front of them is a method of translation. For story re-telling would like to record multiple sets of illustrations for children. One set can be mounted so that children can read in their own language. (For further details see and Berney, T., "Sequential Speech Stimulation," appear in Levin, H., Basic Books, Inc., the opportunity to work in groups, pairs, or individually can monitor the children during the kindergarten

The cameras which are used in the kindergarten to record the opportunity to work in groups, pairs, or individually can be built.

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posts) lend themselves particularly well to
these kinds of language experiences. Drama-
tic play does not have to become a spectacle
for the whole classroom; children who seem
particularly interested in this kind of act-
ivity can be invited first to play with the
props; others may or may not follow suit.
In dramatic play children have a chance to
re-shape their experiences into their symbol-
ic idiom, which may consist of verbal or non-
verbal language, and even, at times, of bi-
lingual dialogue.

(c) Story re-telling. Teachers and aides
can be trained to read stories in an Indian
language to children, though the book in
front of them is in English. While there is
a shortage of materials (and individuals who
can read in their native Indian tongue) this
method of translation is an adequate substi-
tute. For story re-telling activities, we
would like to recommend the purchase of mul-
tiple sets of illustrated books for young
children. One set of illustrations should
be mounted so that children can handle these
while the stories are being read to them,
and once they re-tell the story by themselves.
(For further details on this method of langu-
age stimulation, see John, V., Horner, V.,
and Berney, T., "Story-Retelling: A Study of
Sequential Speech in Young Children," to ap-
pear in Levin, H., Basic Studies in Reading,
Basic Books, Inc., 1970.) In giving children
the opportunity to re-tell stories in small
groups, pairs, or individually, the teacher
can monitor the child's growth in language
during the kindergarten year.

The cameras which have been made available to
the kindergarten teachers should give them
the opportunity to photograph those experi-
ences around which group and individual stor-
ies can be built. In classes where some

children speak an Indian language and others speak English, the stories can be recorded bilingually.

Sematic development: The most significant aspect of language acquisition is the learning of word meanings. One way to think of this process is to conceptualize a gradual shift in the child's use of single labels to words signifying categories of objects, actions and attributes. In other words, while at first children learn the names of certain favored objects, as they grow older their language reflects their recognition of commonalities of features among a variety of objects and events. They learn to generalize through and with words, and also to become more precisely specific. These very same psychological processes -- generalization and discrimination -- are basic to problem-solving.

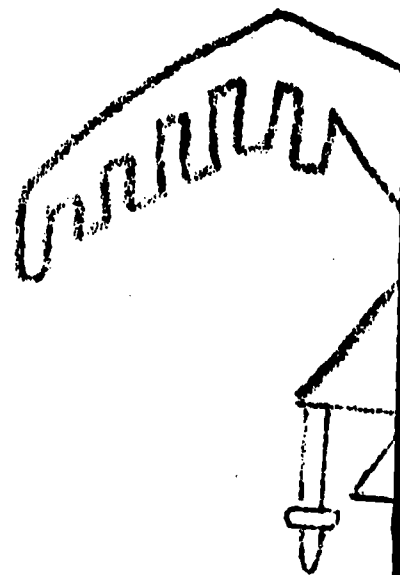
Children learn to use language in problem-solving at an accelerated pace during the ages of 4-7; children who are exposed to conflicting language pressures have a particularly difficult time in developing this function of language.

It is for this reason that an increasing number of educators and psychologists urge that the mother tongue should be the language of instruction for young children.

Teachers who do not speak the native language can prepare certain games, with the help of their aides, aimed at sematic development and the use of language for problem-solving. One of the most difficult concepts for young children to acquire is that of "same." When are two animals or colors or utensils the same? Pantomime and visual demonstration, as well as the use of language, help to strengthen the skills of recognizing essential similari-

ties and ignoring objects, (for example rusted, are sti

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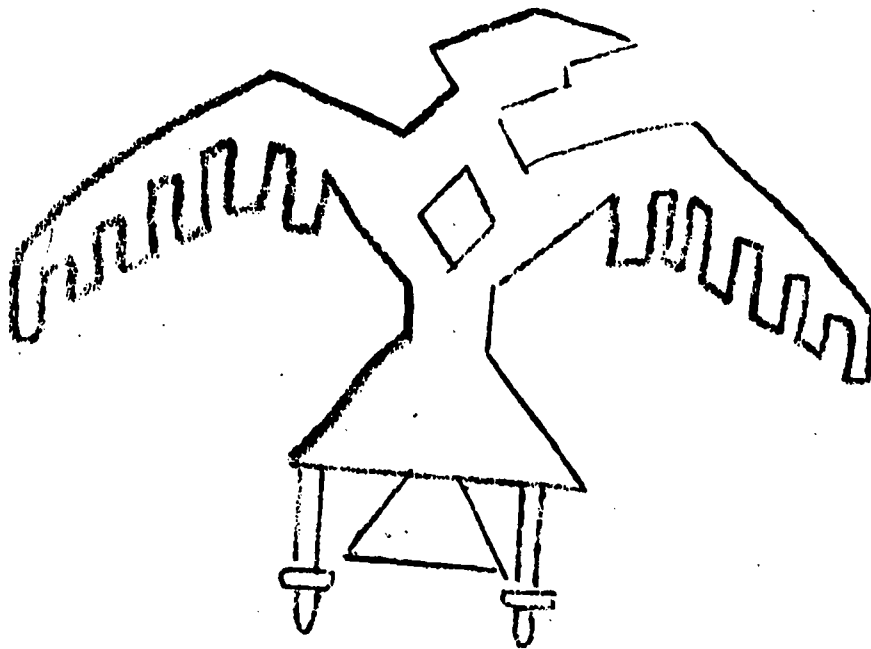
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ties and ignoring irrelevant variations among
objects, (for example, two dimes, one slight-
ly rusted, are still, functionally, the same.)

The use of lotto and sorting games, often
produced by the teacher and aide with cul-
turally relevant materials, offer an impor-
tant setting for the development of word
meaning and problem-solving skills in young
Indian children. (See Games to Make.)

by Dr. Vera P. John



SUGGESTED ACTIVITIES TO INCREASE LANGUAGE POWER

Increasing skills in English language usage and comprehension will need classroom experience. Although no formal period is recommended, the opportunity for simple games, sing the songs, and practice the language must be planned in small groups at work/play, on field trips, and during other parts of the daily routine to learn and use the materials below.

Teacher-planning is most important in building a sequence of experiences that develop the ability to produce English sounds, whether the children already use English or whether they are making the transition from another language. One needs to start with one-word activities (Phase I), labeling, naming, locating on command, and simple phrases (Phase II), using words in a phrase and producing sounds that are made by actions like walking, etc., to final (Phase III) in which children repeat and produce a sentence frame or full sentence.

Phase I - Sound Game

Set out three to five sound-making objects; example: bell, drum, pan with two blocks.

Ask children to close eyes and listen while another child chooses one sound.

Then, everyone guesses.

Phase I - III

Get magazines, Sears catalogues, etc., and let children cut, or tear a picture out - label in native language and English - furniture, cars, clothes, foods, etc.

In Phase II encourage sounds made by cars, etc.

In Phase III try to get frames:

These are _____ All of these are _____ This is not a

It's a _____

Phase I and II - Pantomime guessing

Child does: hammering, weaving, climbing, riding, crawling, etc.
Teacher and children supply name for action.

SUGGESTED ACTIVITIES TO INCREASE LANGUAGE POWER

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sounds, whether the children already use English extensively, or
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I), labeling, naming, locating on command, and building to phrasing
a phrase and producing sounds that are made by animals, cars, horses,
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nd-making objects; example: bell, drum, pan with spoon, hammer,
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alogues, etc., and let children cut, or tear and paste object
ve language and English - furniture, cars, clothes, plants,

nds made by cars, etc.

rames:

All of these are _____ This is not a _____

guessing

aving, climbing, riding, crawling, etc.
y name for action.

Sound guessing

Child does things that make sounds in room: close book, close hands, jump, etc.
Others close eyes and guess.

Phase II - Teacher singing descriptions

Phase III - Children singing descriptions

Here's a simple melody whose words can teach structure of a thing can be panned off as a rhythm.

I can walk and I am walking

Walk walk walking is good fun

I can walk and I am walking

Walk with me oh please do come

I can jump, run, hop, sing, lift (pretend something heavy) whirl, etc.

Note: The following consonants or consonantal clusters incorporated into Navajo:
f as in fun
ng as in sing
r as in run

Phase II - III - Horse hoof clap

Ask children how the horse hoofs sound in clapping hands. Formalize what child has given by strengthening, accenting
This is the way _____'s horse rides clap clappety
Slow? This is the way -----
Fast? This is the way -----

make sounds in room: close book, close door, drop object, clap

guess.

g descriptions

g descriptions

by whose words can teach structure of English verb, and the whole
off as a rhythm.

walking

good fun

walking

se do come

, sing, lift (pretend something heavy), tip-toe, wiggle, glide,

sonants or consonantal clusters incorporated into the above have

f as in fun

g as in sing

r as in run

oof clap

orse hoofs sound in clapping hands.

as given by strengthening, accenting rhythm and then all repeat:

_____ 's horse rides clap clappety clappety, etc.

ay -----

ay -----

Phase III - Lobby Loo - To teach parts of the body and also first a

I put my first hand in	I put my second
I put my first hand out	I put my first
* I give that hand a shake, shake, shake	I put my second
And turn myself about	I put my whole
	etc.

Oh, here we go Lobby Loo, etc.

* That may be difficult - show how to make the th sound

Get a big doll or pretend one child or teacher is a doll.
Where are dolly's eyes? One or two children show on dolly. Then
on themselves, "Here are my eyes."

In hand and fingers, nd and erz may require attention. At first
(not on same day) from singulars, i.e., eyes, ears, teeth, feet,
from nose, mouth so as not to conflict verbs is and are.

Phase III

In discussing children's pictures use some old ones (two weeks ago
will then be past tense. Remember when you sent, did, saw, played
child to verbalize past tense in this way.

Phase III

Four children holding signs (picture) stand in four parts of the
can be store, rodeo, school, bus, hogan, etc. Each child says where
"I want to go to the _____. Then he goes. This can be done in
tongue. Or, using some children as "drivers" (of bus, pick-up, car)
stop and pick up the children who say, "Take me to the _____".

Example: Driver: Where are you going?
Passenger: I want to go to the _____.
Driver: O.K. Get in.

Phase III - Rodeo - Dramatic Play

Children take turns being:

* Announcers (In Navajo or English)
Riders

* Ladies and Gentlemen
You will see--

teach parts of the body and also first and second. (ordinala)

shake, shake
I put my second hand in
I put my first foot in
I put my second foot in
I put my whole self in
etc.

etc.

show how to make the th sound

one child or teacher is a doll.
One or two children show on dolly. Then all say and show
"my eyes."

and erz may require attention. At first do plurals separate
regulars, i.e., eyes, ears, teeth, feet, legs, etc., separate
to conflict verbs is and are.

pictures use some old ones (two weeks ago). The discussion
Remember when you sent, did, saw, played, etc., encourage
sense in this way.

(picture) stand in four parts of the room (yard). Signs
1. bus, hogan, etc. Each child says where he wants to go.
Then he goes. This can be done in English or mother
children as "drivers" (of bus, pick-up, car, horse), the drivers
children who say, "Take me to the _____".

are you going?
want to go to the _____.
Get in.

Play

(or English) * Ladies and Gentlemen -- ** Get your _____
You will see-- Ice cold _____

Broncos
Calves
Singers or other entertainers
** Refreshment sellers

Next we have--
The prize goes to--

The degree of dialogue possible depends on ability of particular group. We expect the play to become more verbal and more organized as it goes on.

Phase III - Sample Concept Lesson. Teaching little - big - bigger (

Two teachers: One is commentator and one is the blower. Demonstrate with a small balloon and begins to blow as the other describes, "It's little, little. It's getting bigger and bigger. It's so big, etc., until it bursts." Second time children join with commenting teacher in "blow by blow." Follow-up: Find things in room - big - little. Who is bigger than who?

Sunday	-	Domingo
Monday	-	Domingo Buska'ni (Day after Sunday)
Tuesday	-	Mali ji Na'anish (Two days work)
Wednesday	-	Tagu ji Nda'anish (Three days work)
Thursday	-	Di ji Nda'anish (Four days work)
Friday	-	Ashdla aji N'aanish (Five days work)
Saturday	-	Yiska' Domingo (Little Sunday or day before Sunday)

These can be recited in phase III, one a day, holding up fingers 1 - 5, i.e., "Thursday is Di ji Nda'anish = Four days work" (Hold up fingers 1 - 4)

Pictures of rugs can be used to:

Evoke pride in Navajo or other Indian craft.

Enjoy beautiful patterns.

Learn colors, red, orange, brown, blue, green. (May require practice)

Learn such terms as: line, square, stripe, diamond, zig-zag, cross, top, bottom, sides.

Practice counting: stripes, diamonds, etc.

See slides, too, of patterns on pottery, rugs, baskets, and other articles.

Next we have--
The prize goes to--

Right here--
(How much does it
cost?) It costs 15
cents, etc.

ners

le depends on ability of particular group. One would
e verbal and more organized as it goes along.

son. Teaching little - big - bigger (final g and gr worked on)

tator and one is the blower. Demonstrate: One shows a
blow as the other describes, "It's little, it's still
and bigger. It's so big, etc., until it bursts."
th commenting teacher in "blow by blow" description.
om - big - little. Who is bigger than -- ?

ka'ni (Day after Sunday)

anish (Two days work)

'anish (Three days work)

nish (Four days work)

N'aanish (Five days work)

ngo (Little Sunday or day before Sunday)

III, one a day, holding up fingers 1 - 5 Mon. - Fri.
nish = Four days work" (Hold up fingers)

o:
er Indian craft.

rown, blue, green. (May require practice)
square, stripe, diamond, zig-zag, cross, within, around,

diamonds, etc.

n pottery, rugs, baskets, and other articles.

STORIES AND LANGUAGE EXPERIENCES

Many of the stories of the Indian people deal with the beginning of things: how the world was created, the sun and moon and stars, the earth and its features -- mountains, lakes, rivers, canyons, plains. True, the puzzle of how these things came to be as absorbed all the peoples of the world, from time immemorial. Children today, whether Indian or not, muse over these same questions.

As he went to bed one evening, a four year old boy revealed the preoccupations of his mind, and recalled the events of his day, by asking:

Why does hair stick to your head? Why does wood stay together? Why does the card table stand up? Why do jail bars stay together? Why does wallpaper stick? Why are eggs good for you? Why do lights turn on? Why is it sometimes hot, cold, warm? Why are cakes for birthdays? Why is a nickle 5 cents? Why do pencils have blades all through them? Why does fur stay on dogs? Why are riddles hard and easy? Why don't people have tails? Why do birds fly? Why is money treasure? Why do cowboys go after money? Why is there such a thing as people?

Some of these questions are reflections of the times and setting of one child. Some are universal in content. Stories of fact and fantasy will appeal to all young children as they build a picture of themselves and the world.

Indian legends tell of the way the animals became what they are: How the spider got its red spot, why bears are black, why the skunk smells good most of the time, how the pony was made from mud. Likewise, there are tales

which deal with the rain and the crops. And and share many is clearly not b them. In this ticular appeal the distinction ing an animal i imagination, th from one world he is not upset animate objects and the like. can be alive. little and help stronger force, for the others.

For these reasons larly suited to direct quality which takes no cal time and se tale teller to depending on th characters to a predictably. C of easy movement not in any sense ime sequence or not need to be e fied beginning a wise readily dis the tale lies in problem that need tion for phenome ution of the why or -- sometimes ter who has beco

LANGUAGE EXPERIENCES

of the Indian people deal of things: how the world and moon and stars, the trees -- mountains, lakes, rains. True, the puzzle of life to be as absorbed all over the world, from time immemorial, whether Indian or not, are questions.

In the evening, a four year old child, with the preoccupations of his age, looks back on the events of his day, by

Why does the card table wobble? Why do nail bars stay together? Why do eggs tick? Why are eggs good? Why do lights turn on? Why is it warm? Why are cakes for nickle 5 cents? Why do they go all through them? Why are riddles hard? Why do people have tails? Why is money treasure? Why do they? Why is there such a

Some of these questions are reflections of the life of one child. Some are stories of fact and some are puzzles to all young children as they are of themselves and the

Some of the way the animals live: How the spider got its legs, why the skunk is black, why the time, how the pony runs. Likewise, there are tales

which deal with the fertility of the soil, the rain and the sunshine, and the growth of the crops. Animals and people talk together and share many of the same problems. There is clearly no bar to communication between them. In this way, the stories have a particular appeal to young children, to whom the distinction between being human and being an animal is not any barrier. In his imagination, the young child moves easily from one world to another. Frequently, also, he is not upset about personification of inanimate objects -- trees, flowers, clouds, and the like. As long as things move, they can be alive. In some of the stories the little and helpless character will outwit a stronger force, or solve a problem too big for the others.

For these reasons, Indian tales are particularly suited to young children. There is a direct quality about the traditional stories which takes no account of strict chronological time and sequence. It is easy for the tale teller to move about in space and time, depending on the needs of the story, and for characters to appear and disappear rather unpredictably. Children do not mind this kind of easy movement suited to the story, and are not in any sense bound by adult notions of time sequence or causality. The plot does not need to be elaborate. A clearly identified beginning and end or conclusion are likewise readily dispensed with. The relish of the tale lies in its direct dealing with a problem that needs to be solved, an explanation for phenomena that are puzzling, a solution of the whys or wherefores of existence, or -- sometimes -- a good joke on a character who has become too pompous or arrogant.

Each of the many Indian tribes has its own particular explanation for things. The Navajo have a story about Spider Woman who instructs Navajo women to weave on a loom which Spider Man told them how to make. The Pima tell how the rattlesnake, once the most beautiful but defenseless of snakes, received his fangs -- two powerful rays from the Sun God. The Eskimos account for the beginning of fish and sea animals. In addition, there are beloved tales which treat of real events sometime in the past, travels or experiences of the tribe.

Because of the universal themes which underlie much of the legend and lore of the Indian people, their stories can be used by other tribes with equal understanding and appreciation. It may be good for Indian children to begin to know something of the stories of their Indian brothers of other regions and tribes, and to appreciate the differences of living associated with woodland, plain, desert and tundra.

Stories can be read to children at many times during the day. The teacher who has a tale or two in her memory can hold children during restless periods of waiting for a bus, before lunch, or keep them resting in the shade after a long walk. Of equal importance is the need to encourage children to tell their own stories, to construct events of the day in story form, to fantasize about the future and to make up their own explanations for things. The rich oral tradition of the Indian people depends upon the imagery and skills of the story tellers of this generation.

The language of each Indian tribe has its own special flavor and meanings, much of which is lost in the translation into English struc-

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ture and vocabulary. In her anthology of Indian prose and poetry, Margot Astrov* speaks of the vivid and sensual descriptions in the original texts which include visual, auditory, even kinaesthetic qualities: the rustling of leaves, the monotonous patter of rain striking against the teepee, the booming of high winds, the rippling of a brook, the soothing coolness of shade. She cites one translator, Robert H. Lowie, who was able to preserve something of the poetry of the original work of the Crow and Hidatsa Indians:

When the day is cloudy, the thunder makes a low rumble and the rain patters against the lodge, then it's fine and nice to sleep, isn't it?

-----and again,

You hear the wind blowing, blowing, then all of a sudden it dies down just as if it had gone off to sleep.

Since so many of the tales preserved in anthologies have been stripped of much of this color and descriptive flavor, it may be possible for those who are using them to reach into their own feelings and attempt to recreate what must have been added by the original Indian storyteller as he held his audience spellbound.

*American Indian Prose and Poetry. An Anthology, Edited by Margot Astrov. New York: Capricorn Books. 1962. Originally published as The Winged Serpent, 1946 (Page 11.)

The Teacher's objectives, through the use of written and spoken story materials, may include the aims of getting children,

To enjoy the stories of their own heritage.

To listen with attention of growing understanding.

To think logically and critically (in terms of their own experience).

To begin to appreciate other times, other lands, other people.

To observe and recall events.

To use words to express ideas, feelings and relationships.

To begin to hear speech rhythms and construction models and to reproduce these in their own conversations.

A few Indian legends are included, below, to suggest the flavor and form. In many instances, the stories lend themselves to dramatization and role playing.

WHY SKUNK SMELLS PRETTY GOOD MOST OF THE TIME A Ute Tale

The birds held a council. Mocking bird said, "That Skunk, what are we going to do about him? He is like a little boy with a bow and arrow. He shoots this way, and that way."

Crow said, "It smells too bad around here. My babies do not smell like crow babies. They smell like skunk babies."

Blue Jay said, "I have a plan. One of us must go down into the valley and tie a string around that bad smell."

The birds said, "Eagle, you can fly best. You are the one to go down into the valley, you are the one to tie a string around Skunk's bad smell."

Eagle flew down the mountain. He smelled Skunk. He was going to tie a string around him. If he saw someone, he would tell them the smell on him. Porcupine smelled bad. Deer smelled bad, too. Eagle smelled bad, too. Eagle flew quietly, but Skunk smelled him. Eagle smelled bad. He sat in a cave on the mountain. He sat in a cave on the mountain.

The birds said, "Canary, you are the one to go down. You are the one to smell." Canary too to go down. He flew down in the valley. He made much noise. He almost hit the ground. He almost heard him. Now Canary is in a tree.

Quail said, "There is a hole in the ground. He is the night-hunter."

Owl flew down. He saw a bush. Skunk had been there. Now he was tired. Owl was quiet as a shadow. He sat around Skunk's bad smell.

Skunk is a good neighbor. He smells pretty good most of the time.

THE SPIDER Cherokee

In the olden days the people suffered from the heat. Many suffered from the heat that in some mysterious way with mystical power protected it closely and refused to give up one coal. She lived a long time.

A meeting was called and they decided to cross the river. They started the fire. First the boys

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Eagle flew down the mountain. There was Skunk. He was going around like a bad boy. If he saw someone, he would throw that bad smell on him. Porcupine smelled bad. Turtle smelled bad. Deer smelled bad. Frog smelled bad, too. Eagle flew close to Skunk. He flew quietly, but Skunk heard him. Now Eagle smelled bad. He flew back upon the mountain. He sat in a tree by himself.

The birds said, "Canary, Skunk cannot hear you. You are the one to tie up Skunk's bad smell." Canary too took the string. He flew down in the valley. He didn't make much noise. He almost did it. But Skunk heard him. Now Canary sat alone in another tree.

Quail said, "There is one who can do this. He is the night-hunter. His name is Owl."

Owl flew down. He saw Skunk sleeping under a bush. Skunk had been a bad boy all day. Now he was tired. Owl made no noise. He was quiet as a shadow. He tied the string around Skunk's bad smell.

Skunk is a good neighbor now. He smells pretty good most of the time.

THE SPIDER AND THE FIRE Cherokee Legend

In the olden days the people had no fire. Many suffered from the cold. It was learned that in some mysterious manner an old woman with mystical power possessed fire but guarded it closely and refused to part with even one coal. She lived across the river.

A meeting was called at which many volunteered to cross the river and try to obtain the fire. First the bear tried. His coat

was burned black and he was forced to swim the river to safety. Ever since, we have had the black bear.

Next, the crows tried. They, too, were burned black and forced to return without the fire. Ever since, we have had black crows.

Then several birds in a body attempted the great feat. All were burned black and returned without success. These we call black birds. Others tried, but each returned with only a blackened coat.

At last, the spider volunteered. No one thought that he could succeed. Tying a small pot on his back, the spider spun a web across the river to serve as a bridge on his return. Then, crossing slowly and carefully, he, because of his size, eluded the guard and obtained a small coal which he put into the pot.

As he crossed the stream on his return trip, the spider felt the little pot grow hotter, but he staunchly continued on his way. Finally, he arrived safely home with his precious cargo. But when the pot was removed from the spider's back, it was discovered that he was not only burned black, but also had a bright red spot where the little pot had rested on his back. Ever since, we have had the black spider with the red spotted back.

WHY RIVERS FLOW BUT ONE WAY Puget Sound

Long ago, before the world changed, all the animal people came together for a bit meeting. Eagle was the headman of the gathering. He lived up high, in the top of a tall tree. Whenever the people wanted to decide anything important, they called up to him as he sat in the tree, and he gave them his opinion.

Each of the animals had a chance to say what they believed. Mink, who was a wise man, said that the opinion of the river was so important that it should be followed.

For a long time the rivers flowed in both directions. Should they flow down? All but one of all rivers said yes, and the other rivers should flow up, said, and then they went back.

"What do you think?" said up to Eagle.

"I agree with the rivers that go both ways. It will be hard to go up and hard to go down."

"I don't agree with the rivers that go both ways. It will have no effect as far as the river goes. It is right back again. And how will it be? I think that all the rivers should flow in one direction."

"Raven is right. It will have a very good effect if the rivers flow in one direction."

"I think the river should flow in one direction. I repeated Raven's words. The bends in the river are the eddies. They are slower. The people should follow the river."

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Each of the animal people at the meeting had
a chance to say what he thought. Even Raven
and Mink, who were slaves, told the others
what they believed should be done. Raven's
opinion was so good that he became known as
a wise man.

For a long time the people argued about the
direction in which the rivers should flow.
Should they flow up or down, or both up and
down? All but Raven thought that one side
of all rivers should run up the mountains
and the other side should run down. All the
rivers should go up as far as the falls, they
said, and then should turn around and come
back.

"What do you think of our plan?" they called
up to Eagle.

"I agree with you," answered Eagle. "If the
rivers go both ways, the new people who are
to come will have an easy time. It will not
be hard to go upstream, and it will not be
hard to go downstream. What does Raven think?"

"I don't agree with you," replied Raven. "If
the rivers turn round at the falls, salmon
will have no chance to stop. They will go up
as far as the falls, and then they will come
right back again. Where will they spawn?
And how will the new people catch them? I
think that all rivers should flow one way."

"Raven is right," agreed Mink. "The people
will have a very hard time catching salmon
if the rivers run both ways."

"I think the rivers should go but one way,"
repeated Raven. "And I think that at all
the bends in the streams there should be lit-
tle eddies. They will make the salmon go
slower. The people can fish there, too."

"Raven's reasons seem very good," said Eagle in the tree.

"Raven's reasons seem very good," repeated the people on the ground. So they followed his plan.

That is why all rivers now run but one way. That is why salmon go all the way up their home river to spawn.

-- from Indian Legends of the Pacific Northwest. Ella E. Clark. University of California Press. Berkeley, Calif. 1958.

AN OLD STORY Blackfoot

One day a rabbit was bragging that he could out run everything on the flat where he lived. A turtle heard him and challenged him to a race. The rabbit just laughed, but set a date for the race.

The turtle got his friends together and told them about the race and how they could help him win. The day of the race arrived and the race course was to be over four hills. When they started the rabbit was in the lead, soon he looked up and to his surprise he saw the turtle just going over the top of the first hill, as he topped the first hill he saw the turtle going over the second hill, the rabbit turned on more speed but as he topped the second hill the turtle was disappearing over the third hill. He used his very fastest speed but when he got to the top of the third hill the turtle was going over the fourth. He was now going at his top speed when he reached the top of the fourth hill only to see the turtle crossing the finish

line. He could no

This is how the turtle hid each of his four friends in the deep gullies from the previous top and then hide on the next hill with something each time. This was not the turtle that he saw going on

This is a story the gatherings.

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line. He could not figure this out.

This is how the turtle won the race: He got
each of his four friends to get on a hill and
hide in the deep grass and watch, as the tur-
tle from the previous hill would go over the
top and then hide in the grass, the turtle
on the next hill would start and do the same
thing each time. The rabbit did not know
this was not the turtle that challenged him
that he saw going over each hill.

This is a story the old men like to tell at
gatherings.

---Donna Fisher

HOW THE RAVEN GOT HIS COLOR
Blackfoot

Many years ago the Blackfeet were short of
food because there was no game. The Chief
sent for Napi, creator of all things. After
Napi arrived the Chief told him of their
hardships. Napi said that he would look for
the trouble the next morning.

Early the next day Napi and the Chief's son
started out to see why there was no game to
be found. They traveled for many days with-
out finding a trace of game.

One day they came to a cave full of buffalo,
deer and elk, but before they could drive
the animals out, a woman and child came
from a lodge on a hill over the cave. Napi
changed himself into a dog and his companion
into a stick. They followed the woman and
child into the forest. The woman noticed
the stick and thought it would be a good
stick to dig roots, the boy asked to keep
the dog and his mother said "Yes."

Later, they all went to their lodge but when they arrived there, the woman's husband said they would have to get rid of the dog and the stick as they were evil looking.

That night the dog and stick went to the cave, Napi changed them back to their original form to chase the game out of the cave. Then Napi changed himself and the boy back to the shape of a dog and a stick. The man in the lodge heard the dog barking and came to see what was happening. He was going to kill the dog and break the stick. The stick rolled up in the hair of a buffalo and escaped. The dog got away also. The dog chased the buffalo toward the village of the Blackfeet. Napi changed himself and the boy to their human forms. Then they went to the village to inform the people of the game. The men of the tribe went down to the river near the buffalo trap.

They tried to chase the buffalo into the trap, but the old man on the hill had changed himself into a big white bird, and scared the buffalo away.

The Blackfeet tried again and again to drive the buffalo into the trap but couldn't succeed. Napi caught the bird and tied it to a stick over a smudgefire and left him there, until he begged for mercy. That is supposed to be the way the raven got its color

---Donald Fisher

A CREE BUFFALO HUNT

My grandmother told me a story about the way the Crees hunted buffalo. She said that they would start getting ready the day before the hunt was to start. The men would tell the women what they wanted taken, and the women

would pack food and men would polish the horns.

The next eat break They would generally send scouts herds, so

My grandmother his first This was hunt.

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---Donald Fisher

THE BUFFALO HUNT

old me a story about the way
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ing ready the day before the
t. The men would tell the
wanted taken, and the women

would pack it. They also would take the
food and utensils that would be needed. The
men would sharpen their knives, clean and
polish their guns, and load their powder
horns.

The next morning they would get up early and
eat breakfast before starting on the hunt.
They would head for the plains where they
generally had the best hunting. They would
send scouts ahead to locate the buffalo
herds, sometimes this would take many days.

My grandmother said that her father went on
his first hunt when he was only sixteen.
This was the story he told about his first
hunt.

"Some of the scouts returned with the story
that there was a herd just a few miles away.
They decided to wait until all the scouts
returned so they made camp. Early the next
morning they started toward the herd. First
they came upon two bulls fighting, as the
herd had moved on they decided to watch the
fight for awhile. They finally caught up
with the herd and chased them for several
miles killing what they needed. At last they
had their limit so they started skinning and
dressing them out. Then they dried the meat.

"On the return trip home they passed the bulls
that were fighting but both were dead. Some
said that they fought till both died; others
said that someone shot them. The hunters
did not investigate.

"When they reached camp they had a big feast
and dance to celebrate the successful hunt."

---Daniel Boggs

COLLECTIONS OF LEGENDS AND AUTHENTIC IND

The stories collected and edited may need some adaptation for us

Blackerby, A. Tale of An Alaskan Whale. Binfords Press

Clark, Ella E. Indian Legends of the Pacific Northwest. Berkeley
California Press. 1958

Coffin, Tristram P. Indian Tales of North America. Philadelphia:
Society, Ind. 1961

Coleman, Sr. B., et al. Ojibwa Myths and Legends. Ross

Harris, Christie. Once Upon a Time. New York: Atheneum Pub. 196
of the North Pacific Indians.

Hayes, William D. Indian Tales of the Desert People. New York: D

Hazeltine, Alice I. (comp.) Red Man, White Man. New York: Lothr
Shepard. 1957

Jacobs, J. Indian Folk and Fairy Tales. New York: Putnam

Marriott, Alice. Saynday's People: The Kiowa Indians and the Story
Lincoln: University of Nebraska Press. 1963

Marriott, Alice and Carol K. Rachlin. American Indian Mythology.
Crowell. 1968

Martin, F. Nine Tales of Raven. Harper

Pine, T.S. and J. Levine. The Eskimos Knew. McGraw

Phillips, S. W. Indian Campfire Tales. New York: Platt and Munk.

Reichard, Gladys A. Spider Woman. New York: Macmillan. 1934

Rushmore, Helen. The Dancing Horses of Acoma. World Publ. 1963

Shaw, A. M. Pima Indian Legends. Tucson: University of Arizona P

COLLECTIONS OF LEGENDS AND AUTHENTIC INDIAN TALES

and edited may need some adaptation for use with young children.

Alaskan Whale. Binfords Press

Legends of the Pacific Northwest. Berkeley: University of

Indian Tales of North America. Philadelphia: American Folklore

Ojibwa Myths and Legends. Ross

Upon a Time. New York: Atheneum Pub. 1963 Five old tales
Indians.

Tales of the Desert People. New York: David McKay. 1957

p.) Red Man, White Man. New York: Lothrop, Lee and

and Fairy Tales. New York: Putnam

s People: The Kiowa Indians and the Story They Tell.
Nebraska Press. 1963

K. Rachlin. American Indian Mythology. New York:

Raven. Harper

The Eskimos Knew. McGraw

Campfire Tales. New York: Platt and Munk. 1963

er Woman. New York: Macmillan. 1934

cing Horses of Acoma. World Publ. 1963

Legends. Tucson: University of Arizona Press. 1968

STORIES ABOUT INDIAN CHILDREN AND THEIR LIVES

*Suitable for use with children ages six and younger

*Books About American Indians. Sonie Bleeker. New York: Morrow

Apache Indians

Aztec

Cherokee

Chippewa Indians

Crow Indians

Delaware Indians

Eskimo

Horsemen of the Plains: The Nez Perce Indians

Horsemen of the Western Plateaus

Indians of the Longhouse

Mission Indians of California

Navajo

Pueblo Indians

Sea Hunters

Seminole Indians

Sioux Indians

*Cherokee Animal Tales. Robert Frankenberg. Holiday. 1968

*Cliff Dwellers of Walnut Canyon. Carroll L. Fenton. Day. 1960

*Desert People. Ann Nolan Clark. Viking. 1962

In My Mother's House. Ann Nolan Clark. Viking. 1943

*Indian and His Pueblo. Louise and Richard Floethe. New York: Scribners. 1960

*Indian Children of America. Margaret C. Farquhar. New York: Holt

Indian Sign Language. Robert Hofsinde. New York: Wm. Morrow. 1956

*Indian Two Feet and His Eagle Feather. M. Friskey. Childrens.

*Indian Two Feet and His Horse. M. Friskey. Childrens.

Indians of the America's Series. Melmont

American Indian as Farmer
Apaches
Cherokees
Children of the Seed Gatherers
Dakotas
Day in Oraibi
Day with Honau
Day with Poli
Delawares
Dog Team for Ongluk
Hopi Indian Butterfly Dance
Iroquois
Little Indian Basket Maker
Little Indian Pottery Maker
Moolack: Young Salmon Fisherman
Navajo Land: Yesterday and Today
Nika Illahee
Seminoles
Something for the Medicine Man
Tohi: A Chumash Indian Boy

*Little Elk Hunts Buffalo. Jessie B. McGraw. New York: Nelson. 1961

Little Navajo Bluebird. Ann Nolan Clark. Viking.

*Little Sioux Girl. Lois Lenski. Philadelphia: Lippincott. 1958

*The North American Indians. Ernest Berke. New York: Doubleday. 1963

Ootook, Young Eskimo Girl. L. Harrington. Hale

Panuck. The Eskimo Sled Dog. Frederick Machetanz. New York: Scribners. 1939

*Picture-Skin Story. Alex W. Bender III. New York: Holiday House. 1957

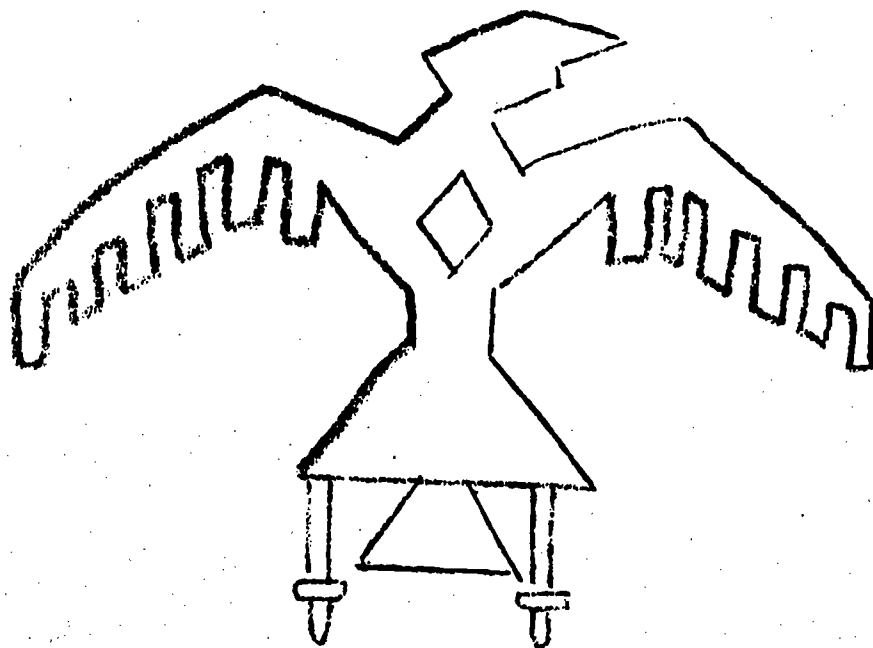
*True Book of Little Eskimos. D. A. Copeland

*True Book of Indians. T. Martini. Childrens

CHILDREN'S BOOKS OF GENERAL INTEREST WHICH HAVE
SPECIAL VALUE FOR INDIAN CHILDREN

- A Pocket Full of Crickets. Rebecca Caudill. Holt. 1964
- A Snowy Day. Ezra Jack Keats. Viking. 1962
- All About Animals and Their Young. R. M. McClung. Random House
- All Kinds of Seals. B. Kohn. Random
- Animal Folk Tales of America. T. Palazzo. Doubleday
- Animal Mothers and Babies. R. Foran. Warne
- Animals of the Arctic. G. Vever. McGraw
- Animal Stories to Read Aloud. Wonder. 1959
- Animals at Home Series. M. Koenig. Grossett and Dunlop
Beaver - Bee - Mouse - Penguin - Stork - Whale
- Animals Round the Year. G. O. Blough. Harper-Row
- Animal Tracks and Hunter Signs. E. T. Seton. Doubleday
- Brightly of the Grand Canyon. M. Henry. Rand
- The First Snowflake. M. A. and E. W. Gibson. Allied Florida
- The Fox Went Out On a Chilly Night. Peter Spier. Doubleday. 1961
- Here Come the Whales. A. E. Goudey. Scribner
Also: Here Come the Beavers, Deer, Dolphins, Raccoons
- Hide and Seek Frog. A. R. Tresselt. Lothrop
- The Mighty Bears. R. M. McClung. Random
- Mighty Hunter. B. and E. Hader. Macmillan
- Oley the Sea Monster. M. H. Ets. Viking

Red Fox and His Canoe. N. Benchley. Harper and Row
Red Mittens. L. Bannon. Houghton Mifflin
Reindeer Trail. B. and E. Hader. Macmillan
Remarkable Chameleon. Lilo Hess. Scribners. 1968
Time for Wonder. M. F. Taylor. United Church
Tracks and Trailcraft. E. Yaeger. Macmillan
Tracks in the Snow. R. Todd. Dover
Whales Go By. F. Phleger. Beginner Press



**A SELECTED LIST OF RECOMMENDED BOOKS FOR
CHILDREN, AGES 3-5 WHO MAY HAVE
HAD LITTLE PREVIOUS OPPORTUNITY
TO SEE AND ENJOY BOOKS**

Compiled by Dorothy J. Anderson
Children's Services Division
American Library Association

ABC, written and illustrated by Bruno Munari.
World, 1960. \$3.50
This is a clearly drawn ABC book with whimsical touches by the artist.

Bedtime For Frances, by Russell Hoban; illustrated by Garth Williams. Harper, 1960.
\$2.75.
Frances, the badger, could be a child -- the way she thinks up reasons for not going to sleep. Like a child, she's not pleased with the thought of a spanking and so does go to sleep after many interruptions.

The Biggest Bear, by Lynd Ward. Houghton Mifflin, 1953. \$3.25.
Johnny solves the problem of a bear cub that becomes bigger and bigger.

Blueberries for Sal, by Robert McCloskey. Viking, 1948. \$3.00.
Little Sal and her mother and Little Bear and his mother get all mixed up when they set out to pick blueberries.

The Camel Who Took a Walk, by Jack Tworkov. Dutton, 1951. \$2.95
A beautiful camel unwittingly outsmarts a tiger, a monkey, and other forest creatures who lie in wait for her. Pleasant, lilting language and a surprise ending.

RECOMMENDED BOOKS FOR
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ENJOY BOOKS

othy J. Anderson
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problem of a bear cub
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, by Robert McCloskey.
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t all mixed up when they
blueberries.

a Walk, by Jack Tworlov.
.95
unwittingly outsmarts
, and other forest crea-
wait for her. Pleasant,
and a surprise ending.

Caps for Sale, written and illustrated by
Esphyr Slobodkina. W. R. Scott, 1947.
\$2.75

While a tired peddler slept, a group of
mischievous monkeys took all of the caps
from his pack. The peddler's efforts to
get the caps returned amuse children and
make this a good story to act out.

The Circus Baby, written and illustrated by
Maud and Miska Petersham. Macmillan, 1950.
\$3.00

A circus elephant spends a great deal of
time watching the clown family. One day
she decides her baby elephant must learn
to eat properly--with high chair, bib,
dishes, and silver. The result is disas-
trous. The pictures will please small
children who may remember having had some
of the same difficulties.

The Country Bunny and The Little Gold Shoes,
by Du Bose Heyward; illustrated by Marjor-
ie Flack. Houghton. \$3.25.

Delightful pictures in the delicate soft
colors of Spring show how the Country Bun-
ny was chosen to be one of the Easter Bun-
nies.

Crow Boy, by Taro Yashima. Viking, 1955.
\$2.75.

Pictures in rich colors illustrate a story
about a wise teacher and a lonely boy.

Curious George, written and illustrated by
Hans A. Fey. Houghton, 1941. \$3.25.

Curiosity brings about the capture of
George, a little jungle monkey, and later
brings him some exciting adventures on his
boat ride to America and on his arrival in
New York City when he gets loose.

The Day We Saw the Sun Come Up, by Alice Goudey; illustrated by Adrienne Adams. Scribner. \$3.25.

Two children watch day come and go. Simple explanations of sun and earth. Delicate pastel drawings.

The Five Chinese Brothers, by Claire H. Bishop; illustrated by Kurt Wiese. Coward-McCann, 1938. \$2.50.

Amusing folk tale of five unusual Chinese brothers is told in brief text and bold pictures. The humor and pattern of the story make it ideal for storytelling or lap reading.

Grandfather and I, by Helen E. Buckley. Lothrop, 1959. \$2.95.

A boy's delight in walking with his grandfather. Lilted, repetition.

The Happy Lion, by Louise Fatio; illustrated by Roger Duvoisin. Whittlesey (Now McGraw-Hill), 1954. \$2.75.

The Happy Lion lived in a zoo in France. All the people who visited the zoo were his friends until he got out of the cage and tried to return their visits. Rollicking nonsense with distinguished pictures. More adventures follow in later books.

Harry The Dirty Dog, by Gene Zion. Harper, 1956. \$3.25.

Harry hates to be clean and hides the brush the children use to bathe him.

Horton Hatches the Egg, by Dr. Seuss. Random 1940. \$2.95.

Story in verse of Horton who hatches the egg of Mayzie, a very lazy bird.

In A Pumpkin Shell: illustrated by Jo court, 1960. \$2. Mother Goose rhyme chosen for each 1

Inch by Inch, written by Lionni. Obolenski. An inchworm saves a robin by proving a surer. Beautiful pictures.

Katy No-Pocket, by H. A. Rey. How Katy Kangaroo did which to cart her other animals how babies.

The Little House, written by Virginia Lee Bu \$3.00.

Panoramic pictures the changing seasons as the city moves house. Its move completes a satisfying

Little Toot, written by die Gramatky. Put The gay story of a that finally assumes The original drawing most appealing.

Make Way for Duckling illustrated by Robert M \$3.50.

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Come Up, by Alice
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Gene Zion. Harper,

n and hides the brush
the him.

by Dr. Seuss. Random

on who hatches the
lazy bird.

In A Pumpkin Shell: A Mother Goose ABC,
illustrated by Joan Walsh Anglund. Har-
court, 1960. \$2.95.
Mother Goose rhymes have been carefully
chosen for each letter of the alphabet.

Inch by Inch, written and illustrated by Leo
Lionni. Obolensky, 1960. \$3.50.
An inchworm saves himself from a hungry
robin by proving his usefulness as a mea-
surer. Beautifully colored imaginative
pictures.

Katy No-Pocket, by Emmy Payne; illustrated
by H. A. Rey. Houghton. \$3.00.
Katy Kangaroo didn't have a pocket in
which to cart her son Freddy so she asked
other animals how they carried their
babies.

The Little House, written by and illustrated
by Virginia Lee Burton. Houghton, 1942.
\$3.00.
Panoramic pictures full of detail trace
the changing seasons and the changing scene
as the city moves in around the little
house. Its move back to the country com-
pletes a satisfying experience.

Little Toot, written and illustrated by Har-
die Gramatky. Putnam, 1939. \$3.50.
The gay story of a lighthearted tugboat
that finally assumed his responsibility.
The original drawings by the author are
most appealing.

Make Way for Ducklings, written and illus-
trated by Robert McCloskey. Viking, 1941.
\$3.50.
The popular and amusing story of the trip
taken by Mrs. Mallard and her ducklings
when they move from their home on an is-
land in the Charles River to a new loca-

tion in the Boston Public Gardens, snarling traffic as they travel along the busy, narrow streets. A Caldecott Medal Award.

Mike Mulligan and His Steam Shovel, by Virginia Burton. Houghton, 1939. \$3.25.

Mike Mulligan remains faithful to his steam shovel, Mary Anne, against the threat of the new gas and Diesel engines.

Millions of Cats, written and illustrated by Wanda Gag. Coward-McCann, 1928. \$2.50.

When the very old man goes out to look for a kitten, he comes home with millions and billions and trillions of cats. He and the very old woman can't decide which one to keep, but the cats settle that problem in their own way.

Mother Goose: Seventy-Seven Verses With Pictures by Tasha Tudor. Walck, 1944. \$3.25.

Lovely delicate pictures in pastel shades illustrate a Mother Goose with an unusual format. Especially appealing to little girls.

Pelle's New Suit, written and illustrated by Elsa Beskow. Harper, 1929. \$2.50.

Pelle, a Swedish farm boy, earns his new suit and follows each step in the process of its making. The book is memorable for its fresh, colorful pictures of rural Sweden.

Play With Me, written and illustrated by Marie Hall Ets. Viking, 1955. \$2.75.

Appealing drawings illustrate the story of a little girl looking for and finding a playmate among the meadow creatures when she learns to sit quietly.

Policeman Small, written by Lois Lenski. Walden. Everyday experiences of a traffic detail are told with picture opposites.

Rain Drop Splash, by Leonard Freed. \$2.75.

The cadence of fall is captured in the brief text of a rainy day. The rain on the shiny leaves, the nose, splashed from the rain. Full-page pictures illustrate the text.

The Red Carpet, by Leonard Freed. 1948. \$3.75.

Rollicking verses describe a carpet through town on a rainy day.

The Snowy Day, written by Ezra Jack Keats.

Footprints in the snow are traced during a day of travels during a snowy day outdoors. A Caldecott Medal Award.

The Story About Ping, written and illustrated by Kurt Winesap. \$1.75.

The story of a Chinese houseboat. To escape the coming up the gangway one evening. After cooking pot, Ping is spanked with a spanking.

The Story of Babar, written by Jean de Brunhoff.

French by Merle Miller. \$1.95.

Babar is a young elephant.

Gardens, snarling
ong the busy, nar-
Medal Award.

Shovel, by Virgin-
9. \$3.25.

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1955. \$2.75.
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y creatures when

Policeman Small, written and illustrated by
Lois Lenski. Walck, 1962. \$2.25.
Everyday experiences of a policeman on
traffic detail are told in simple text,
with picture opposite.

Rain Drop Splash, by Alvin Tresselt; illus-
trated by Leonard Weisgard. Lothrop, 1946.
\$2.75

The cadence of falling rain is caught in
the brief text telling what happened on a
rainy day. The raindrops "dripped from
the shiny leaves, dropped from a rabbit's
nose, splashed from a brown bear's tail."
Full-page pictures in muted colors comple-
men the text.

The Red Carpet, by Rex Parkin. Macmillan,
1948. \$3.75.

Rollicking verse follows the red carpet
through town on a mad and fun-filled chase.

The Snowy Day, written and illustrated by
Ezra Jack Keats. Viking, 1962. \$3.00.

Footprints in the snow mark small Peter's
travels during a wonderful fun-filled day
outdoors. A Caldecott Medal Award.

The Story About Ping, by Marjorie Flack; il-
lustrated by Kurt Wiese. Viking, 1933.
\$1.75.

The story of a Chinese duck who lives on a
houseboat. To escape being spanked for
coming up the gangplank last, he hides out
one evening. After he nearly ends up in a
cooking pot, Ping decides that home, even
with a spanking, is highly desirable.

The Story of Babar, written and illustrated
by Jean de Brunhoff; translated from the
French by Merle S. Haas. Random, 1933.
\$1.95.

Babar is a young elephant who left the jun-

gle to live in Paris. When he goes back to his home, he is proclaimed king of the elephants. There is a tongue-in-cheek matter-of-factness which appeals to children. The childlike, yet sophisticated, pictures are good for hours of looking.

The Tale of Peter Rabbit, written and illustrated by Beatrix Potter. Warne, 1903. \$1.25.

The immortal story of Peter Rabbit and his misadventures in Mr. McGregor's garden is still a favorite book for little children. They can soon "read" it just looking at the pictures.

Where the Wild Things Are, Maurice Sendak. Harper, 1964. \$3.50.

Max, sent to bed for acting wildly, becomes monarch of a fantastic animal world.

White Snow, Bright Snow, by Alvin Tresselt; illustrated by Roger Duvoisin. Lothrop, \$2.95.

The first snowfall brings work for the farmer, postman and policeman, but wonder and delight for the boys and girls.

The above titles and book notes were selected from the following sources:

Let's Read Together - American Library Association

"Caldecott Medal Books" - American Library Picture Books - Assn.
Philadelphia Free Library

Books for Adults on Children's Reading

Bequest of Wings

Annis Duff (Viking)

Books, Children and Men

Paul Hazard (Horn Book)

Unreluctant Ye
Lilian Smith

Following is a list of the above books:

American Library
Huron Street,

Coward-McCann,
New York, New York

E. P. Dutton &
South, New York

Harcourt, Brace
Caldwell Avenue

Harper & Row,
York, New York

Horn Book, Inc
Boston, Massachusetts

Houghton Mifflin
Boston, Massachusetts

Lothrop, Lee &
Fourth Avenue,

Paris. When he goes back to
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is a tongue-in-cheek matter-
ch appeals to children. The
sophisticated, pictures are
of looking.

Rabbit, written and illus-
ix Potter. Warne, 1903.

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Association
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ee Library

on Children's Reading

king)
and Men
(Horn Book)

Unreluctant Years
Lilian Smith (ALA)

Following is a list of publishers of the
above books:

American Library Association, 50 East
Huron Street, Chicago, Illinois 60611.

Coward-McCann, Inc., 200 Madison Ave.,
New York, New York.

E. P. Dutton & Co., Inc., 300 Park Ave.
South, New York, New York.

Harcourt, Brace & World, Inc., 7555
Caldwell Avenue, Chicago, Illinois.

Harper & Row, 49 East 33 Street, New
York, New York.

Horn Book, Inc., 585 Boylston Street,
Boston, Massachusetts.

Houghton Mifflin Company, 2 Park Street,
Boston, Massachusetts.

Lothrop, Lee & Shepard Co., Inc., 419
Fourth Avenue, New York, New York.

THE DEVELOPMENT OF SOCIAL SCIENCE CO

Encroachment on our environment is destroying our natural resources. Neglect of the cultures of the American Indian is destroying his heritages, and his tribal patterns. In non-Indian schools, children frequently study "the Indians." For the child growing up in the context of the reservation, it becomes the task of the school to help him develop options for his future life. He must be helped to develop a healthy self-concept that respects, admires and carries forth his culture. Parents and grandparents help shape the child's view of himself and of the world around him. They further his sense of belonging to a family, group, tribe or community.

There must be channels of communication between the home and school, with the family welcome in the school environment. Before arriving at school, the Indian child has come to know his community through active exploration. He should be offered the same chance to explore the school community. School helps the child enter the world of work. It provides tasks for him, aiding him in their performance, and generally helping him to see his role in the classroom. By expanding the confines of the classroom jobs, to school jobs, and then to the roles played in the community, the child begins to value the work performed by others. Excursions and trips into the community to watch people at work expand the boundaries of the classroom, while invitations to the community members to enter the classroom and perhaps to share their skills, makes the school part of the larger community and the community part of the school.

DISCOVERY OF SCHOOL AND C

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DISCOVERY OF SELF IN RELATION TO FAMILY, SCHOOL AND COMMUNITY

The social living program for Indian children grows out of the various aspects of his home, his neighborhood, and the school life of the two worlds in which he lives. Basic concepts are also drawn from the various disciplines in the sciences and they are translated to fit the kindergarten child's level of ability to understand.

Together these form the specific goals of the social studies program. Through the many experiences arranged by the kindergarten staff a child learns:

- How to make decisions (Sociology)
- Ways of getting along with others (Psychology)
- To share and use available materials of the classroom (Economics)
- The culture and history of his tribe.

In discovery of self the kindergarten staff can help him to:

- Realize that he holds an important place in his home and his school group, make him aware that he is important.
- Realize that he has a contribution to make to his family and to his classmates.
- Become aware that his behavior affects the atmosphere of the classroom and the behavior of the others.

Experiences through which realization can come could be to:

Make it possible for the child to have meaningful tasks to perform in the school setting—preparing food, setting the table, preparing classroom materials, helping to clean up.

Help the child appreciate the importance of his presence as a member of the group; of the way he carries out his responsibility (call the child by name), let him complete selected tasks in his own way at his own pace; display his work in prominent places.

Reinforce positive behavior through talking with him and including him in activities; communicating with him through gesture, a pat, a smile.

Accept the child and accept his contributions.

Give the child opportunities to have full access to materials and equipment in the classroom so that he may choose activities according to his own interests and have experiences with other children in leading and following in the play activities: housekeeping area, blocks, carpentry, library and language area, dramatic play, etc.

To help the child see himself in relation to home and school the kindergarten staff can:

Arrange for short trips for small groups of children through and around the school, visiting the kitchen, the boiler plant, the nurse's office, the principal's office, and other classrooms; observing use of the typewriter, the intercom system, filing cabinets, the adding machine, the telephone, the heating equipment, the scale for weighing, etc.

Other prearranged to the children's parents work, the tion, laundry, sup trip to the health tive services near clinic hours, give explore and talk w

In planning trips artifacts for clas alert to cultural

Keeping up relatio shared experiences vide for a continu growth - Headstart

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THE WORLD OF WORK

In looking at the may have as her ob

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Understand that different skills
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for the child to have to perform in the school (e.g. preparing food, setting the table, cleaning room materials, helping to

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see himself in relation to the work of the kindergarten staff can:

t trips for small groups of children to the neighborhood and around the school, such as the boiler plant, the principal's office, and the library; observing use of the intercom system, filing cabinet, adding machine, the telephone, the scale for weigh-

Other prearranged trips could include those to the children's homes, to places where parents work, the trading post, filling station, laundry, supermarket, post office. A trip to the health station or other supportive services near the school, if made after clinic hours, gives the children a chance to explore and talk with the personnel.

In planning trips to visit ruins and gather artifacts for classroom, teachers should be alert to cultural taboos.

Keeping up relationships through visits and shared experiences with Headstart, can provide for a continuum in relationships and growth - Headstart through first grade.

The kindergarten staff can give the child opportunities to reconstruct experiences and clarify his thinking through activities in housekeeping area, blocks (mapping), carpentry, library and language area, creative arts and music.

Replicate celebrations in which children and their families are involved according to local custom and character.

THE WORLD OF WORK

In looking at the world of work, the teacher may have as her objectives to help the child:

Understand that there are many kinds of jobs.

Understand that different jobs require different skills.

Understand that people often help one another through their jobs, thus contributing to the community.

Bring into focus his experiences with members of the community.

Observe and understand the roles played by others.
Find suitable models of identification.
Value the world of work.
Value jobs performed by others.

Many facets of work can be looked at. Both Indian and non-Indians should be studied. The fireman, policeman, sheriff, teacher, doctor, nurse, garbage man, religious leader, teacher's aide, social worker, plumber, service station man, cooks, mechanic, factory worker, grocer, artist, medicine man, are helpers that exist in one form or another in most communities; they may be Indian or Anglo. Today the American Indian is employed at a large variety of jobs. The following are just a few of the many occupations existing, and an example of the tribe known for it.

Farmers: Cherokees (North Carolina),
Blackfeet (Montana), Sioux (North Dakota).

Herders: Navajo (Arizona), Hopi (Arizona)

Forestry: Cherokee (North Carolina), Seminole (Florida), Utes (Utah).

Sawmill: Navajo (New Mexico), Chippewa (Great Lakes).

Reindeer herding: Togiak Eskimos

Ranching: Apache (Arizona), Blackfeet (Montana).

Fishermen: Haidas (Alaska)

Construction: Mohawk

Fire Fighters: Zuni, Hopi (Arizona),
Mescalero Apache (Arizona).

Oil drilling

Road construction

Manufacturing (Canneries)

Carpenters: Sioux (North Dakota)

The field of work that an child should be learning for membership in what occupations provide values to it. The American Indian has transmitted the right values of his tribal culture of the tribe, and he has made it

When one looks at occupations, it is performed by those who are familiar with and the Pueblo description of a

The Navajo silver jewelry is years old; jewelry of cast silver (of which they then filed down) is placed by silver stamped on with designs from the Zuni. The jewelry was once it is now pure

The drum plays a ceremonial and a rhythm for

Understand the roles played by
models of identification.
field of work.
performed by others.

work can be looked at. Both
Indians should be studied.
 Policeman, sheriff, teacher, doc-
tor, page man, religious leader,
social worker, plumber, ser-
vant, cooks, mechanic, factory
artist, medicine man, are
most in one form or another in
the field; they may be Indian or Anglo.
When an Indian is employed at a
particular job. The following are just
some occupations existing, and
the tribe known for it.

Cherokees (North Carolina),
Crow (Montana), Sioux (North Dakota).

Navajo (Arizona), Hopi (Arizona)

Cherokee (North Carolina), Sem-
ple (Idaho), Utes (Utah).

Navajo (New Mexico), Chippewa
(Minnesota).

Yukon: Togisk Eskimos

Apache (Arizona), Blackfeet

Idas (Alaska)

Mohawk

Zuni, Hopi (Arizona),
Apache (Arizona).

Oil drilling: Osage and Oklahoma Indians

Road construction: Eskimos

Manufacturing: Sioux (North & South Dako-
ta), Canning pickles - Isleta Pueblo.

Carpenters: Cherokee (North Carolina),
Sioux (North Dakota), Hopi (Arizona).

The field of work relevant to the young Indi-
an child should relate to occupations exist-
ing for members of his tribe. No matter
what occupation an Indian chooses, the op-
tions provide him the opportunity to enter
the world of work, bringing his own cultural
values to it. At the same time, he is per-
mitted the right to return to his life in the
tribal culture and his place in the society
of the tribe, bringing with him the profits
he has made in the world of work.

When one looks specifically at Indian occu-
pations, it is necessary to include the role
performed by the craftsman. Generally, we
are familiar with the crafts of the Navajo
and the Pueblo people. This is a brief des-
cription of a few of these crafts:

The Navajo silversmith's craft is about 100
years old; jewelry was originally made from
cast silver (coins), melted into molds, and
then filed down; today coins have been re-
placed by silver slugs and designs are
stamped on with dies; turquoise, obtained
from the Zuni, is set into the silver; while
jewelry was originally made for personal use,
it is now purchased by tourists.

The drum plays an important role in Pueblo
ceremonial and dance because it sets the time
or rhythm for the Indian. The drum-maker pro-

duces three kinds of drums: (1) a hand drum, consisting of a skin head and drum body of soft wood; (2) a water drum, consisting of a log with a hollow end, filled with water, and a skin over the top; and (3) a hollow drum consisting of a drum body covered with stretched hide on both top and bottom.

The craft of the Hopi potter involves the woman; she rolls a ball of clay till it forms long chains which are then wrapped or coiled around, and pressed together into the desired shape; when this is achieved, the pot is smoothed out, decorated, fired; no two pots have the same design.

Navajo women weave rugs sold to tourists; in other tribes, both men and women weave (Hopi) a rug frame consists of four poles, two vertical and two horizontal, at top and bottom; threads going up and down form the warp while the weft (woof) is the filling across; these rugs take a great deal of time to produce.

Sandpainting is part of the Navajo ceremonial to cure the ill by removing his bad thoughts; the shaman (or sandpainter) working on the floor of the hogan, draws a figure, sprinkling it with grains of sand; each part of the figure has a specified meaning; when the drawing is complete, the ill person sits in the middle of it, as grains of sand from the figure drawing are placed on his body; he then leaves the hogan as the sand is carefully scraped up, placed into a blanket, and buried. Thus the ill person is to be cured. Now sand paintings are made to be sold.

Apache women make three kinds of baskets: (1) the burden basket is made of squaw brush or split willow; portions of which are dyed black for decoration; (2) the "tus" or water basket, with its narrow neck and wide mouth;

it is waterproofed surface; horsehair added; and (3) this is coiled and wide

The tribal society engendered in its positions. There whether by inheritance, who is the takers or masons who dwellings, in return of the farmer or frequently made by The health and recreation are met by the members of a tribal society cratic patterns may even though these the larger society the medicine man consulted, for example

HOUSING

The young child needs him to make sense cate himself in its technique for achievement one starts by with the children. the windows; we keep science materials The child thus learns through his senses blindfolded to find What clues does he when he takes the

The child should be school room as he school becomes his each day. Can we

of drums: (1) a hand drum, skin head and drum body of water drum, consisting of a head, filled with water, and top; and (3) a hollow drum drum body covered with both top and bottom.

Hopi potter involves the wheel of clay till it forms are then wrapped or coiled together into the desired shape. When the pot is completed, fired; no two pots are made to be sold.

Woolen rugs sold to tourists; in Hopi men and women weave (Hopi) rugs of four poles, two vertical, at top and bottom; and down form the warp while the filling across; these take a deal of time to produce.

Part of the Navajo ceremonial involves removing his bad thoughts; a painter) working on the wall, draws a figure, sprinkles of sand; each part of the figure has a meaning; when the drawing is finished the draw- ing the ill person sits in the center of the rains of sand from the figure is placed on his body; he then as the sand is carefully brushed into a blanket, and bur- dened person is to be cured. These are made to be sold.

There are three kinds of baskets: (1) the basket is made of squaw brush portions of which are dyed red and black; (2) the "tus" or water arrow neck and wide mouth;

it is waterproofed by applying pitch to its surface; horsehair handles are sometimes added; and (3) the bowl-shaped basket which is coiled and wide.

The tribal society, like most societies, has engendered in it differentiated tasks and positions. There is the political leader, whether by inheritance, achievement or popularity, who is the chief. There are carpenters or masons whose job it is to help build dwellings, in return they receive the produce of the farmer or the herder. Clothing is frequently made by a person in the tribe. The health and religious needs of the Indian are met by the medicine man. The microcosm of a tribal society with its own idiosyncratic patterns must be given consideration, even though these roles are duplicated in the larger society. In some instances, both the medicine man and the pediatrician are consulted, for example.

HOUSING

The young child needs experiences which help him to make sense of his world, and to locate himself in it. Mapping is a useful technique for achieving these goals. Perhaps one starts by mapping the classroom, with the children. "This is our library near the windows; we keep our dolls over here; the science materials are also near the windows." The child thus learns to map his world through his senses. Ask a child who has been blindfolded to find his way about the room. What clues does he use? What does he see when he takes the blindfold off?

The child should become as familiar with the school room as he is with home, for the school becomes his home for a number of hours each day. Can we show the relationship be-

tween school and home? Can we carry over from his home to the classroom? Indeed, it should be done. By looking at housing, such as his own home, and the homes of other tribal people, the Indian child develops a sense of being part of something larger than his own immediate setting. An approach to housing should move from the familiar, to the less known, looking at points of similarity and differences, and high lighting conditions contributing to housing types. While this may look like a very didactic approach to working with young children, it is not meant to be so. These experiences should not take the form of a formal lesson, or presentation of facts, but should emerge from the classroom activities. Questions about what should be in the housekeeping area or what the child has in his home, give the teacher much information about the child's home, and brings the home environment into the confines of the classroom. Block building and other construction lead to further understanding of homes, building types, and the child's world.

The teacher may wish to emphasize the point that people live in different types of houses. Her goals may include:

- To develop knowledge and understanding of areas in the classroom and the home.
- To see how housing is constructed, what materials are used.
- To compare different types of housing.
- To appreciate different types of housing and the conditions of their style (i.e. tropics-chickee)
- To understand contemporary and historical housing used by different Indian tribes.

The following is a description of several types of Indian dwellings; this should not

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By looking at housing, such
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by different Indian tribes.

a description of several
wellings; this should not

be construed as an exhaustive listing. It is suggested merely as a resource, to open some paths of exploration for teachers of young American Indian children. Ask yourself about colors, shapes and size of housing. Ask how the adobe is made (Pueblo), or the trees cut, and notched in housing construction. Look at the variety of roofs. Think about climate and physical conditions and how these dictated what kind of housing was built. Lastly, ask if there are ways of providing classroom experiences about housing related to the tribal culture of the children.

Indian housing varies in size, shape, construction and materials. Sioux lived in large tents called teepees. The woman erected the structure by sticking long poles into the ground, a specified distance from one another, forming a circle, and leaning the tops together. The poles were covered with hides, stitched together, and stretched over the poles. The hides were decorated by men, and included stars and animals. The teepee, or tipi, always faced the east. The housing of the Plains Indian was practical because it could be taken down and moved elsewhere as the Indian followed the game.

The Navajo home is called a hogan. It is built of logs, covered with clay or mud, and has six or eight sides, a rounded roof, with a hole in the top from which smoke could escape. The north side of the hogan belongs to the women while the south side is her husband's. Hogans always face the east because no shadow is to fall between the Navajo and the Sun when he says his morning prayers. Contemporary hogans have stoves, often oil cans, with stovepipes carrying the smoke up to the hole in the roof.

The Indians of the Pueblo lived in large compact villages, joined together, with each room built next to another. Adobe was used as the chief construction material. The thick walls of the pueblo made this home cool in the summer and warm in the winter. The roofs were supported by wooden beams covered with adobe plaster; the beams stuck out through the walls of the room; windows were small, thus cutting down on the ventilation. Rooms on the lower floors did not have entrances, and might have been used for storage. The buildings could only be reached with the aid of a ladder which made them more secure from outsiders. Modern Pueblo people live in less compact villages. While some of the new houses are built of adobe, others are made of wood. The roofs are gabled, and covered with tin. These new houses are more scattered than the older pueblos.

The Zuni tribe live in modern houses built out of stone with brightly painted doors and windows. The rooms are large with high ceilings and corner fireplaces; most Zuni homes have stoves, and small flower gardens outside of their homes; this is not usual for most Indian homes. The vegetable garden, tended by the woman, is known as a waffle garden, because of the low walls to retain water, and is planted near the river.

The wickiup, or Apache home, was also built by women. It was round or oval in shape, twelve feet across, and about eight-feet high. In the middle was a hole dug for a fire, which was used in poor weather unconducive to outdoor cooking. The wickiup frame consisted of poles set into the ground, and bent together at the top, leaving an opening for smoke to escape. Brush or branches were woven through the poles. The frame was then covered with grass, or straw. Originally, hide was placed

over the structure, placed with canvas. moved easily. The doors, and small entrance may be built close to

The chickee was the these open houses protected from sun and rain, yet allowed air to pass through; the roofs were supported by wooden beams and covered with thatch. The type of construction was suited to the conditions of the Southeast. Some have sides, and some

Choctaws of Mississippi built rectangular in shape and covered with thatch or bark. They are referred to as log houses.

The wigwam, or home of the Indians, was oval or conical in shape, erected by a woman. The typical type of housing was moveable.

The long house was typical of the tribes of the northwest. The houses were tied together in a row. These homes were some size proclaiming the status of its owner. Below the eaves were supply shelves for dried meats, berries

The Alaskan lived in while they constructed buildings. The traditional buildings caught in a storm, the buildings were made of a driftwood, or willow, insulated with blocks of fat. The dwellings are made of

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over the structure, but later, it was re-
placed with canvas. The wickiup could be
moved-easily. The wickiup of today may have
doors, and small entrance halls. Several
may be built close together.

The chickee was the home of the Seminoles;
these open houses provided shelter from the
sun and rain, yet allowed the breezes to pass
through; the roofs were supported by poles
and covered with thatch and reeds. This kind
of construction was adequate for the tropical
conditions of the Seminoles. Modern chickees
have sides, and some have indoor toilets.

Choctaws of Mississippi made homes of wood,
rectangular in shape, with curved roofs cov-
ered with thatch or bark. These houses are
referred to as log houses.

The wigwam, or home of many nomadic hunters,
was oval or conical in shape, built of sap-
lings, covered with birchbark strips, and
erected by a woman. Again, this was a prac-
tical type of housing because it was easily
moveable.

The long house was typical of the coastal
tribes of the northwest. Planks of cedar
were tied together making a gabled lodge.
These homes were sometimes huge, with the
size proclaiming the status or prestige of
its owner. Below the rafters of each house
were supply shelves containing smoked and
dried meats, berries and fish oils.

The Alaskan lived in igloos made of wood;
while they constructed ice windbreakers when
caught in a storm, they never lived in snow
buildings. The traditional igloo consisted
of a driftwood, or whalebone frame, and was
insulated with blocks of sod. Modern Eskimo
dwellings are made of wood, logs, driftwood

or other salvage and bricks.

The primitive Aleuts lived in large communal dwellings sunk deep into the ground and covered with layers of sod for insulation; these homes were entered from a hole in the roof. The barabara, or later Aleut house was smaller, and no longer a communal dwelling. It was partially sunk into the ground and was entered from the side.

TRANSPORTATION

In exploring the transportation of a tribe, one must ask where and for what reasons did this tribe choose a particular form of transportation. An agricultural people, who produce the foods needed for survival, may have had a limited need for transportation. Therefore the pace of this culture may be slower. To a nomadic tribe, moving in pursuit of food, speed and mobility might be of utmost importance. Children of these backgrounds will show a variance in their responses to the technological culture that has invaded his land.

The old "Blackfeet" tale, which has come to be known as "The Hare and the Tortoise," suggests that to the Blackfeet speed was not the most important factor for success. Teachers of these children should be aware that there may be less play with toy buses and cars, if the child spends two hours a day traveling to and from school. The child's desire to soar through the sky like a bird may be a more vivid way of thinking about transportation, than the school bus, and would not be unlike the dreams of some of his ancestors.

For the child in the classroom, transportation begins with a problem: "I want to take the cage with the horny toad outside when I

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in the classroom, transporta-
with a problem: "I want to take
the horny toad outside when I

go onto the playground." This problem could
be solved by the teacher; she simply has to
lift the heavy aquarium and carry it out for
the child, but this would deny the child an
opportunity to deal with a problem-solving
situation. "How can I get this cage out-
side?" presents the topic of transportation
in a real, concrete context.

By enlisting the aid of another child, an
attempt could be made to carry the cage. The
child looks about him, perhaps seeking to
find a solution in his environment. A wheel
barrow and wagon come into the child's visu-
al field. It is decided that the wheel bar-
row is more appropriate to the situation.
Thus with one child pushing, and the other
balancing the horny toad's cage, the animal
is moved out of the room.

The teacher, from this small flow of behavi-
or, was able to approach the problem of
transportation in a way that was meaningful
for the child and grew out of his experi-
ences. The principles of balance, how the
horny toad moves, and other ways of solving
problems were also part of this experience.

Children bring to the classroom an interest
in various modes of transportation. Perhaps
this grows out of their daily observation of
vehicles. Because the child wants to know
about certain vehicles, and plays with them,
transportation is a meaningful area of ex-
ploration for the young child. Children
play with trucks, buses, cars, boats, air-
planes, and wheels, creating these materials
when they are available in the classroom.
Their dramatizations reflect this interest.
They load and unload pick-up trucks; they
make the sounds of cars and trains. At
times, the child may whinny like a horse as
he gallops across the prairie. Modern and

traditional boats should also be available for dramatic play. The school bus, car truck, power boat and airplane should exist along side the wagon, horse, and traditional travois. Modes of transportation typical to the Indian and his ancestors should not be neglected for they form a link between the child and his past.

The horse, introduced to the New World by Spaniards, has been important to many Indian tribes (Crow of Montana, Sac and Fox of Iowa, Navajo of the Southwest, and Plains Indians). Before the Plains Indians had the horse, they hunted on foot, following the movement of the buffalo. With the use of the horse these tribes were able to cover a wider geographic territory in search of food. The skilled Navajo horsemen found that this animal's surefootedness enabled him to climb steep canyons, and thus the horse was used to get to otherwise less accessible places. The horse also helped the Plains Indians by hauling their possessions. The travois, or hauling rig, an A-shaped rack, with poles that attached to the horse, helped the nomadic Indians in their movements. The Indian did not use the wheel; he used the travois.

Several tribes, with access to waterways, developed different kinds of boats. Construction was dependent upon available natural resources, and the boat's utility. Choctaws, using boats on the rivers and creeks, probably built a boat of the dug-out variety, made by hollowing out logs. The Indians of the Atlantic and inland waterways used canoes with birch and hide the most common frame coverings. The Chippewa of the Great Lakes were especially known for their graceful canoes. The Sac and Fox tribes used boats to haul their furs which they traded. Plank boats, canvas canoes, kyaks, and uniaks were

used by Alaska rivers and the and walrus. pull them over

FOOD AND COOK

Tribal eating determined by resources and group. The Ap of bears or be salt. The Ind would careful eaten salmon, able the fish again.

Tribal food pa geographical a it. Today the the foods the Indians (Narratans) cultivat ner of Boston fish for clamb squash, and us frequently ste now called "fi dians (Cheroke stews, soups, breads. Plain hunted, follow they prepared over campfires Kwakiutl, Sali trapped seafoo broiled. Sout Hopi) grew pep soups, guacamo

Cooked and sea raw food. See

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used by Alaskan Indians as they traveled
rivers and the sea in search of fish, seals,
and walrus. Eskimos also used dogsleds to
pull them over the frozen ice and land.

FOOD AND COOKING

Tribal eating habits and cooking methods were
determined by the availability of natural
resources and by religious dictates of the
group. The Apaches would not eat fish, flesh
of bears or beaver. Onondagas would not use
salt. The Indian fishermen of the Northeast
would carefully rearrange the bones of the
eaten salmon, believing that this would en-
able the fish to return to life to be caught
again.

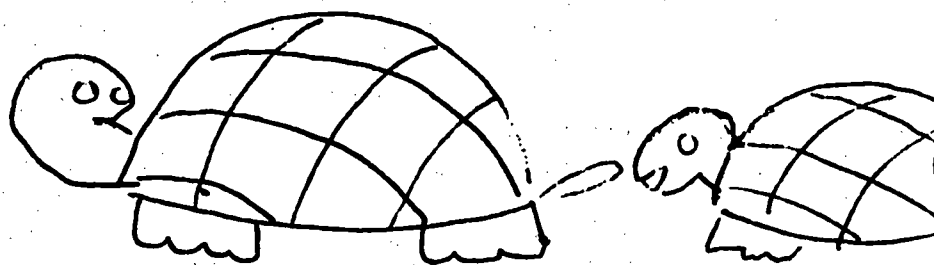
Tribal food patterns can be divided into five
geographical areas, with foods specific to
it. Today these areas are known for many of
the foods the Indians first used. Eastern
Indians (Narragansetts, Penobscots, Powha-
tans) cultivated beans, making the forerun-
ner of Boston Baked Beans, and using shell-
fish for clamcakes; they also grew pumpkins,
squash, and used maple syrup; their food was
frequently steamed in earthen pots, which is
now called "fireless cooking". Southern In-
dians (Cherokees and others) made fragrant
stews, soups, and baked a variety of corn
breads. Plains Indians (Sioux, Cheyenne)
hunted, following the buffalo and other game;
they prepared their meats by roasting them
over campfires. Northwest Indians (Tlingit,
Kwakiutl, Salish) fished for salmon, and
trapped seafood, which they steamed or
broiled. Southwest Indians (Papago, Pueblo,
Hopi) grew peppers, beans, corn, making
soups, guacamole, piki, and barbecue sauce.

Cooked and seasoned food was preferred to
raw food. Seeds, roots, flowers and grasses

were used to add flavoring to the cooking foods. The Pacific tribes used tender inner bark of hemlock and spruce while Southwest Indians used mesquite beans, cactus, yucca fruits, and agave for flavoring. Drying, freezing, smoking, and stone boiling were some early methods of cooking.

"Cooking the foods of many lands," also can give children a feeling of closer relationship to strange and unfamiliar peoples and cultures.

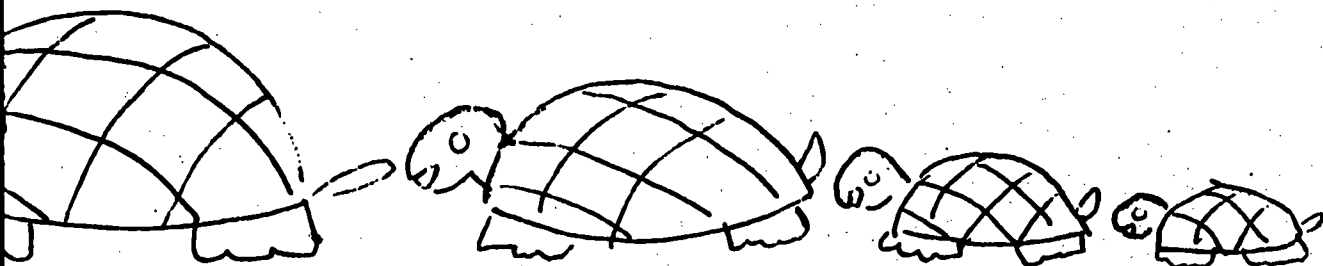
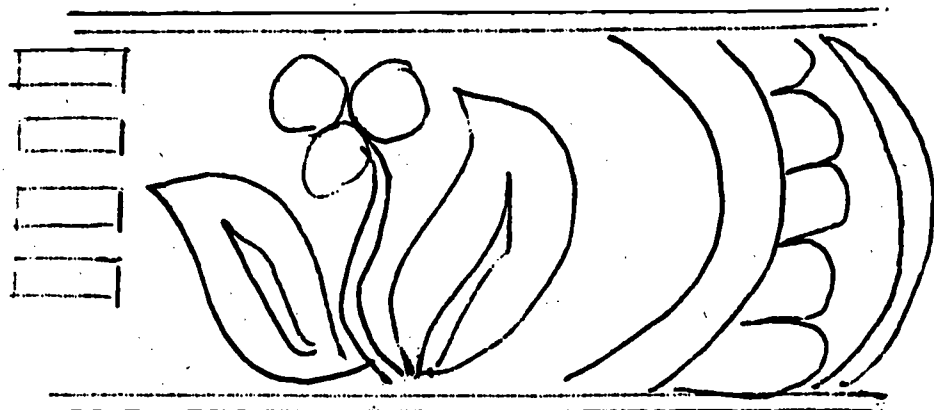
The opportunity to learn and prepare foods helps children to gain deeper insights and appreciations of various peoples and cultures of the world.



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THE DEVELOPMENT OF MATHEMATICAL CON

The Curriculum guide for the kindergarten for Indian children is language centered. However, the mathematical objectives listed below reveal how the development of mathematical concepts is also an integral part of the child's continual growth in language.

It is more meaningful for children to have many opportunities to explore, experiment,

and discover time in roteputation. The background in understand and design a comp to integrate into larger games, exper children to

I. To begin to understand number concepts

- a. Counting (1 to 10).
- b. Recognizing ordinal position (first, second, third).
- c. Recognizing written numerals (1 to 10).
- d. Reproducing cardinal counting by abstract symbols or numerals.

blocks av of paint other obj counting

4. Make pict charts fo tables, e

EXPERIENCES

1. Set tables for lunch, breakfast, or snack. At first teacher puts correct number of chairs around each table or the correct numbers of cups, spoons, etc. Child places them in position. When child knows about numbers, the teacher can tell the child how many places need to be set for each table. Still later in the year she can put the numeral on paper and place it on the table according to the direction.
2. Sing songs and use finger plays for counting to ten.
3. Capitalize on all opportunities for counting, such as counting while putting

5. Trips are have gone ment comp of trucks driving, and lette

6. Develop g using mat onment (S

II. To begin

- a. One to
- b. Set as
- c. Sorting (Sets)
- d. Quantit by visu

THE DEVELOPMENT OF MATHEMATICAL CONCEPTS

for the kindergarten for language centered. How-
al objectives listed be-
development of mathemati-
an integral part of the
rowth in language.

al for children to have
to explore, experiment,

and discover their environment than to spend
time in rote memorization or mechanical com-
putation. The kindergarten teacher needs a
background in mathematics and an ability to
understand and work with children in order to
design a complete program for her group and
to integrate the program as much as possible
into larger activities. The teacher plans
games, experiences and activities to enable
children to learn the desired concepts.

Understand number concepts

10).
ordinal position (first,
written numerals (1 to 10).
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se finger plays for

1 opportunities for
s counting while putting

blocks away; setting and clearing easel
of paint jars; counting scissors and
other objects during work and play,
counting sticks and stones.

4. Make picture, work, and numeral-recipe
charts for cooking, planting, setting
tables, etc.
5. Trips are very useful here. The children
have gone on walks to the storage equip-
ment compound, have counted the number
of trucks, tanks, barrels, etc. When
driving, they try to pick out numbers
and letters on license plates and signs.
6. Develop games e.g. dominoes, puzzles,
using materials from the natural enviro-
nment (See Games to Make).

II. To begin to understand the set concept

- a. One to one correspondence.
- b. Set as a collection of objects.
- c. Sorting and classifying collection
(Sets) of objects.
- d. Quantitative comparisons of two sets
by visual inspection.

EXPERIENCES

1. Classifying through sorting articles brought in from environment: Stones, rocks, leaves, bark.
2. Counting children and playing a game in which they match boy to boy, girl to girl (pairs of clothing items, such as shoes, socks, moccasins).
3. Matching clothes, boots, mittens -- things that go together, dress up clothes in housekeeping area.
4. Develop "intellectual kits". These are collections of materials or objects (e. g. key kit) used to teach such skills as discrimination, reasoning, labeling, association, classification, etc.

III. To begin to understand geometric concepts.

- a. Shapes: Square, Circle, Rectangle, Triangle
- b. Ordering according to size and shape.

EXPERIENCES

1. Free play at flannel board with varied colored felt shapes.
2. Matching games and form boards reflecting shapes and sizes. (See Games to Make)
3. Collage pieces of different textures for pasting; matching size, shape, and textures.
4. Make cookies using variously shaped cookie cutters.

IV. To begin

- a. Addition
- b. Subtract

EXPERIENCES

1. Block play the relative units and
2. Dramatic p Arrange fo food cart
3. Table sett people at and dishes number of objects mi materials

V. To begin t urement.

- a. Linear.
 1. Shorter
 2. Farther
- b. Volume.
 1. Cup
 2. Pint
 3. Quart
 4. Gallon
- c. Weight.
 1. Heavy-
 2. Pound
- d. Fraction
 1. Whole
 2. One ha
 3. One fo

Sorting articles
Environment: Stones,
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boy to boy, girl to girl
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Understand geometric con-

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size, shape, and tex-

variously shaped cook-

IV. To begin to understand basic operations.

- a. Addition (informal).
- b. Subtraction (informal).

EXPERIENCES

1. Block play - staff helps children see the relationship between units-double units and quads.
2. Dramatic play (store and trading post.) Arrange for quantities of empty cans and food cartons for play buying and selling.
3. Table setting. Children count number of people at their table and match utensils and dishes; a child tells teacher the number of children for whom materials or objects missing from full complement of materials needed at table.

V. To begin to understand concepts of measurement.

- a. Linear.
 1. Shorter-longer
 2. Farther-nearer
- b. Volume.
 1. Cup
 2. Pint
 3. Quart
 4. Gallon
- c. Weight.
 1. Heavy-light
 2. Pound
- d. Fractional parts.
 1. Whole
 2. One half
 3. One fourth, one quarter (optional)

EXPERIENCES

1. Collage with glue, string, yarn, paste.
2. Carpentry with pieces of wood of different lengths, thicknesses, and shapes.
3. Block play-reenacting railroad, wagon train, map making.
1. Make jello and pudding for small and large groups of children.
2. Prepare fruit juices in class.
3. Arrange containers of different volume for use in water and sand box play.
1. Teacher's interpretation during sand box and water play.
2. Weigh children on regular scale.
3. Weigh specific quantities of food.
1. Dramatic play and cooking.
2. Science demonstrations.
3. Block play-using correct names for size and shapes of blocks - quarter, half, full and double units.
4. Games: form boards using pictures of familiar objects
5. Geoboards

- e. Time
 1. early
 2. day,
 3. hour
 4. yeste

- f. Money
 1. names
 2. value
 3. barte

**VI. To beg
lation**

OBJECTIVE

- a. under
- b. on top
- c. above
- d. behind
- e. in front
- f. in the
- g. between
- h. right -

1. Plan da
2. Plan fo
events.

1. Teacher
tic play
2. Have rea
3. Take fie
actual p

EXPERIENCE

1. Natural

* These are,
well as na

string, yarn, paste.

pieces of wood of different
sizes, and shapes.

toy railroad, wagon

toys for small and large

toys in class.

toys of different volume for
and box play.

toys during sand box

regular scale.

quantities of food.

cooking.

lessons.

correct names for size
blocks - quarter, half, full

toys using pictures of fam-

e. Time

1. early-late
2. day, week, month, year
3. hour
4. yesterday, today, tomorrow

f. Money

1. names of coins
2. values of coins
3. barter, pawn

VI. To begin to understand positional re-
lationships*

OBJECTIVES

- a. under
- b. on top of
- c. above
- d. behind
- e. in front of
- f. in the middle of
- g. between
- h. right - left

1. Plan daily schedule.
2. Plan for trips and special visitors and events.

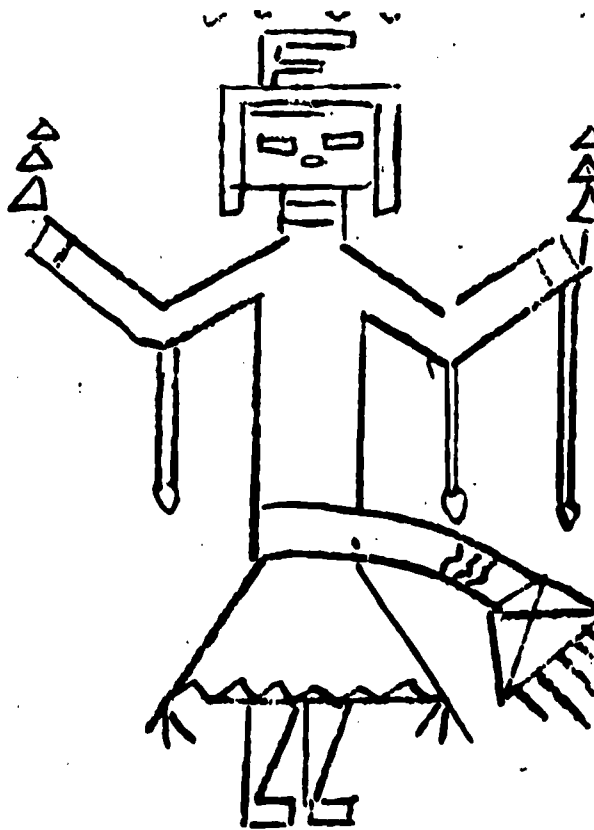
1. Teacher's interpretations during dramatic play.
2. Have real money available.
3. Take field trips in small groups for actual purchasing of foods and materials.

EXPERIENCES

1. Natural conversation with children

* These are, of course, language concepts as well as mathematical.

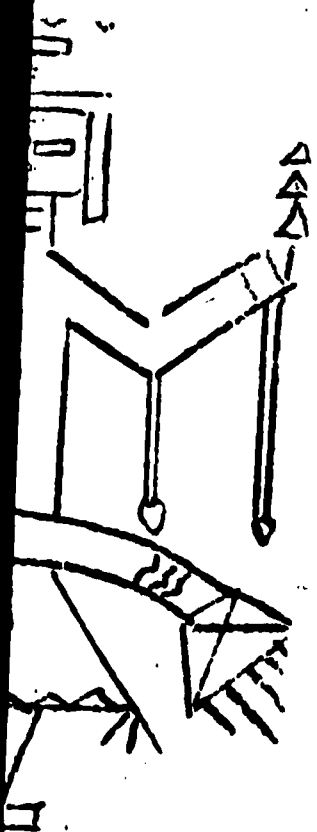
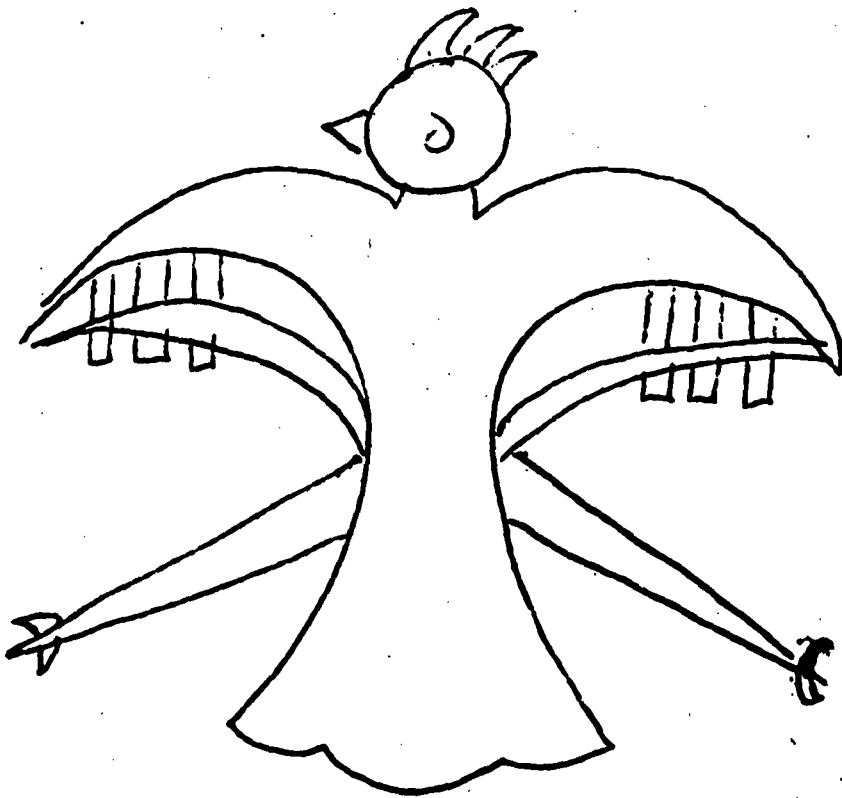
2. Bus trips and field trips.
3. Informal game playing.
4. Block play and dramatic play
5. Make sandwiches.
6. Make jello with bananas or other fruit placed on top of jello.
7. Table setting.



s.

play

or other fruit



THE DEVELOPMENT OF NATURAL AND PHYSICAL SCIENCE

In a curriculum guide focusing on Indian children in kindergarten centered in a bilingual and bicultural context, natural and physical science concepts are drawn from the familiar events and materials with which the child lives and extend to the significant discoveries in the larger world.

Specific objectives which can be achieved through the kindergarten year show the importance of language for thinking and analyzing general knowledge about the natural and physical sciences.

From the children's interests and questions and what the teacher already knows about what can be achieved, the science program develops. In the kindergarten setting science materials, demonstrations, and experiments are presented as simply as possible and a few at a time. This gives each child the opportunity to explore, experiment, discover, and arrive at conclusions for himself.

The kindergarten staff has the responsibility for stimulating and encouraging the child's natural curiosity to use all of his senses and to help him develop a questioning attitude.

"Let's find out," or "Let's see what happens," are effective approaches to science for young Indian children. These experiences should not be limited to set time segments, but should be incorporated into the child's daily curriculum life experiences. Science should include the tribal culture, with its explanations of phenomenon not readily understandable. In the folk tale "Why Rivers Flow But One Way," the Indians of the Puget Sound demonstrate clear and concise powers of observa-

tion. They have rivers flowing of the explanation

The young child, tion, brings to nature. His toy available resource are satisfied with observation and and exciting science be brought to the on the child's heritage. His oted, while not n child feels free explore, to make d questions. Expe tive, beginning answering questi it?" "what color feel like?" "... like?" and "...l

The total environment should be conducted the areas, that "subjects." Alt mentalized the r knowing, the chi on his cultural

An environment s the child may ex ways as possible is allowed to ex of the classroom from a gourd in bridges many rea tells you that t ground at a cert

THE DEVELOPMENT OF NATURAL AND PHYSICAL SCIENCE CONCEPTS

side focusing on Indian children centered in a bilingual text, natural and physical are drawn from the familiar with which the child to the significant discover-world.

s which can be achieved garden year show the impor-for thinking and analyzing about the natural and phy-

s interests and questions er already knows about what he science program develops. n setting science materials, d experiments are presented ble and a few at a time. ild the opportunity to ex-discover, and arrive at mself.

staff has the responsibility d encouraging the child's to use all of his senses velop a questioning atti-

or "Let's see what happens," oaches to science for young These experiences should set time segments, but ated into the child's daily periences. Science should culture, with its explana-n not readily understand- tale "Why Rivers Flow But ans of the Puget Sound dem-concise powers of observa-

tion. They have witnessed the phenomena of rivers flowing one way; the problem lies in the explanation of this phenomena.

The young child, growing up on the reserva-tion, brings to school a healthy respect for nature. His toys and games are based on the available resources of nature. His questions are satisfied with a combination of accurate observation and folk legend. These creative and exciting scientific explanations should be brought to the classroom by capitalizing on the child's observations and cultural heritage. His observations should be accep-ted, while not negating his folklore. The child feels free to raise questions, to ex-plore, to make discoveries and to answer his questions. Experiences should be descrip-tive, beginning with what is familiar, and answering questions such as: "how big is it?" "what color is it?" "what does it feel like?" "...taste like?" "...smell like?" and "...look like?"

The total environment for the Indian child should be conducive to exploration of all the areas, that we as adults, have labelled "subjects." Although adults have compart-mentalized the realms of information, and knowing, the child makes associations based on his cultural experiences.

An environment should be provided in which the child may explore an object in as many ways as possible. For example, a child who is allowed to explore the rich environment of the classroom, may discover a rattle made from a gourd in the music area. The gourd bridges many realms of knowing. The child tells you that the gourd is grown in the ground at a certain season of the year. Is

this not science? You talk with him about the similarities between this and other gourds; its size, shape, using descriptive vocabulary. Is this not language arts? You secure and open a gourd, examining the inside. He tells you that his mother uses gourds at home. Is this not social studies? You encourage him to tell you more, recording his language and his story about gourds. You count the number of seeds inside. Is this not mathematics? You talk about the sounds of various gourds. Is this not rhythm and music? Thus the gourd in the classroom provides the child with many opportunities to learn the skills and concepts essential to his development as a learner.

In encouraging or providing for science experiences, the teacher's objectives may include helping the child:

To be alert to his surroundings.

To further develop his basic senses.

To develop active questioning.

To make predictions.

To think logically, while recognizing and appreciating his intuitive understandings.

To appreciate and understand the natural environment.

To share his discoveries with others.

The experiences to be suggested should grow from the child's interests, his concerns, and the things he wishes to know. They should not be viewed as defined curriculum but as hints or suggestions for possible directions of exploration.

lk with him about
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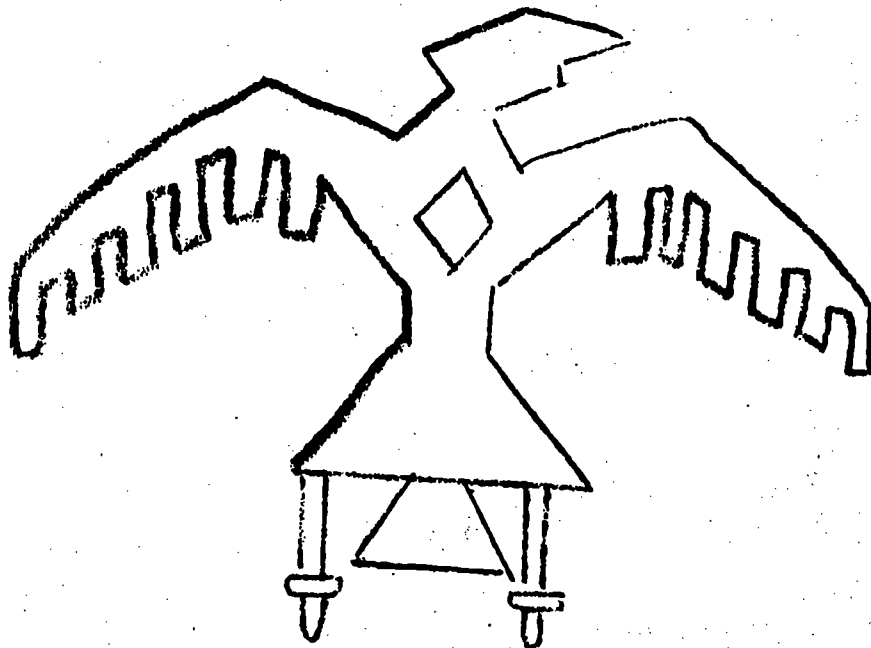
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possible directions



I Sensory Experiences:

Touch: Skin enables us to learn about our environment.

discussion: how does an object feel? describe experience of touch you are unable to see; what objects can you identify without seeing identify people without seeing them?

experiences:

1. have a secret "feely" box containing an object that the child touch without seeing it.
2. let a blindfolded child identify members of the group.
3. let a blindfolded child identify and move through room.
4. provide objects of different temperatures to be handled.
5. select contrasting materials, exploring them with the children.
6. make believe that you are holding something and describe it.

materials:

gourds	pine cones	silver	corn husks	sand
sage brush	cocoons	pebbles	corn meal	ball
leaves	feathers	marbles	sand	flow
sunflower seeds	rocks	rocks	soil	bead
cotton flax	bark	wood	soap	fur

Smell: Noses help us to learn about our environment.

discussion: what do things smell like? what smells good? bad?

experiences:

1. allow children to smell contrasting odors having them describe it
2. blindfold a child and let him identify foods and other objects by
3. take a walk after shower and smell the scent of the wet earth.

materials:

flowers	pepper	soap	cleanser
fruit	bark	perfume	pine needles



to learn about our environment.

What does an object feel? describe experience of touching an object
What objects can you identify without seeing them? can you
identify them?

A box containing an object that the child tries to identify

Child identify members of the group.
Child identify and move through room.
Different temperatures to be handled.
Materials, exploring them with the children.
You are holding something and describe it.

cones	silver	corn husks	sandpaper
beans	pebbles	corn meal	ball
shells	marbles	sand	flower
	rocks	soil	beads
	wood	soap	fur

Learn about our environment.

What does it smell like? what smells good? bad?

Child contrasting odors having them describe it.
Child let him identify foods and other objects by their smell.
Child cover and smell the scent of the wet earth.

soap	cleanser
perfume	pine needles

Sound: There are many different kinds of sounds we hear.

discussion: what kinds of sounds there are? how do we know where sounds come from? what happens when things vibrate?

experiences:

1. have children identify sounds that they cannot see.
2. with eyes closed, have them identify voices.
3. have them describe and duplicate sounds.
4. have them listen to their own voices on a tape recorder.

Taste: Tongue and mouth help us learn about our environment.

discussion: what things do they like to taste? dislike? what tastes sweet? bitter? salty?

experiences:

1. provide an opportunity to taste a variety of contrasting food.
2. blindfold a child and let him try to identify the food, discuss textures.

materials:

fruit	pepper	corn	lemon
salt	mustard	squash	herbs

Sight: Eyes help us to learn about our environment.

discussion: how do you know where to go? how do you know not to fall over something? how do you know where you are?

experiences:

1. have children look at different objects, describing any differences.
2. look at objects with moving parts.
3. have children walk through an obstacle course.
4. have children look at different kinds of birds.

II **Weather Cycle** - rain, evaporation, cloud formation, hail, sleet, snow, water, air

Rain: rain affects our environment

discussion: How does it feel to get wet? what happens when things get wet? what happens to the sky when it rains? what happens to the soil, sand when it rains? how does rain affect plants?

experiences:

1. Observe rain from the window.
2. Listen to sound of rain.
3. Notice how people dress and move in the rain.
4. Watch a puddle as water falls into it.
5. Watch what rain does to the soil.
6. Collect rain in a bucket.
7. Overwater soil, in the classroom, watching as the water causes the soil to float away.
8. Watch patterns of drying.

Snow: snow affects our environment

discussion: what does snow feel like? look like? taste like? what does snow do to cars? buildings? plants? soil? what are snowflakes shaped like?

experiences:

1. Have children play in the snow and observe it from window.
2. Collect snow flakes on a dark piece of fabric looking at their shape.
3. Make snow candy.
4. Watch how people dress and move in the snow.
5. Watch snow melt.
6. Notice how people walk in different kinds of snow (slushy, packed, dry, deep)
7. Notice how vehicles move in the snow.
8. Have children pretend to be falling snow and dramatize it.

Freezing

Cold: cold affects people and their environment.

discussion: describe how it feels to be in the cold. what happens to the earth when it is freezing cold? how do trees look in the freezing cold? how do people dress? what do animals do?

experiences:

1. Have children try to dig up some frozen earth.

2. Observe how people dress for the extreme cold.
3. Observe the color of the skin in the freezing
4. Observe the smoke coming from the mouth.
5. Talk about how fingers and feet feel in cold.
6. Observe frost on the windows.
7. Observe the ice on the ground, buildings.
8. Observe frozen clothing on a clothesline.
9. Let a dish of water freeze, allowing the child
10. Hang a shirt outside the room, till frozen; br
see it.

Wind: wind affects people and their environment.

discussion: what happens to soil in a wind storm?
in the wind? how do plants move in the wind? how

experiences:

1. Let children go out of doors on a windy day an
on their heads.
2. Notice how people walk in the wind.
3. Notice how things fly about in the wind.
4. Listen to the sound of the wind.
5. Notice how wind feels on the skin.
6. Notice what wind does to water.
7. Place a strip of cloth outside the window and
8. Place a fan near a basin of water and watch th
9. Blow feather and other small pieces of objects
10. Make pin-wheels or kites.
11. Watch wind blow loose soil or sand indicating
12. Have children take a piece of paper and fan th
faces and to note that wind is air in motion.

Air:¹ people and animals need air to live.

experience:

1. Ask children to hold their noses and mouths sh
air pushes things.

experiences:

people dress for the extreme cold.
color of the skin in the freezing cold.
smoke coming from the mouth.
how fingers and feet feel in cold.
st on the windows.
ice on the ground, buildings.
zen clothing on a clothesline.
of water freeze, allowing the children to handle it before and after.
t outside the room, till frozen; bring it in letting children feel,

ts people and their environment.

at happens to soil in a wind storm? to sand? how do people walk
ow do plants move in the wind? how does a kite fly in the wind?

n go out of doors on a windy day and try to walk about, or to keep hats
ads.

people walk in the wind.
things fly about in the wind.
he sound of the wind.
wind feels on the skin.
wind does to water.
ip of cloth outside the window and watch it blow.
near a basin of water and watch the ripples.
r and other small pieces of objects.
eels or kites.
blow loose soil or sand indicating erosion.
en take a piece of paper and fan themselves to feel the wind on their
o note that wind is air in motion.

animals need air to live.

n to hold their noses and mouths shut; discuss reaction.

1. Put paper on a table; turn on electric fan in the direction of the paper.
2. Go outside on a very windy day; feel the air push.
3. Put pin-wheel in the room ventilators.

air has weight.

experience:

1. Put a flat balloon between two blocks of wood; blow up the balloon. Watch the weight of the air in the balloon lift the blocks.

air evaporates moisture, (dries things)

experience:

1. Wash some doll clothes; hang them in the air.

air takes up space

experience:

1. Put a dry tissue or hanky in a glass. Invert in a bowl of water; the air keeps the tissue dry.

air lifts things

experiences:

1. Fly a kite on a windy day.
2. Hold a streamer in the air on a windy day.
3. Watch airplanes in the sky.

air moves

experiences:

1. Spray an aerosol fresener in one corner of a room; smell the odor as it moves to other corners.
2. Watch smoke in the air.

moving air is wind

experiences:

1. Toss a hat into the wind.
2. Watch the leaves twirling.
3. Note clothes dancing on a line.
4. See hair blowing in the wind.

air has moisture

experiences:

1. Put ice cubes into an aluminum cup or tumbler; watch moisture form on outside of container.
2. Breathe on a pane of glass or mirror; see moisture.

air (oxygen) helps fires burn

experience:

1. Put a candle in a jar. Light it. Watch it burn until oxygen is used.

air has dust in it

experience:

1. Watch the rays of the sun as they come through the window. Note the dust particles.

air slows falling things

experience:

1. Make a small parachute from a spool and a handkerchief. Toss it in the air on a windy day and watch what happens.

SUBJECT

water has air in it

experience:

1. Fill a bottle with faucet water. Put the bottle on a windowsill. Watch the air bubbles rise to the top of the water.

Water in Everyday Life - water has many forms.

experiences:

1. Freeze ice cubes.
2. Boil water to make steam.
3. Let steam flow into a glass container; watch it burn back into
4. Bring snow into the room; let it melt into water.
5. Gather hail, if possible.
6. Walk in the dew.
7. Note the frost on window panes.
8. Watch icicles form and melt.

water has many uses (it helps people in many ways)

experiences:

1. Discuss the use of water in the following ways:

- | | |
|--------------|--------------------|
| . cleaning | . drinking |
| . cooking | . quenching (fire) |
| . baking | . bathing |
| . scouring | . swimming |
| . painting | . skating |
| . sprinkling | |

all living things need water

experiences:

1. Give it to:

- . plants
- . animals
- . birds
- . people

water expands when it freezes.

experience:

1. On a very cold day put two jars outside. Fill both with water. When the water in the covered bottle freezes, observe what it d

1 Dr. J. E. Kosoloski, Director of Bureau of General and Academic Educa
Charlotte G. Garman, Editor Kindergarten Guide Pennsylvania Dept. of

steam.
to a glass container; watch it burn back into water.
the room; let it melt into water.
possible.

window panes.
and melt.

helps people in many ways)

water in the following ways:

g . drinking
g . quenching (fire)
g . bathing
g . swimming
ing . skating

water

freezes.

put two jars outside. Fill both with water. Put a lid on one.
the covered bottle freezes, observe what it does.

Director of Bureau of General and Academic Education and Mrs.
Director Kindergarten Guide Pennsylvania Dept. of Education.

water gets into the air by evaporation

experience:

1. Fill two measuring cups with water. Put a lid on each cup and note the water line.

some things hold more water than others.

experience:

1. Put water in a clear bowl. Watch the water line on a stone. Do the same with a sponge, rubber, piece of wood. Which holds most water.

there is water in soil.

experience:

1. Put soil in a jar. Cover it tightly. Note drops of water that mix with some things.

experience:

1. Experiment with different powders (salt, sugar, flour, syrup; note what happens.

some things float in the water.

experience:

1. Try a piece of wood, sponge, a stone, a feather.

Sun: the sun affects people and their environment.

discussion: what does the sun do to people's skin?
do people dress in the sun?

experiences:

1. Play out of doors on a sunny winter day observing the sun.
2. Notice how the sun warms the soil.
3. Notice how sun affects plants.

to the air by evaporation

measuring cups with water. Put a lid on one. Watch both cups daily to
water line.

ld more water than others.

r in a clear bowl. Watch the water line before and after you put in a
Do the same with a sponge, rubber, piece of cloth. See which absorbs the
er.

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in a jar. Cover it tightly. Note drops of moisture that gather in the jar.

th some things.

nt with different powders (salt, sugar, baking soda, instant coffee) oil,
ote what happens.

oat in the water.

ece of wood, sponge, a stone, a feather, a plate.

affects people and their environment.

what does the sun do to people's skin? to soil? to sand? to plants? how
ess in the sun?

of doors on a sunny winter day observing how the sun feels on the skin.
ow the sun warms the soil.

o affects plants.

4. Talk with a farmer or rancher about the sun.

Heat: heat affects man and his environment.

discussion: how do people feel in the extreme heat? how does soil react to extreme heat? how do people dress in heat? how do you keep the water cool?

experiences:

1. Observe how the sun feels on a very hot day.
2. Observe people perspiring.
3. Notice how much people drink on hot days.
4. Find ways to cool off.

the sun gives heat.

experiences:

1. Stand in hot sun.
2. Feel the earth and pavement in the heat.
3. Put a cold pan in the sun; let it stand ten minutes. Then feel it.
4. Put chocolate candy in the sun.
5. Put a candle on a tray. Let it stand in the sun.

we can make heat.

experiences:

1. Look at the school furnace.
2. Light a small fire (outdoors).
3. Rub your hands together briskly.
4. Light a candle.
5. Breathe into your hands.

heat changes the form of some things.

experiences:

1. Cook apples into sauce.
2. Fry an egg.
3. Put milk in heat; watch it curdle.
4. Toast some bread.
5. Bake a cake.
6. Make bread.

r rancher about the sun.

d his environment.

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ch it curdle.

heat dries things

experiences:

1. Put a wet cloth on the radiator or ventilator.
2. Put a pan of mud in the sunlight.
3. Put a piece of bread on the windowsill or radiator.
4. Wash hands; hold them under a drier.

heat is useful.

experiences:

1. Discuss heat in the home and school for:
 - . ironing
 - . heating
 - . cooking
 - . sterilizing
 - . healing

III Seasons: Examples of a seasonal activity - Fall

Winter

Spring

Summer

Fall

Harvest:

discussion: what do farmers do at harvest time? what do they do with the products; where do the things come from?

experiences:

1. Bring materials appropriate to the harvest to the class to show to the children, others.
2. Allow children to touch the materials.
3. Give Indian and Anglo name for the material.
4. Contrast the feeling of one fruit with another.
5. Open the fruit, or vegetables to look at seeds.

IV Plants -- plants are growing things
growing things need water, light, food
there are different kinds of plants
some plants are cultivated, others grow wild
different types of plants require different environments
plants have several parts

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d in the sunlight.
bread on the windowsill or radiator.
d them under a drier.

the home and school for:

ing . heating
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ing

s of a seasonal activity - Fall

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things come from?

appropriate to the harvest to the classroom grown locally, familiar
, others.

to touch the materials.

Anglo name for the material.

eling of one fruit with another.

or vegetables to look at seeds.

re growing things

need water, light, food

rent kinds of plants

cultivated, others grow wild

of plants require different environments

er parts

discussion: how does a plant get food? what happens if a plant gets not enough water? what happens when a plant grows in the dark? what is different? what plants are cultivated? what plants grow in the wild? what affect some plants? how does heat affect some plants? what kinds of plants grow in cold places? what kinds of plants grow in hot places? what are the characteristics of plants?

experiences:

1. Over-water a plant and observe what happens.
2. Under-water a plant and observe what happens.
3. Place a plant in the dark, observing what happens.
4. Place a plant in the refrigerator observing what happens.
5. Ask local people what they plant.
6. "Adopt" a tree. Pick a tree and observe it each month. Draw and record changes.
7. Walk in the forest, or desert, looking for wild plants and flowers.
8. Take apart a plant, pointing out the various parts.
9. Grow a variety of plants in the classroom.
10. Plant parsley seeds in a sponge, keeping the sponge moist and covered with foliage.
11. Build a desert terrarium in a large jar with cactus plants and small animals.
12. Build a marsh terrarium in a large jar with a piece of glass for a lid, a piece of wood, and moist rich soil is necessary. Place small plants in the soil; keep near a window where it will not receive direct sunlight.
13. Transplant from indoors to outdoors.

Animals: animals are living things
animals need food, water, air
there are different kinds of animals
some animals are domesticated, others live in the wild
different animals require different environments
some animals have fur, others have feathers or skin
animals protect themselves in different ways - home builders
fast runners, hibernation, good fighters, color

discussion: what kinds of food do different animals eat? how do they look? their colors? their skin? how do they move? what are their homes? what kind of homes do they build? what animals are domesticated? what animals live in the wild? how does an animal protect himself by building a home? by hibernating? by changing color? by being a good fighter? what are the different things? how do animals and growing things reproduce themselves?

Does a plant get food? what happens if a plant gets too much or
what happens when a plant grows in the dark? how do plants look
plants are cultivated? what plants grow in the wild? how does cold
s? how does heat affect some plants? what kinds of plants grow in
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terrarium in a large jar with a piece of glass for a cover; a block
moist rich soil is necessary. Place small plants (fern, moss, lichen)

ep near a window where it will not receive direct sunlight.

om indoors to outdoors.

re living things

ood, water, air

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ave fur, others have feathers or skin

t themselves in different ways - home builders

hibernation, good fighters, color

kinds of food do different animals eat? how do different animals
s? their skin? how do they move? what are their footprints like?
do they build? what animals are domesticated? what animals live
does an animal protect himself by building a home? by running fast?
y changing color? by being a good fighter? what animals do these
how do animals and growing things reproduce their kind?

experiences:

1. Have a variety of animals in the classroom (gerbil, rabbit, snakes, worms, insects,) allowing the children to handle the animals when possible).
2. Talk about animals the children have as pets.
3. Build different kinds of animal homes.
4. Look and listen to birds in the wild.
5. Take a field trip counting all the wild animals.
6. Notice the footprints of animals in the wild.
7. Talk about the way different animals get their food. Observe the shape of beaks.
8. Watch how different animals move, trying to imitate them.
9. Observe the color of different animals.
10. Visit a zoo, forest, desert, searching for animals.
11. Visit children's homes. Take pictures of them and write a story about their pet.
12. To show children that living things have babies. Show pictures of guppies, tadpoles, kittens being born.

Our Bodies - our bodies are made up of many parts.

experiences:

1. Have children look at themselves and each other.
2. Let children use a stethoscope to listen to the heart.
3. Talk about and show pictures of the brain and lungs.

our bodies need good care

experiences:

1. Show a film or filmstrip about good eating habits.
2. Take daily exercise and rest.
3. Show children who are not clean how to care for themselves. Use a corner with a mirror, comb, brush, washcloth, etc.
4. Have a good breakfast party to emphasize importance of breakfast.
5. Emphasize and practice frequent washing of hands.
6. Practice brushing of teeth.
7. Work in a dark room, then a light room. Discuss the importance of light.

many people help us to care for our bodies

variety of animals in the classroom (gerbils, hamster, bird, guinea pig, snakes, worms, insects,) allowing the children to care for them (use local when possible).

at animals the children have as pets.

different kinds of animal homes.

listen to birds in the wild.

field trip counting all the wild animals.

the footprints of animals in the wild.

at the way different animals get their food, noticing different kinds

of different animals move, trying to imitate their movements.

the color of different animals.

to go, forest, desert, searching for animals.

children's homes. Take pictures of them and their pets. Children write

about their pet.

children that living things have babies like themselves, hatch eggs, watch tadpoles, kittens being born.

our bodies are made up of many parts.

children look at themselves and each other. Identify visible body parts.

children use a stethoscope to listen to their hearts.

draw and how pictures of the brain and lungs.

good care

film or filmstrip about good eating habits, exercise, rest.

by exercise and rest.

children who are not clean how to care for themselves. (Have a health

check with a mirror, comb, brush, washcloth, etc.).

good breakfast party to emphasize importance of proper diet.

and practice frequent washing of hands.

brushing of teeth.

dark room, then a light room. Discuss the difference.

help us to care for our bodies

experiences:

1. Invite the doctor, dentist, nurse, dental hygienist, physical
visor to talk with the children. Visit their school headquar
2. Visit the cafeteria to see the food personnel at work.
3. Watch the custodian scrub, clean, sweep the building.
4. Walk through the neighborhood; observe the street cleaners, wi

we can help to protect ourselves

experiences:

1. Have a "clean-up" brigade in the playground.
2. Show filmstrips of playground safety.
3. Emphasize and practice putting left-over food, apple cores, m
proper containers for disposal.

Sounds¹- sounds are made by vibration.

experiences:

1. Call, sing, whisper, shout, put hands on throat and feel neck.
2. Strike a tuning fork. Put it in water. Watch!
3. Pluck a stretched rubber band or a stringed instrument.
4. Open piano; strike keys; watch the hammers.
5. Beat a drum.
6. Ring a bell.
7. Place a yardstick on a table with half of it extending over th
the children strike the protruding edge. Observe the movement

sounds may be loud or soft, high or low, shrill or gentle

experiences:

1. Turn up the T.V., radio or record player.
2. Sing loudly and softly.
3. Whisper, shout.
4. Stamp feet on floor rapidly, slowly.
5. Experiment with rhythm instruments.

sounds are everywhere

experiences:

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ian scrub, clean, sweep the building.
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ourselves

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s for disposal.

de by vibration.

per, shout, put hands on throat and feel neck.
fork. Put it in water. Watch!
d rubber band or a stringed instrument.
ke keys; watch the hammers.

k on a table with half of it extending over the edge. Have
like the protruding edge. Observe the movement called "vibration".

soft, high or low, shrill or gentle

radio or record player.
softly.

or rapidly, slowly.
hythm instruments.

1. Listen to room sounds.
2. Tour the playground and identify sounds.
3. Walk around the block to discover street sounds if in ci
4. Show filmstrip about sounds.

Magnets - magnets attract objects made of some metals

experience:

1. Place a collection of items - nails, buttons, seeds, cli
tacks, pegs, crayons, wire - on a table. Let children s
attracts.

magnets attract through some metals

experience:

1. Put a piece of paper, a sheet of wood or plastic or a gl
magnet and the objects listed above. See whether the ma
the items.

there are different kinds of magnets

experience:

1. Provide a variety of magnets for children to see.

magnets are useful to man

experience:

1. Find magnets in the room (on doors, bulletin boards, ma

Machines - machines make work easier for people

experiences:

1. Look at and use simple machines that Mother may use:
 - . can opener
 - . mixer
 - . nut cracker
 - . needle

and identify sounds.
to discover street sounds if in city.
sounds.

objects made of some metals

of items - nails, buttons, seeds, clips, baby pins, thumb
wire - on a table. Let children see which ones the magnet

the metals

, a sheet of wood or plastic or a glass plate between the
items listed above. See whether the magnet will still attract

of magnets

magnets for children to see.

room (on doors, bulletin boards, magnetic toys, games).

work easier for people

the machines that Mother may use:

- . knife and fork
- . scissors
- . clothesline
- . sweeper

- . curtain rod
- . iron
- . mop
- . broom

- . dustpan
- . toaster
- . washer
- . dryer

that Father may use

- . hammer
- . saw
- . shovel
- . rake

- . automobile jack
- . vise
- . screwdriver

that we all may use

- . stairway
- . car
- . ramp
- . doorknob

- . pencil sharpener
- . toothbrush
- . comb

some machines are used for fun

experiences:

1. Locate and demonstrate toy machines in the kindergarten:

- . trains
- . doll carriages
- . wagons
- . tricycles
- . wind up toys
- . trucks
- . seesaw
- . rollerskates

some machines give us comfort

experiences:

1. Use a rocking chair.
2. Take an elevator or an escalator ride.
3. On a hot day bring in an electric fan.
4. Make ice cream with a hand or an electric freezer.
5. Turn on a faucet to get water!

To assist the teacher the following classifications of simple machines should not be expected to remember them.

- k
- . curtain rod
 - . iron
 - . mop
 - . broom
 - . dustpan
 - . toaster
 - . washer
 - . dryer

- . automobile jack
- . vise
- . screwdriver

- . pencil sharpener
- . toothbrush
- . comb

d for fun

ustrate toy machines in the kindergarten:

- s
- . wind up toys
 - . trucks
 - . seesaw
 - . rollerskates

comfort

hair.
r or an escalator ride.
ing in an electric fan.
with a hand or an electric freezer.
t to get water!

he following classifications of simple machines are listed. Children
to remember them.

Lever

Claw-hammer
Nut Cracker
Can Opener
Shovel
Seesaw
Crow-bar

Inclined Plane

Stairway
Sloping boards, ladders
Hill
Slide
Ramps
Rocks
Logs
Tree trunks

Pulley

Flag Pole
Window Curtains
Clotheslines
Tow Trucks

Wheel and Axle

Doorknob
Roller skates
Pencil sharpener
Back wheel of a car
Bicycle

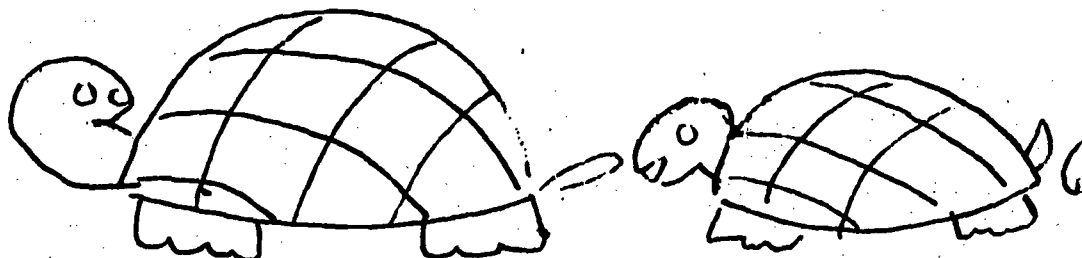
Screw

Automobil
Paper Pre
Piano Sto
Vise

Wedge

Axe
Needles
Knives
Chisel

- 1 Dr. J. E. Kosoloski, Director Bureau of General and Academic
Garman, Editor Kindergarten Guide Pennsylvania Dept. of Educa



Pulley

Flag Pole
Window Curtains
Clotheslines
Tow Trucks

Screw

Automobile Jack
Paper Press
Piano Stool
Vise

Wheel and Axle

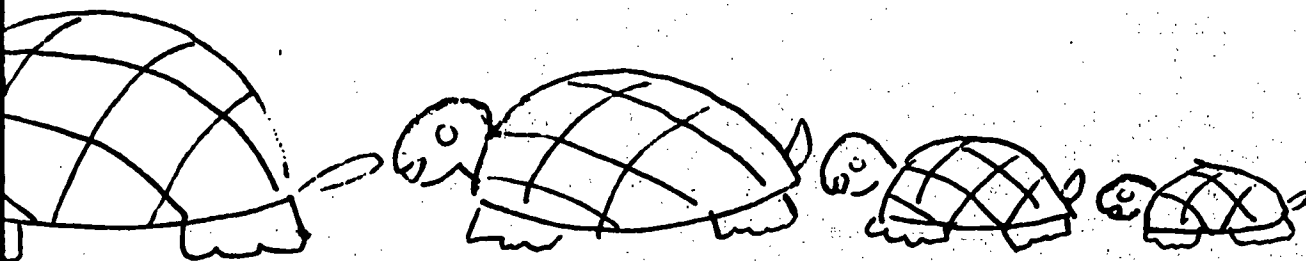
Doorknob
Roller skates
Pencil sharpener
Back wheel of a car
Bicycle

Wedge

Axe
Needles
Knives
Chisel

adders

i, Director Bureau of General and Academic Education and Mrs. C. G.
ergarten Guide Pennsylvania Dept. of Education.



SCIENCE AS A HOBBY
Some Suggestions for Kindergarten Teachers

A. Sources of Science Materials

1. **The earth's crust:**
rocks, pebbles, minerals, fossils, vari-colored soils, sand, t
2. **Plant life:**
grasses, weeds, wild flowers, trees, garden flowers, garden v
seed pods, cactus, guava.
3. **Insect life:**
spiders, ants, beetles, moths and butterflies, (silkworms), w
mosquitoes, mites, tics.
4. **Bird life:**
bones and feathers, nests, bird-watching, Audubon cards, feed
baths.
5. **Miscellaneous animal life:**
snails, worms, lizards, turtles, tadpoles, fish, and other fr
dogs, rabbits, fisheggs.
6. **The sky:**
clouds, stars, constellations, color, dust.
7. **Household chemicals:**
baking soda, washing soda, bleaches, iodine, vinegar, chalk,
salt, steel wool, pennies and dimes, silver polish, limewater
charcoal, preservative such as alum.
8. **Toys, tools and other mechanical gadgets:**
clocks and watches, wind-up toys, floating toys, jet-propelled
things with wheels, pulleys, conveyor belts, gears.
9. **Rhythm instruments and other sound makers:**
rubber bands, cigar boxes, metal spoons, empty bottles, rattle
and blocks, sandpaper, pan lids.
10. **Beachcomber specimens:**
sand, bivalve and univalve shells, starfish, sand "bugs", beac
sculptured stone, sanded glass, seaweeds.

SCIENCE AS A HOBBY
Some Suggestions for Kindergarten Teachers

Science Materials

Must:

minerals, fossils, vari-colored soils, sand, tundra, ice, seawater.

wild flowers, trees, garden flowers, garden vegetables, seeds and
nuts, guava.

beetles, moths and butterflies, (silkworms), water insects, flies,
ants, ticks.

birds, nests, bird-watching, Audubon cards, feeding stations, bird

Animal life:

lizards, turtles, tadpoles, fish, and other fresh-water creatures,
fish eggs.

constellations, color, dust.

Chemicals:

washing soda, bleaches, iodine, vinegar, chalk, vegetable dyes, sugar,
salt, pennies and dimes, silver polish, limewater, ammonia, sulphur,
preservative such as alum.

Other mechanical gadgets:

clocks, wind-up toys, floating toys, jet-propelled toys, common tools,
wheels, pulleys, conveyor belts, gears.

Instruments and other sound makers:

cigar boxes, metal spoons, empty bottles, rattles, bells, sticks,
cardboard, pan lids.

Specimens:

and univalve shells, starfish, sand "bugs", beach hoppers, driftwood,
rocks, sanded glass, seaweeds.

B. Simple Equipment to Work With

1. **Containers:**
aluminum foil pans, egg cartons, cigar boxes, plastic jars, butter jars with covers, mason jars, pickle bottles, milk can hosiery boxes, thread cartons, tin juice cans, tin coffee cans
2. **Tools:**
magnifying glass, spoons, metal or plastic screening, knife, blade, scissors, (low power microscope, if possible). In A ripening lamp would be excellent.

C. Sample Activities

1. **Collections:**
rocks, shells, seeds, etc., arranged in egg crates or other
2. **Plaster of Paris projects:**
fish and seashell molds, fossils (casts and imprints).
3. **Flower projects:**
pressed flower compositions, 3-D flower collections, crayon-wax paper flower and leaf transparencies.
4. **Seed projects:**
seed hunts (how many kinds?), bottle cap exhibits, seeds we seed travelers (for autumn) seed pictures (mosaics, using r etc.)
5. **Experiments with growing plants:**
lima beans on blotters, grass seeds on plastic sponge, sweet water, slips from geranium, begonia, etc., citrus garden (c fruit, orange, and lemon sprouts), "mystery" plants.
6. **Bug motels:**
home for living specimens.
7. **Ant village:**
jar of anthill soil, ants, tiny moist sponge, sugar or meal
8. **Worm farm:**
box of garden soil with living worms, cornmeal, some moisture

Work With

, egg cartons, cigar boxes, plastic jars and bottles, peanut covers, mason jars, pickle bottles, milk cartons, flower pots, bread cartons, tin juice cans, tin coffee cans with lids.

spoons, metal or plastic screening, knife, single-edge razor (low power microscope, if possible). In Alaska an ultra violet light would be excellent.

seeds, etc., arranged in egg crates or other cartons.

Projects:
molds, fossils (casts and imprints).

compositions, 3-D flower collections, crayon-resist illustrations, and leaf transparencies.

any kinds?), bottle cap exhibits, seeds we eat, seeds we spit out, (spring or autumn) seed pictures (mosaics, using rice, barley, beans, peas,

growing plants:
cuttings, grass seeds on plastic sponge, sweet potato or a yam in water, geranium, begonia, etc., citrus garden (can of soil with grapefruit and lemon sprouts), "mystery" plants.

specimens.

oil, ants, tiny moist sponge, sugar or meal, placed in pan of water.

1 with living worms, cornmeal, some moisture

9. *From "worm" egg to silk:
spring project beginning with silkworm eggs (available from a company.
*Note: Try this only if mulberry leaves are available.
10. Pets, wild and tame:
ducks, (fascinating though messy), birds (seed-eaters, fruit-eaters), terrarium or aquarium, miniature aquaria.
11. Home-made chemical set:
orange crates, hose, bucket, household chemicals, salvaged equipment, fire extinguisher and alcohol lamp if flame is permitted)
12. "Engineering" projects:
"Rube Goldberg" machines from odds and ends (very creative fun for older boys).
13. Rhythm orchestra:
salvaged materials used for child-made instruments.
14. Art-science projects:
mosaics using pebbles, shells, plant materials, etc., (glue the pebbles, shells, etc. onto cardboard or press into a mastic), olive bottles filled with water, colored glass or colored beach pebbles, leaf prints (ink and crayon), window sill boxes (using sand, driftwood, stones, shells).

And -- many other activities which children and teachers will think of as science hobbies get underway. Included are some of the above projects, and much background material, written for "middle-aged" children (grades in the elementary school) in the following books, published by

ELIZABETH K. COOPER - Author of

Minerals	194
Science in Your Own Back Yard	195
Discovering Chemistry	195
Science on the Shores and Banks	196

Magazine - Ranger Rick from National Wildlife Association

silk:
beginning with silkworm eggs (available from a biological supply
company) if mulberry leaves are available.

Animals:
Although messy), birds (seed-eaters, fruit-eaters, meat-eaters),
aquarium, miniature aquaria.

Tools and Materials:
A box, bucket, household chemicals, salvaged equipment (fireproof
cabinet and alcohol lamp if flame is permitted).

Projects:
Projects from odds and ends (very creative fun especially for

used for child-made instruments.

Projects:
Shells, shells, plant materials, etc., (glue the specimens to heavy
card into a mastic), olive bottles filled with water - worn bits of
colored beach pebbles, leaf prints (ink and crayon) seaweed gardens,
using sand, driftwood, stones, shells).

Projects which children and teachers will think about or invent as soon
as they get underway. Included are some of the above projects, some additional
material, written for "middle-aged" children (those in the middle
school) in the following books, published by Harcourt, Brace & Co.

ELIZABETH K. COOPER - Author of

Minerals	1943
Science in Your Own Back Yard	1958
Discovering Chemistry	1959
Science on the Shores and Banks	1960

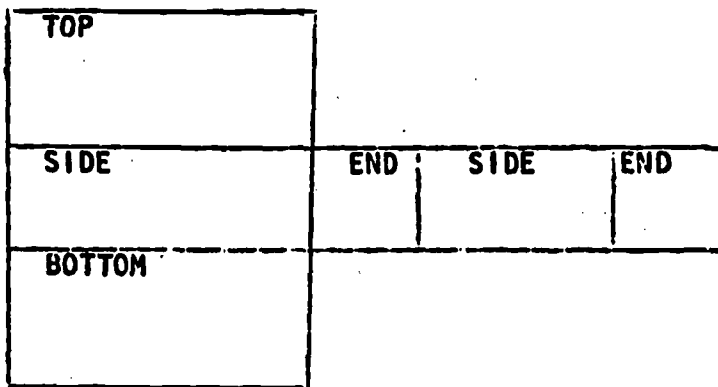
- Ranger Rick from National Wildlife Association.

ONE PIECE ALL SCREEN ANIMAL

Procure a metal pan or tray (easily washable) to receive dirt or droppings. This may be a tin cookie pan, baking pan with low sides, a serving tray, or waste porcelain crumb tray from an old stove. The size of this pan determines the size of the cage as it serves for the base.

By screening of welded wire grid 1/2" x 1" of adequate dimensions to make a desirably sized cage. Lay the screen over the tray and determine the number of wires each way which will fall within the limits of the base tray, allowing a half inch overage.

On a piece of paper draw a pattern based on the units of wire rectangles in each of the six panels of the cage. The sides of the cage are laid out in four panels end to end with a bottom panel adjacent to one side on the right and a top panel adjacent to the same side on the left. Your layout will look like this.



Pattern

Make the extend to wire in used to

Make the edge of of a wood

Use small ends of panel's pair of may be tight an

Disregard is complete snips or trimming waste so the pen

Note: wire (r is not The dia the exte pets ho only we

ONE PIECE ALL SCREEN ANIMAL CAGE

cr tray (easily washable) pppings. This may be a g pan with low sides, a a porcelain crumb tray he size of this pan de- the cage as it serves

d wire grid 1/2" x 1" of o make a desirably sized over the tray and deter- res each way which will s of the base tray, al- erage.

raw a pattern based on tangles in each of the e. The sides of the four panels end to end adjacent to one side on panel adjacent to the . Your layout will look

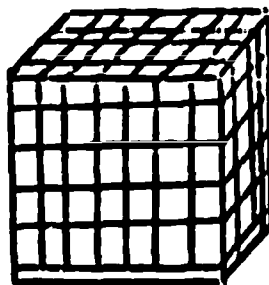
Make the cut so the stub ends of wires will extend the full half inch beyond the last wire in the panel. These wire stubs are used to bind the edges together.

Make the bends by laying the wire at the edge of the panel exactly on the square edge of a wooden box and tap with a hammer.

Use small narrow nose pliers to wrap stub ends of wire tightly around the adjacent panel's edge wire. (It pays to have a good pair of pliers for this job.) Each wire may be twisted around until the end lies tight and does not present a scratch hazard.

Disregard the door until the entire cubicle is complete. Then cut opening with wire snips or nippers and attach the door made by trimming an overlapping panel from the waste screen. The cost of cage material of the pen on display was \$2.50.

Note: The present grade of half inch square wire (rabbit mesh) available at all stores is not satisfactory for the base of pet pens. The diameter of the wire has been thinned to the extent that it will cut the feet of any pets housed therein. The market now affords only welded grid in a satisfactory grade.



--Docia Zavítkovsky

A CARRYING CASE

Do you like to carry an animal to your story time?

Do you borrow creatures from your neighbors?

Do you want kitty to take a trip with you?

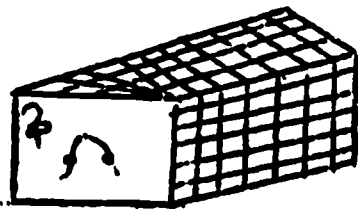
You can make a simple case

Use

- 1 apple box
- 2 small hinges and screws
- 2 screen door hooks
brads
- 1/4" mesh wire (approximately 20" x 24")
- staples

To make

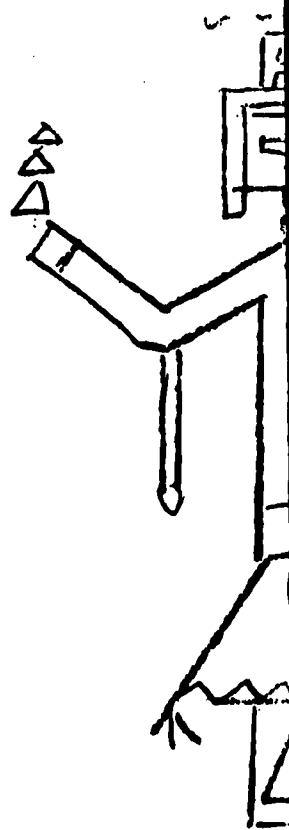
1. Remove both sides
2. Make one side into door by attaching hinges and screen door hooks.
3. Staple 1/4" mesh wire over top and open side.
4. Attach screen door pulls on ends for carrying.



AN INSECT CASE

An easy insect cage cylinder with old bottom. (peanut butter) Old motion picture instead of cake pan screen that is just cylinder that will

Overlap the ends one inch; fasten together with teners or "sew" the the cylinder in on for a lid.



ING CASE

an animal to your story

ures from your neighbors?

y to take a trip with

a simple case

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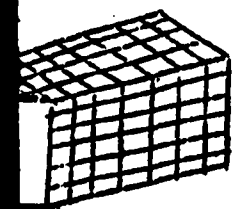
imately 20" x 24")

des

into door by attaching
een door hooks.

sh wire over top and

door pulls on ends for

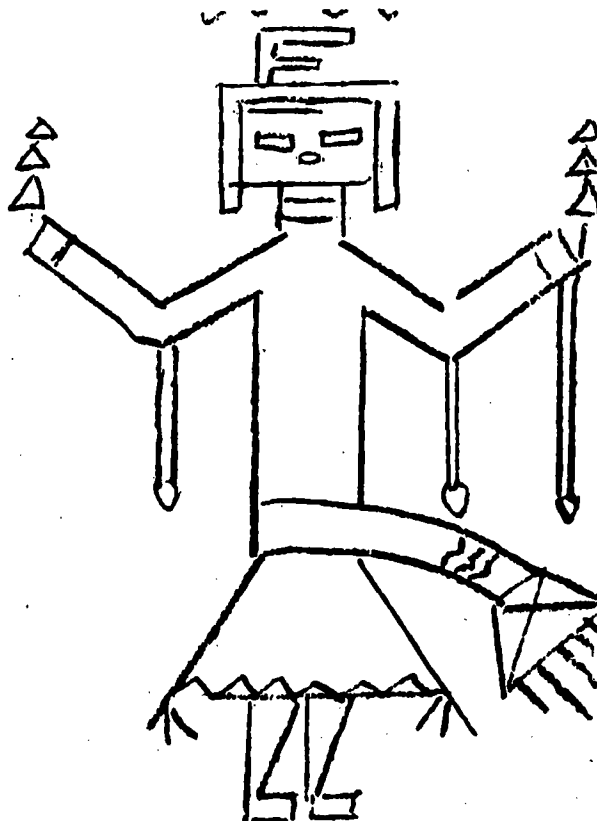


INSECT CASE

An easy insect cage can be made of a wire cylinder with old cake pans at the top and bottom. (peanut butter jar covers will do) Old motion picture containers can be used instead of cake pans. Use a piece of screen that is just long enough to form a cylinder that will fit into the pans.

Overlap the ends of the screen about a half inch; fasten together with brass paper fasteners or "sew" them with a fine wire. Set the cylinder in one pan and use the other for a lid.

-- Docia Zavitkovsky



Additional Supplies:

Fish nets
Large jars
Plastic containers
Plants
Soil
Sand
Frog
Insects
Spiders
Butterfly
Cocoons
Leaves
Sea Shells
Rocks
Minerals
Flashlights
Batteries
Wire
Lock and key
Door latch
Mechanical tools
Combs
Bottles and corks
Bottle stoppers
Water trough
Medicine droppers
Cups
Pulleys
Scales
Clock
Bells
Wheels
Starfish

Old radio
Egg beater
Flour sifter
Plastic bottles
Measuring spoons
Measuring cups
Pine cones
Cotton (flax)
Honeycombs
Ant colony
Bee colony
Buttons
Zippers
Bird nests
Insect nests
Racks
Fan
Nails
Fabric
Balloons
Sponge
Fur
Fruit
Vegetables
Clothesline
Arrowheads
Bows
Basin
Pail
Straws
Clay
Tea strainer
Clam shells

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Old radio
Egg beater
Flour sifter
Plastic bottles
Measuring spoons
Measuring cups
Pine cones
Cotton (flax)
Honeycombs
Ant colony
Bee colony
Buttons
Zippers
Bird nests
Insect nests
Racks
Fan
Nails
Fabric
Balloons
Sponge
Fur
Fruit
Vegetables
Clothesline
Arrowheads
Bows
Basin
Pail
Straws
Clay
Tea strainer
Clam shells

Kettle with spout
Colander
Pebbles
Marbles
Tin cans
Scoops
Farming tools
Milk cartons
Egg cartons
Salt
Sugar
Chalk
Thread
Spools
Jar covers
Blotter
Cork
Water
Screwdriver & screws
Iron filing
Food coloring
Paint
Telephone
Axe
Fire extinguisher
Whale bones
Fish spines
Antlers
Horns
Sheep skins
Hides
A cold box to keep frozen
things

BIBLIOGRAPHY OF SCIENCE BOOKS FOR YOUNG

INSECT STORIES

Hunting, Harriet	LET'S GO OUTDOORS	Doubleday
Marcher, Marion	MONARCH BUTTERFLY	Holiday
McClung, Robert	SPHINX, STORY OF A CATERPILLAR	Marrow
McClung, Robert	TIGER, STORY OF A SWALLOWTAIL	Marrow
Podendorf, Illa	TRUE BOOK OF INSECTS	Children's
Williamson, Margaret	FIRST BOOK OF BUGS	F. Watts
Ipcar, Dahlov	WORLD FULL OF HORSES	Doubleday
Podendorf, Illa	TRUE BOOK OF PETS	Children's

BROOK AND POND

Flack, Marjorie	TIM TADPOLE	Doubleday
McClung, Robert	BUFO: STORY OF A TOAD	Marrow

EGGS THAT HATCH

Berg, Jean	BABY SUSAN'S CHICKEN	Wonder Bo
Schloat, Warren	THE WONDERFUL EGG	Scribner

SEEDS AND PLANTS AND TREES

Cormao, M. B.	FIRST BOOK OF TREES	F. Watts
Downer, Louise	THE FLOWER	W. R. Sco
Simon, Norma	TREE FOR MEN	Lippincot
Webber, Irma	BITS THAT GROW BIG	W. R. Sco
Webber, Irma	UP ABOVE AND DOWN BELOW	W. R. Sco
Zim, Herbert	WHAT'S INSIDE OF PLANTS	Morrow

SEASONS

Blough, Glenn	WAIT FOR THE SUNSHINE	McGraw
Lenski, Lois	I LIKE SUMMER	Oxford
Lenski, Lois	I LIKE WINTER	Oxford
Lenski, Lois	NOW IT'S FALL	Oxford
Lenski, Lois	SPRING IS HERE	Oxford
Schlein, Miriam	DEER IN THE SNOW	Abelard-S

BIBLIOGRAPHY OF SCIENCE BOOKS FOR YOUNG CHILDREN

LET'S GO OUTDOORS	Doubleday	1939	\$3.50
MONARCH BUTTERFLY	Holiday	1954	\$2.95
SPHINX, STORY OF A CATERPILLAR	Marrow	1949	\$2.95
TIGER, STORY OF A SWALLOWTAIL	Marrow	1953	\$3.95
TRUE BOOK OF INSECTS	Children's Press	1954	\$2.80
FIRST BOOK OF BUGS	F. Watts	1949	\$2.95
WORLD FULL OF HORSES	Doubleday	1950	\$3.25
TRUE BOOK OF PETS	Children's Press	1954	\$2.50

TIM TADPOLE	Doubleday	1946	\$2.25
BUFO: STORY OF A TOAD	Marrow	1954	\$3.93

BABY SUSAN'S CHICKEN	Wonder Books	1951	\$3.25
THE WONDERFUL EGG	Scribner	1952	\$2.95

AND TREES

FIRST BOOK OF TREES	F. Watts	1951	\$2.75
THE FLOWER	W. R. Scott	1955	\$2.75
TREE FOR MEN	Lippincott	1956	\$2.95
BITS THAT GROW BIG	W. R. Scott	1949	\$3.95
UP ABOVE AND DOWN BELOW	W. R. Scott	1943	\$2.75
WHAT'S INSIDE OF PLANTS	Morrow	1952	\$3.93

WAIT FOR THE SUNSHINE	McGraw	1954	\$3.25
I LIKE SUMMER	Oxford	1950	\$2.50
I LIKE WINTER	Oxford	1952	\$2.50
NOW IT'S FALL	Oxford	1948	\$2.50
SPRING IS HERE	Oxford	1945	\$2.50
DEER IN THE SNOW	Abelard-Schuman	1956	\$2.95

WEATHER

Friskey, Margaret
Goudey, Alice
Tresselt, Alvin
Tresselt, Alvin

TRUE BOOK OF AIR AROUND US
GOOD RAIN
FOLLOW THE WIND
WHITE SNOW? BRIGHT SNOW

Children'
Aladdin
Lothrop
Lothrop

TIME CONCEPTS

Schlein, Miriam

IT'S ABOUT TIME

W. R. Sco

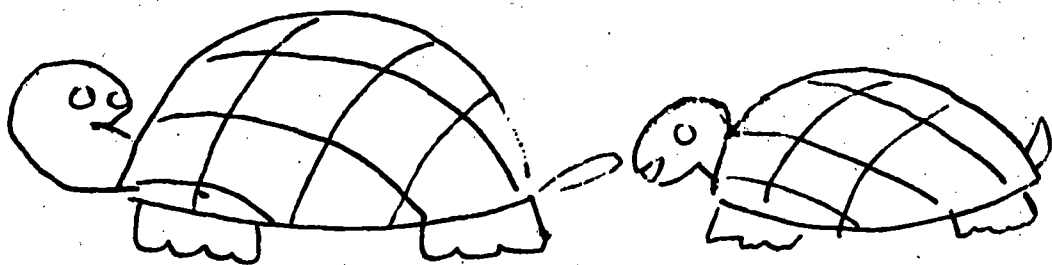
THIS AND THAT

Bendick, Jeanne
Zim, Herbert

ALL AROUND YOU
WHAT'S INSIDE OF ANIMALS

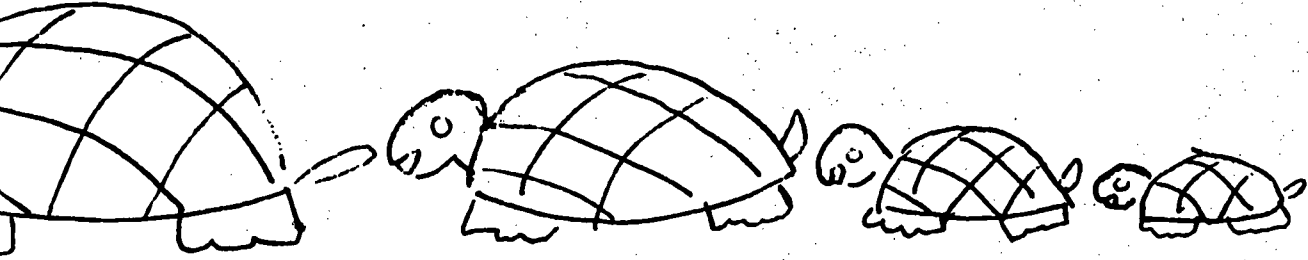
Whittlese
Marrow

EDUCATION EXTENSION, U



TRUE BOOK OF AIR AROUND US	Children's Press	1953	\$2.50
GOOD RAIN	Aladdin	1950	\$3.50
FOLLOW THE WIND	Lothrop	1950	\$3.75
WHITE SNOW? BRIGHT SNOW	Lothrop	1947	\$3.50
IT'S ABOUT TIME	W. R. Scott	1955	\$3.25
ALL AROUND YOU	Whittlesey	1951	\$3.75
WHAT'S INSIDE OF ANIMALS	Marrow	1953	\$3.00

EDUCATION EXTENSION, UNIVERSITY OF CALIFORNIA



EXPERIENCES WITH MUSIC AND RHYTHMIC M

In the language-centered curriculum, the most universal language is that of music and bodily movement. Words may come slowly, particularly to the child who is trying to express himself through two separate languages. The creative media can serve as important non-verbal forms of communication. The products of creative activities may pave the way to broader communicative power.

Through the aesthetic media each child can find personal freedom and refreshment. The kindergarten staff utilizes many methods for arranging creative activities depending upon the unique experiences the Indian child brings with him to school.

All of the peoples of the world have their songs. There are songs for play, songs sung in preparation for and during work, and for ceremonies of a seasonal or religious nature. Scholars have traced the movement of song styles along the paths of human migration, and even today one finds that melodies and song themes wander freely within several enormous regions, past language and culture barriers, without losing their essential form. Radio and records have helped to speed up this ready movement of songs and even styles of rhythmic expression.

Within a given group of people, however, the songs and dances which are kept alive and handed on from one generation to another are apt to be an expression of their own personal and shared community concerns. They show a powerful relationship to the aspects of the social structures that regulate the behavior of people in different cultures. As Lomax* summarizes this idea: "As people live, so do they sing." Songs that have lasted deal with

the events, attitudes which are... The song conditions and life and of people are expressive forms of the culture. Lomax

However, when Clementine," chant "Rock mountaineer Beethoven's symphony orchestra moves from one is often dis the new performance

The song will rhythm, and to clan.

Whether character borrowed from made up on the ated by an individual an idea, singing should be an each much that goes The teacher work dren might have

To keep the c and to them To help child rhythms and To help child sounds both To help child and rhythmic

EXPERIENCES WITH MUSIC AND RHYTHMIC MOVEMENT

red curriculum, the most that of music and bodily come slowly, particularly is trying to express separate languages. They serve as important non-communication. The products may pave the way to power.

media each child can and refreshment. They utilize many methods for activities depending upon the Indian child brings

the world have their songs for play, songs sung during work, and for al or religious nature. The movement of song of human migration, adds that melodies and eely within several enor- language and culture barrier essential form. helped to speed up this s and even styles of

f people, however, the are kept alive and eration to another are n of their own personal oncerns. They show a to the aspects of the regulate the behavior cultures. As Lomax* "As people live, so do t have lasted deal with

the events, activities, problems and attitudes which are shared by all in the community. The songs are clearly related to the conditions and the organization of social life and of personal experience in it. They are expressive of both the feelings and the forms of the customs and institutions of the culture. Lomax* notes in colorful terms:

However, when the Pygmies hoot "My Darling Clementine," when the Cherokee Indians chant "Rock of Ages", when the Kentucky mountaineer moans the Negro blues, or when Beethoven sets Scots bagpipe tunes for the symphony orchestra -- when, that is, a tune moves from one style region to another, it is often distorted out of recognition by the new performance framework. (page 65)

The song will have taken on features of style, rhythm, and tonality unique to the tribe or clan.

Whether characteristic of a local group, or borrowed from the universal heritage of songs, made up on the spot for an occasion, or created by an individual to express a feeling or an idea, singing and rhythmic expression should be an easy and ready accompaniment to much that goes on in a school or kindergarten. The teacher working with young Indian children might have the following objectives:

- To keep the children singing, with a group and to themselves.
- To help children reproduce, and to invent rhythms and melodies.
- To help children listen critically to sounds both musical and non-musical.
- To help children find pleasure in musical and rhythmic expression.

***Folk Song Style and Culture. Alan Lomax. American Association for the Advancement of Science. Washington, D. C. Publication No. 88. 1968**

To acquaint children with songs of both Indian and non-Indian origin.

She might well keep these same objectives in mind herself. Her interest and spontaneous participation in singing and free body movement can give children assurance that their own activities in music and dancing are prized. It is unfortunate when singing, play with sounds and variation in body movements are regarded as a subject matter to be confined to certain periods of the day. In and out of doors, on trips, as an accompaniment to routines of washing, dressing, and putting things away, a song or a dance can add pleasure to the day and express delight in the presence of others.

In more formal work with melodies and rhythms, the teacher can devise opportunities for children to

- match pitch
- carry a tune
- sing together, in unison
- keep time, with voice or body movements
- portray mood, temp, and story
- understand the concepts of up and down
 - high and low
 - fast and slow
 - loud and soft, etc.
- recognize similar and dissimilar melody, rhythm and form
- become aware of sounds about us in daily living
- make and use simple musical instruments

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1. Folk Song

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Culture. Alan Lomax.
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imitate the dances and dancers of their
own tribes and clans
imitate animals and nature (trees, clouds,
wind, thunder, etc.)

Song and rhythm materials to use with young
children come from three sources. Most
readily used by someone new to Indian lore
are those borrowed from another culture,
either the treasury of folk songs from all
over the world, or the nursery and kinder-
garten songs in wide use in educational set-
tings. Finally, songs and rhythms may be
obtained from the repertoire typically used
by the Indians in the region.

1. Folk Songs

Most of us know a good many folk songs, the
kind one sings around a campfire or at ga-
therings where people feel close and good.
It is more fun if someone is present who
"knows all the words." As a rule, folk
songs have singable melodies and introduce
one simple thought or subject theme at a
time. They allow for considerable repeti-
tive embellishment, so the singers can keep
it going as long as they want by adding and
sometimes inventing new phrases. Many folk
songs lend themselves readily to singing
games, dancing, and rhythmic pantomime.
There is action in them, to skip, to clap,
dance, jump, stretch, or work to.

Teachers may have reservations about using
certain folk songs, those with ungrammati-
cal phrasing or expressions of adult con-
cerns of love, dying and woe. While there
is room for argument, and certainly need for
sensitivity in selecting those to use, many

educators believe that children can use words which are "too big for them" with relish and growing familiarity, and enjoy the ungrammatical as a playing with words. Perhaps the unhappy content of some songs -- of hurt, pain, killing, death, sadness, cruelty, and destruction -- can help children with their own feelings of loneliness or deep feelings of anger and rejection. Singing about one's own worries and concerns can help in the handling of them. Certainly, the vitality and validity of the songs is a welcome change from the blandness of much music written for young children only.

*Ruth Seeger summarizes her discussion of the appropriateness of using folk songs with young children by asking:

Should we try to shield the child from feeling of sadness, of hurting, or being hurt, of killing, dying? Can we shield him? Such feelings are not unnatural to him; he has them, to a greater or lesser extent, already within himself. It is not unnatural for a child to build fantasies around killing, hurting, destroying even things or people he loves. If he can sing about these things -- can take action through song -- the deed is done (in fantasy) and the pressure relieved. Can we not say, then, that having songs around which sing of these things may be a means of easing such feelings within himself, and of helping to make him more comfortable with himself as well as with what is around him? (page 17)

In addition to its use as a carrier of feelings - the entire spectrum of emotions - the folk song is a bearer of history and custom. Since the Indian is growing up in a country to which his people have contributed both to

its history and its comes appropriate to United States, as we with him. Again, Section:

This music has been play, sleep, fun, It has grown out of many ways of living fantasies cling to It knows and tells thought about the things that happen grow in intimate roads it helped build pick, the ships it stretches it made

No less important are of the herding of cattle which were important settlers and Indians

There are many collections source to turn to for tra verses if they a few of those which most children are:

The Young Voyagers
The Erie Canal
On Top of Old Smo
Peter Gray

*American Folk Songs
Crawford Seeger. Doubt
City, New York. First

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its history and its customs and arts, it be-
comes appropriate to use folk songs of the
United States, as well as other countries,
with him. Again, Seeger* expresses this func-
tion:

This music has been a natural part of work,
play, sleep, fun, ridicule, love, death.
It has grown out of and passed through
many ways of living and doing. Facts and
fantasies cling to it from its wandering.
It knows and tells what people have
thought about the ways of living and the
things that happened. Through it one can
grow in intimate appreciation of the rail-
roads it helped build, the cotton it helped
pick, the ships it helped sail, the land-
stretches it made less lonely. (page 21)

No less important are the songs which tell
of the herding of cattle, and the animals
which were important in the lives of early
settlers and Indians, alike.

There are many collections of folk songs, a
source to turn to for the words and the ex-
tra verses if they are forgotten. Just a
few of those which might be used with young
children are:

The Young Voyageur
The Erie Canal
On Top of Old Smokey
Peter Gray

*American Folk Songs for Children by Ruth
Crawford Seeger. Doubleday and Co., Garden
City, New York. First printed 1948

Turkey in the Straw
Aloutte
Home on the Range
Whoopee Ti-Yi-Yo
She'll Be comin' Round the Mountain

-- The foregoing are contained in
Fireside Book of Folk Songs. M. F.
Boni and N. Lloyd. Simon and
Schuster.

Hold Old Are You? I'll Be Sixteen Come
Sunday
What Shall We Do When We All Go Out
Goodbye, Old Paint
Sweet Water Rolling
Rain, Come Wet Me
Rain or Shine
One Cold and Frosty Morning
Riding in the Buggy, Miss Mary Jane
Billy Barlow
Skip To My Lou
This Old Hammer
Hush Little Baby
Jim Crack Corn
Old Mister Rabbit
Bought Me a Cat
Hop Old Squirrel
My Horses Ain't Hungry
Poor Old Crow
Eency Weency Spider

-- these and many others in Am-
erican Folk Songs for Children.
Ruth Crawford Seeger, Double-
day and Co., New York

The Paw Paw Patch
Rattlesnake
Wake Up Jacob
I'm a Leavin' Cheyenne
I'm Goin' Away to Texas
Sweet Betsy

Who! Ha!

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2. Kindergar

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-- among those found in The Folk Songs of North America. Alan Lomax. Doubleday and Co., New York.

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2. Kindergarten Songs

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Of course, many of the songs used in nursery schools are folk songs which have been used primarily in the home for generations. Often these are so-called nursery rhymes set to music. Others have been written for use with young children and have proved popular in many countries. Frequently these can be adapted for use with Indian children by simply inserting an Indian word, now and then, or by altering the basic vocabulary of the song so that objects and experiences more familiar to children in rural or reservation settings are employed in the song. The following examples are merely suggestive.

Mary had a little lamb, little lamb, little
lamb

Mary had a little lamb
Its fleece was white as snow

Mary ip nay ya kha toohk
ip nay kha toohk
ip nay kha toohk

Mary ip nay ya kha toohk
Mit khoa khat tik toe mik

Mary had a little dog, little dog, little
dog

Mary had a little dog
Its fur was white as snow

Mary khip may roo khak toohk
khip mee khak toohk
khip mee khak toohk

Mary khip may roo khak toohk
 Mith-khoa-kah ti to mik (Middle Eskimo)

-- Juanita Norton, Kotzebu

The song of Farmer in the Dell can be sung with Eskimo words, or English, in a manner more fitting the environment of these Northern children:

English words

Eskimo words

bear	auk lauk
caribou	tu tu pak
wolf	ah mah ook
rabbit	oo kul likh
muskrat	keek vah look
fish	ah cah lookh
seal	nat chikh
man	E neek
village	Noonah kik
They all clap and sing	Coo yah roongah

Tune of "Farmer in the Dell"

The Auk lauk is in the woods
 The Auk lauk is in the woods
 Hi, Ho, the Merry, Oh,
 The bear is in the woods

The Auk lauk sees the tu tu pak
 The Auk lauk sees the tu tu pak
 Hi, Ho, the Merry, Oh
 The bear sees the caribou

The tu tu pak sees the ah mah ook
 The tu tu pak sees the ah mah ook
 Hi, Ho, the Merry, Oh,
 the caribou sees the wolf

The ah mah ook sees the oo kul likh
 The ah mah ook sees the oo kul likh

Hi, Ho, the Merry
 The wolf sees

The oo kul likh
 The oo kul likh
 Hi, Ho, the Merry
 The rabbit sees

The keek vah look
 The keek vah look
 Hi, Ho, the Merry
 The muskrat sees

The ah cah lookh
 The ah cah lookh
 Hi, Ho, the Merry
 The fish sees

The nat chikh
 The nat chikh
 Hi, Ho, the Merry
 The seal is caught

The E neek goes
 The E neek goes
 Hi, Ho, the Merry
 The hunter brings

They all clap
 They all clap
 Coo yah roongah
 roongah
 They all clap

Again, the Farmer
 quite a different

The squirrel in
 The squirrel in
 Hi, Ho, the Merry
 The squirrel in

The squirrel takes

oo khak toohk
i to mik (Middle Eskimo)

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r in the Dell can be sung
, or English, in a manner
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Eskimo words

auk lauk
tu tu pak
ah mah ook
oo kul likh
keek vah look
ah cah lookh
nat chikh
E neek
Noonah kik
Coo yah roongah

in the Dell"

n the woods
n the woods
Oh,
e woods

the tu tu pak
the tu tu pak
Oh
caribou

the ah mah ook
the ah mah ook
Oh,
he wolf

s the oo kul likh
s the oo kul likh

Hi, Ho, the Merry, Oh,
The wolf sees the rabbit

The oo kul likh sees the keek vah look
The oo kul likh sees the keek vah look
Hi, Ho, the Merry, Oh
The rabbie sees the muskrat

The keek vah look sees the ah cah lookh
The keek vah look sees the ah cah lookh
Hi, Ho, the Merry, Oh
The muskrat sees the fish

The ah cah lookh sees the nat chikh
The ah cah lookh sees the nat chikh
Hi, Ho, the Merry, Oh,
The fish sees the seal

The nat chikh sees the E neek
The nat chikh sees the E neek
Hi, Ho, the Merry, Oh,
The seal is caught by the hunter

The E neek goes to Noonah kik
The E neek goes to Noonah kik
Hi, Ho, the Merry, Oh,
The hunter brings the seal to the village

They all clap and sing
They all clap and sing
Coo yah roongah coo yah roongah coo yah
roongah
They all clap and sing

Again, the Farmer in the Dell can take on
quite a different meaning:

The squirrel in the woods
The squirrel in the woods
Hi, Ho the Merry, Oh
The squirrel in the woods

The squirrel takes a rabbit, etc.

The rabbit takes the deer, etc.

The deer takes a bear, etc.

The bear takes a bird, etc.

The bird takes the beaver, etc.

The beaver takes the wolf, etc.

The wolf takes the fox, etc.

The fox stands alone
The fox stands alone
Hi, ho, the Merry, Oh
They all clap and sing.

-- From Indian Teacher-Aide Handbook,
Caryl Steere and Joseph Steere,
Patricia and Albert Kukulski
Arizona State University, Tempe

3. Indian songs

Strictly speaking, the Indian songs are folk songs, too, but they are discussed separately because they require special preparation. While there are similarities in the songs used by different tribes, and the subjects sung about may be repeated, each group has its own songs which are, in a sense, a summary of the feelings, experiences and preoccupations of the group. These should be checked with the tribe to make certain that they do not include what should be reserved for religious ceremonies. Indian women grinding corn have songs to accompany their movements, a different song for each time of the day. There will be songs for harvest and for preparations before a hunt. Some of the musical heritage of a tribe will be "shy" songs, as Lomax calls them, or part of their secret rituals. These, however, do not differ in construction and style, melody, pitch and rhythm from those in general everyday use.

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wolf, etc.
fox, etc.

Teacher-Aide Handbook,
and Joseph Steere,
Albert Kukulski
University, Tempe.

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It is extremely difficult to show correct accents, nasality, and rhythms in the usual musical notations. One of the most explicit attempts to do so was developed by Louis A. Ballard for A Kindergarten Curriculum Guide for Indian Children. After consulting this description of the steps which might follow in working with Navajo materials, the teacher should seek local sources for words and melodies characteristic of her own group. Mr. Ballard stresses the need to pay attention carefully, to forget one's own shyness in attempting to sing with children, and to listen to the music around.

Recordings are becoming more widely available as a source of genuine Indian musical themes and rhythms. A partial listing of sources may be found at the end of this section.

For the most part, North American Indians use percussion instruments only. A wide variety of percussion instruments can be devised to provide the accompanying beat.

MUSIC EDUCATION SYLLABUS

American Indian music is vocal music, and, like all vocal music, it derives from the language of the people. When we realize that over 200 tribes of Indians with separate languages or dialectic variants exist here in continental America alone....Then the enormity and variety of this music can stagger the imagination. Especially so when we further realize that each tribe may possess as many as 500 songs or more, with regional differences to add more complication to the issue.

"How then," you may rightly ask, "can I, as a classroom teacher and a non-Indian, even hope to present Indian music in the class-

room...much less SING IT???" Also, "Where does one even begin, if the music is so vast and complicated?" Or, you may say, (and this is a classic statement with teachers!), "I'M NOT A MUSICIAN, AND I CAN'T CARRY A TUNE IN A BUCKET!"

First of all, I suggest that you 'wipe the slate clean' of all excuses, inhibitions and any pre-conceived notions about Indian music and about your own musical abilities. If you can talk, then you can sing. (Of course, I can't say how well...but this is up to you.) You will not be teaching Navajo children to sing Navajo songs, but, rather, you will be leading and learning with Navajo children how to enjoy a musical experience through educational activities such as singing, chanting and rhythmic. These activities will all be based upon the American Indian tribal music heritage and Indian musical expression which was the outgrowth of a cultural need. Your class and you will become a new tribe and, consequently, your new group will have this same need for musical expression which, by all rights, should grow out of the culture represented in your classroom. Fortunately, this culture is very rich and can be very meaningful to you and to your children... BUT, only if a conscious effort is made to utilize that culture and its myriad aspects. You will and must learn a few Indian songs and practice the basic sounds of Indian vocal expression, as presented in the compendium. You must use your auditory faculty in a more acute manner than you have ever before used it...in short, develop your sense of hearing to a very fine degree, and then retain what you hear and reproduce the vocal sound. Just as Navajo language sounds are vastly different from English language sounds, and require reorientation of thought patterns, so does Indian music require a different vocal technique. The

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one key is LISTEN!

Does it relate to the ethnic roots of the child? Does it honor the Basic Indianism which this child possesses? Does it provide ample opportunity for the child to apply his culturally aesthetic sensitivity? Does it open the door toward a brother perspective of music, language and the entire world of learning experiences? IS IT FUN?

Such questions as these can serve as guide-lines throughout this discovery of Indian musical elements by you and your children, and they can serve as guides in the application to your teaching. Remember, to the tribal Indian person, music is not an isolated experience as it is in our Western Civilization where we dress ever-so-properly to attend a concert or a jam session. Indian music, besides being vocal-plus-percussion, was and is mainly functional music. Gebrauchsmusik, as Paul Hindemith, the famous German composer, would say. The function may be to appeal for rain to help the corn grow, or to accompany the dance or to help cure the sick or many other functions. Now, your classroom music and songs cannot all be functional in this sense, obviously... but, this cultural need can be used to make each activity more meaningful. Some Indian songs related war experiences of the singer or gave tribute and recognition to the leaders. Perhaps you never thought of it as such, but that little song that you yourself used to sing in kindergarten or first-grade was based upon the same idea...remember? "GOOD MORNING, TEACHER. MY NAME IS LORENZO!" or "GOOD MORNING, MRS. SMITH. MY NAME IS BETTY!"

Well, such greeting songs which use courtesy words are still used as a beginning song

activity in every music class in America. However, most American children hear 'good morning' every day at home and on the streets. Your Navajo children do not. Furthermore, the very words 'good morning' are completely alien and un-thinkable to your Navajo child.. in fact, to say this and look right in a person's eyes is downright impolite, according to the Navajo 'way' of life. At least, this has been my experience with teachers and administrators who have worked with Navajo children for many years.

So, what do you use instead of 'good morning'? What would relate to the Navajo culture? Well, why not try as a first musical experience, the chanting of a typical Navajo vocable (no-meaning sounds) and then add a child's name.

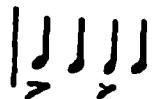
EXAMPLE 1. A YEH YANGA, A YEH YANGA...A YEH YANGA, A YEH YANGA, LORENZO, ANGA

Note: First, pick a comfortable pitch for the base tone. Then say A, as in fate, prolonging the sound. Then, intone or chant the syllables to a rhythmic beat, walking speed, saying each syllable rather short and curt. YANGA, sounds like kong-ah, only substitute the "Y" consonant sound. There will be a little dip on the second YANGA. Listen for this; try to imitate.

Do this to the accompaniment of an Indian drum and rattles, as follows:

EXAMPLE 2. A YEH YANGA, A YEH YANGA...A YEH YANGA, A YAH YANGA, LO-RENZO, ANGA.

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A, A YEH YANGA...A YEH
YEH YANGA, LORENZO, ANGA

comfortable pitch for the
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There will be a lit-
second YANGA. Listen
to imitate.

ayment of an Indian
follows:

A, A YEH YANGA...A
A YAH YANGA, LO-REN-

drum rattle



Meaningful activity which is related to the culture of the Indian child can be the key which opens your own understanding as well as becoming a springboard for other educational experiences. Hence, the basic objectives and philosophy of this treatise requires that three distinct Indian music learning experiences be utilized:

1. Navajo tribal songs and rhythms.
2. Pan-Indian tribal songs and rhythms. (other tribes)
3. Creative song-play-mime activities with rhythms. (using English words as well as Indian words and vocables.)

With this beginning, it is a short step to all-English songs or even the little French, Latin, German songs which children sing.

Also, included herein are helpful suggestions for your own vocalization of Indian songs. In learning these, the "mother tongue" method is by-far superior to any reliance upon written notation or text, although some brief suggestions for these are included. You should approach this problem as a child does who learns some of the most difficult languages in the world before he reaches 6 years of age. The Indian or the Senega youngster learns his complex language and its many subtle nuances by acute listening and by repetition. This is the "mother

tongue" method. Also, I encourage you to venture forth on your own...for additional songs and words, inquire of the Indian people, and repeat all words and all sounds...allow yourself to be laughed at and join in the fun of making a mistake and correcting it. The Indian language has many similarities within itself, so many, in fact, that the Indian people love puns on words and love to laugh at each other. For instance, one worn joke arises from the fact that hoseesnta* means equally "I will sing" or "I will kick him." And so there are many anecdotes of the pattern:

¹"Hosteen Yazzie (little man) went to see his mother."

"What for?"

"He is going to give him a kick." (i.e., The man, a singer, will perform a chant.) (Also, there is no gender in the Indian language.)

Learners ² may take comfort against their mistakes and embarrassment from the realization that the only recipe for pronouncing an Indian perfectly is to take the precaution of being born of or among Indians. The talk of those who have learned the Indian languages as adults always has a flabby quality to the Indian ear. They neglect a slight hesitation a fraction of a second before uttering the stem of the word. They move their lips and mouths too vigorously. Native Indians have a nonchalant, mechanical flavor in ordinary discourses--almost as if a robot were talking.

True, you are dealing with two languages, English and the Indian language, but the one language which is universal is MUSIC. And music is a living, exciting language which

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MATERIALS NEED

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¹THE NAVAJO by
day and Co.,

²IBID, p. 258

Also, I encourage you to venture your own...for additional songs of the Indian people, and all sounds...allow yourself to be carried away and join in the fun of singing and correcting it. The Indians have many similarities within their cultures, in fact, that the Indian love to sing on words and love to laugh. For instance, one worn joke is the fact that hoseesnta* means "I will sing" or "I will kick him." There are many anecdotes of the pat-

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like comfort against their misperception from the realization of the difficulty of pronouncing an Indian word. Take the precaution of being patient with the Indians. The talk of those who know the Indian languages as a flabby quality to the Indian ear neglect a slight hesitation a second before uttering the word. They move their lips and lips. Native Indians have a mechanical flavor in ordinary conversation as if a robot were talking.

dealing with two languages, the Indian language, but the one that is universal is MUSIC. And music, exciting language which

transcends a need for words and actual meaning. Especially so in Indian music where many no-meaning sounds are used. So---be of good faith in this adventure in sound, and, remember...to your students the sound of your voice can be the most beautiful music to their ears. Listen well, and:

GOOD SINGING - NUH ZHONI TA'L* (produced by stopping the flow of air by closure of the glottis.)

MATERIALS NEEDED FOR USE IN THE CLASSROOM

- 2 small Indian Tom-Tom Drums with beaters (available at any curio store)
- 6 or more Indian gourd rattles (or maracas will do). If these are not readily available, then your class can make some from tin cans and gravel, painted and tied to a stick!
- A variety of sticks, 12" x 1" diameter, enough in pairs for each child to have one pair.
- A variety of stones, fist-size (your student's fist, not yours), again enough for each child to have one.
- Some branches of a tree (cedar is readily available, or mesquite), just about 5 or 6 will do. This can be messy.

¹ THE NAVAJO by Kluckhohn & Leighton, Doubleday and Co., 1946, p. 260

² IBID, p. 258

Sand in a tin can or pop bottle to make a swishing sound. This makes a good rattle that everyone will want to use.

(Then for yourself, a tape recorder to play back your tapes of Indian music which you are learning.)

**NOTE: NO PIANO NECESSARY
NO RECORD PLAYER NECESSARY**

With materials, it is possible to be a bit innovative in producing some of your own percussion instruments from the raw materials available. Shoe boxes, rubber bands, pop bottle lids on a string... These and other things can provide you with percussion sounds to accompany the voice. However, it is best to use authentic Indian musical instruments when possible. The Navajo people have a little drum made of pottery, filled with water and covered with tanned sheep-skin. This is a delightful little instrument and perhaps one of your parents can help you. Again, this can be fabricated from a coffee can and an inner-tube, but the original version is unbeatable!

TYPICAL INDIAN VOCABLES:

Example 2. WHEY NEY YAH (Navajo) (Low voice register)

WHEY NEY YAH (high) eh OH-oh, OH-oh, OH-OH, OH-oh, OH-oh, OH (seven beats, the voice getting lower each time.)

This particular vocable is used as the chorus part to a Navajo Love Song, yet it is fun to sing by itself, as it has strong rhythmic and lyrical features alone, without the use of words.

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EXAMPLE 3.
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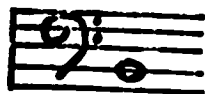
VOCABLES:

YAH (Navajo) (Low voice

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NOTE: What tone do you start on??? The
beauty of Indian singing is that you
can select a comfortable pitch level
that is not too high or too low for
your own voice, and use that as a
base tone. For instance this is a
good starting pitch:



B - natural, bass clef,
for men.



B - natural, below mid-
dle C, for women

Where the vocable jumps up (high), the voice
skips an octave, by musical terminology.
But this is not important to learn right now.
The best thing to do is imitate the sound.

For a rhythm or percussion sound, clap your
hands, or use a rattle or beat a drum.

EXAMPLE 3. HEY EH, HEY EH, HOH OH HOH
HEY EH, HEY EH, HOH OH HOH, HOH OH HOH,
HOH OH HOH, ETC.

This particular vocable is commonly used
in the ceremonial Yei-be-chai songs. By
itself it has no sacred meaning and can
be used in the classroom for our singing
purposes. Again, select a comfortable
pitch level and start the chant with a
steady rhythm and use a nasal tonal qual-
ity by keeping the back of the tongue
high against the palate of the mouth.

This would be an excellent vocable to use with dance steps similar to the ceremonial dances. Stepping with the left foot forward, dragging the right foot behind in a shuffling fashion.

A CREEK INDIAN SONG: "Duck Dance Song" From this Oklahoma Indian tribe of woodland Indians, who hunted wild ducks for food, and created this little song as a social dance activity. No words, as such, only vocables.

Example 6.

WAY.....HEY YAH, WAY, HEY, YAH HEY...YAH
WAY HEY YAH WAY HEY WAH HEY YAH.
OH HO YANNA HEY YAH
WAY HEY YAH HEY YAH.
(repeat)

After singing this song several times, the leader (you) should end it with a drum tremolo (roll), and sing the words in a high pitch, "WE HOOOOOOOOO".

Related activities to the Duck Dance Song could be having the children waddle across the floor like ducks.

-- Louis Ballard
Education Specialist, Music, BIA

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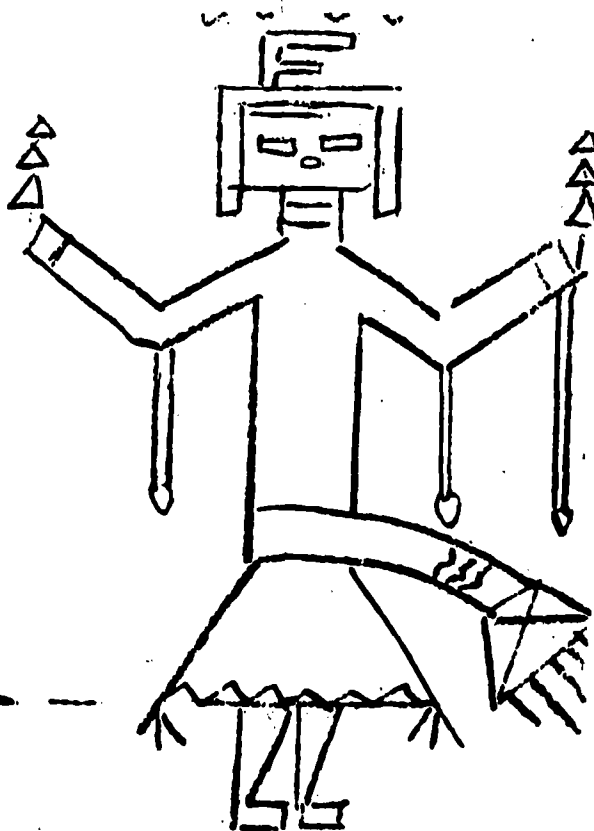
: "Duck Dance Song" From
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to the Duck Dance Song
children waddle across

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Specialist, Music, BIA



RHYTHMIC MOVEMENT AS A TOOL FOR

Young children learn through their senses. The kinesthetic sense (muscles) is as important for them as their other senses of sight, hearing, taste and touch. Rhythm, and especially rhythmic movement, is a valuable experience to plan as part of the curriculum. If it is related to the child's life experience it is not only pleasurable but also makes possible:

- The expression of his understanding of his world
- The extension of his knowledge of his environment
- The understanding of the roles of himself and others in his society
- The non-verbal expression of his feelings and ideas.
- The learning of new concepts

Varieties of Experiences

1) Indian children during dramatic play like to beat drum rhythms and sing and dance in the traditional patterns of their culture. They do this without having any specific lessons but rather in the same way that they imitate other movement activities they have observed in their homes and tribal environment. If there is no sign of this in your classroom then an invitation to a grandparent or tribal leader to sing or play the drum for the children will surely get them to begin. The teacher's attitude of respect and admiration will indicate that she values the experience and it will appear more often.

To encourage this further, classroom equipment should include records of authentic Indian music, at least one good Indian drum, some rattles and ankle bells and pieces of

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e good Indian drum,
bells and pieces of

appropriate fabric for simple costumes.
(These should be checked with the tribal
council to make certain they do not include
what should be reserved for religious cere-
monies.) All these can be set out on a
special shelf or center-of-interest area so
that they are readily available to the chil-
dren. (See Equipment Guide) Colorful
pictures of costumed dancers in action can
be placed nearby for inspiration.

The teacher's role is to provide the equip-
ment, the space for movement, the time in
the daily program and the encouragement for
the children to become involved. She is not
actively teaching "how" to sing and dance
the specific steps unless she is especially
knowledgeable. Her role here is more that
of an "enabler", one who makes it possible
for the child's expressiveness to occur.

There are other kinds of rhythmic movement
activities in which the teacher plays a more
active role but still does not demonstrate
a "right" way for the children to try to im-
itate. These are:

2) Circle Singing Games. This is an activ-
ity in which the teacher participates toge-
ther with a small or large group. She dir-
ects the sequence of the movement (what is
to happen next) but not the specific way it
is to be done. That should be left to the
individual child. For example, in the game
"Here We Go Round the Mulberry Bush" the mo-
tions of each participant can be quite var-
ied while demonstrating "this is the way we
put on our clothes." Encourage the children
to help you adapt the verses of such sing-
ing games so that they relate more appropri-
ately to their own life experiences. (See

examples in Games). This will provide an opportunity for stimulating thinking, language use, and encourage new varieties of rhythmic movement. Once you have made up a new verse write it down so that it can be remembered and repeated. Children enjoy the ritual of repetition as well as variety.

Note: Indian children are generally not competitive any may not volunteer for turns. They like to be recognized for their individuality but not in front of a group. In games that call for one person to be in the middle you can overcome possible embarrassment at being "singled out" by having two or three at a time instead.

3) Movement Experiences for Body Awareness.

Freely exploring and then identifying ways that different parts of the body can move are opportunities for self-awareness, self-control and also for language development. For example, the teacher might suggest the following: "Let's walk around the room." (with or without rhythmic accompaniment.) "Let's find another way to walk that's different." (stamping, tiptoe, on heels, on outer edge of foot, sideways, backwards, big steps, little steps, etc.) "When we walk, what part of us has to move?" "Is there another part of us that can move even when we sit down? Find a way to move while you're sitting." (All can explore at the same time.)

"What's moving?" (Some children will demonstrate non-verbally while the teacher can identify the part of the body. She might add a description of the kind of motion it is, i. e., hands shaking, arms swinging, body rocking, head rolling, etc.)

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This will provide an opportunity for thinking, language and various varieties of rhythmic experiences. We have made up a new verse that it can be remembered and children can enjoy the ritual of variety.

Children are generally not likely to volunteer for turns. They are organized for their individuality and not for the benefit of a group. In games, children are often in the middle of things and experience possible embarrassment at behaving two or three at a time.

Exercises for Body Awareness.

When identifying ways in which different parts of the body can move are related to self-awareness, self-concept and language development. For example, you might suggest the following: "Let's find out what's different." (stamp on outer edge of foot, big steps, little steps, what part of us has to get down? Find a way to get up.) "All can explore

When children will demonstrate the teacher can help them explore the body. She might add different kinds of motion it is, i.e., swinging, body rocking, etc.)

Sometimes ask the whole group to try out discoveries made by some of the children. Choose a sequence that can point up differences in tempo (fast contrasted with slow.) Chant the descriptive words to provide a simple rhythmic accompaniment. For example,

"Arms/can swing/ ver-y/slow-ly/
Arms/can swing/ from side/to side/"
"Hands/can shake so/very/quickly
Hands/can shake so/very/fast/"

The emphasis in this kind of experience is on the discovery that children can control their own body movements, vary them and repeat them in rhythmic ways that feel good and help them to learn. Individual differences can be admired as creative attempts to respond to the challenge offered by the teacher rather than in judgmental terms of right or wrong. The teacher should be careful not to laugh at a child's unpredictable response for this is a way to reinforce inhibition.

4) Movement Experiences for Concept Learning.

There are numerous concepts that can be experienced more clearly through movement than any other way. Some of these are:

Concepts of size; big, little; tall, short; narrow, wide; long, short.

Concepts of shape and form; round, square, flat, bumpy, smooth, straight, twisted, curved.

In these, the children can work together with partners or in small groups to try to form their own bodies in these different sizes and shapes.

Concepts of position in space: under, on top of, above, behind, in front of, between, in the middle.

Concepts of direction: backwards, sideways, ahead, up, down, right, left, near, far.

A game adopted from the traditional "Musical Chairs" can be played (in which no one is ever "out"). Each time the music plays the children move around the line of chairs (which should be widely spaced) in a direction called out by the leader, i.e. "backwards". When the music stops they must stop according to the leader's call, i.e. "between the chairs".

Concepts of speed: fast, slow, medium (called "tempo" in rhythm).

Changing gradually or suddenly from one tempo to another enables children to organize some of their original movement rhythms so that they are in a continuous sequence and result in the form of a dance. The contrast of a fast movement followed by a very slow one and ending fast again is an example of form in dance.

Concepts of weight and intensity: heavy, light, hard, soft; strong, weak; loose, tight; tense, relaxed.

These can be experienced best while working with props like big balloons, rubber balls, paper streamers, little feathers, big blocks, soft silky scarves. After the children have had an opportunity to explore these for awhile, play appropriate recorded music to evoke dance-like movement with them.

Concepts of number, color and category are useful as possible ways to organize the class for turns during movement activities, i.e., "all people who are wearing brown socks go in the middle of the circle. How many are there?" The finger play "Where is Thumbkin?" can be

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e.g. "How many are there?"
"is Thumbkin?" can be

dramatized in movement by having five people
stand in a row, each representing one of the
characters (Thumbkin, Pointer, Tall man,
Ring man, Pinky). Each "runs away" after he
has answered, "Here I am." and "Very well,
I thank you."

5) Other Rhythmic Movement Experiences us-
ually referred to as Fundamental Rhythms and
Locomotor Rhythms: These include jumping,
skipping, crawling, rolling, running, walk-
ing, sliding. Dramatic Rhythms are those in
which some of these are done while pretend-
ing to be an animal or a special character:
tumbling like a clown, hammering like a work-
man, steering like a truckdriver or engineer,
swimming like a fish, flying like a bird,
hopping like a frog, galloping like a horse.

In any of the above activities, the teacher
can use her voice in chant or song spontane-
ously improvised or use a drum to give rhy-
thmic support to the movement. To do so
most successfully, she need not be a trained
musician but she must try to identify the
tempo, the beat and the quality of the in-
tensity of the particular rhythm she is go-
ing to accompany. That is, she must adjust
herself to the speed and to the lightness or
heaviness of the child in movement. It will
be done most easily if she is able to join
in the movement herself, imitating the child.
She can then "know" it in her own muscles
with her kinesthetic sense.

-- Miriam B. Stecher

INDIAN SONGS

from

Songs of the Wigwam,
Cooperative Service Inc.
Delaware, Ohio. 1953.

Magic Feathers
Paddling My Canoe
Woodpecker Song
Fox Hunter's Song
Maple Sugar Song
Ottawa Canoe Song
Hoot Owl Song

Copyrighted Material Deleted

FINGER PLAYS

Five little Indians on a sunny summer day
Rode out on the reservation
Just wanting to play

The first little Indian
Found a pretty stone
"I think I'll pick it up
and take it to my home."

The second little Indian
Caught a small field mouse
"I'd like to keep it for a pet
And build for it a house."

The third little Indian said
"I know this prickly weed.
See, when I open it,
there's a tiny seed."

The fourth little Indian said,
"On this hill there is a place
When I stand there
I feel the wind blow in my face."

The fifth little Indian said,
"It is fun here in the sun
I'd like to take off my shoes
And run and run and run."

So the five little Indians
Stayed and played all day
Then they jumped upon their ponies
And galloped far away.

Five little Indians went hunting on the plain
The first one said, "I think it's going to
rain."

The second one said, "There is thunder in the
air."

The third one said, "I don't care."

The fourth one said, "Let's gallop far away."

The fifth one s
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The fifth one said, "We can hunt another
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"Clap" went the thunder
Down came the rain
And the five little Indians
Rode home over the plain.

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EXPERIMENTING WITH SOUND

Making Percussion Instruments With Various Materials

an said
weed.

Drums

Materials:

1. Bowls - wooden chopping; drill hole in bottom, stretch soaked drum head, tack with upholstery tacks.
2. Kegs - all sizes; sand thoroughly, paint, bore 3 holes in bottom, remove top metal rim.
3. Wooden Pails
4. Tin Cans - #10 size - coffee cans - use plastic lids for drum head.

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in my face."

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Drum heads: Used drum heads - soak in cold water 10-30 minutes according to weight of skin. Fasten to drum with upholstery tacks, pull tightly all around. Can use thongs made of rawhide or plastic string. Do not touch for 24 hours.

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their ponies

Caution: Thin drum heads cannot be laced as holes weaken skins.

ent hunting on the plain
I think it's going to

Beaters for Drums

"There is thunder in the
I don't care."
"Let's gallop far away."

1. Sponge Ball - cement to dowel stick.
2. Stocking Darner - bind with yarn and cover with strong material.
3. Large Spool - bind with yarn and cover with strong material.

4. Dish Mop - tie strings, bind with yarn and cover with chamois or piece of glove.
5. Sock - fill with soft material and cement to dowel.

Seal boxes cannot emp small enou young chil

Rhythm Sticks

8" long - sand, paint (hang with string and nail on end while painting)

Sand Blocks

Blocks of wood, mill ends - sandpaper, cover blocks on bottom and four sides with sandpaper, level all four corners to avoid tearing. Fasten cupboard handle on small block of wood to fit child's grasp.

Ringin Sour

1. Bells
2. Teacup on str
3. Glasse differ
4. Nails on str
5. Pieces length susper
6. Pieces

Rattles and Tambourines

1. Gourds - bore holes top and bottom, clean out seeds and fill with handful of dry corn, dried watermelon seeds, tacks, BB shots, according to sound desired. Seal holes with plastic wood.
2. Coffee Can Lids - put in noise maker as above, fasten two lids together with tape, decorate, good substitute for tambourines.

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Sound Boxes

1. Cartons - cottage cheese, ice cream, yogurt.
2. Boxes - plastic, heavy cardboard, wooden.

Place in each materials giving different sounds: macaroni, a paper clip, rice, pepper corns, pebbles, small shells, sand, tiny bells, small nails, etc.

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with chamois or piece
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all ends - sandpaper,
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small shells, sand, tiny
etc.

Seal boxes, and cartons so young child
cannot empty contents. Choose some boxes
small enough to fit comfortably into a
young child's hand.

Ringing Sounds

1. Bells
2. Teacups of different sizes suspended
on strings.
3. Glasses of different sizes filled with
different amounts of water.
4. Nails of different lengths suspended
on strings.
5. Pieces of metal pipe of various
lengths - bore hole in side of pipe,
suspend on strings.
6. Pieces of metal - different sizes.

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Baldwin, Gordon C. Games of the American Indian. New York: Norton. 1969.

RECORDS, INDIAN AND OTHER

Authentic Indian recordings may be obtained from:

Canyon Records
6050 North Third Street
Phoenix, Arizona 85012

Among them: Dances and songs from the Apache, Kiowa, Omaha, Papago, Pima, Peyote, Navajo, Arapahoe, Arikara, Cheyenne, Hopi, Jemez, Shawnees, Sioux, Toas, Ute, Zuni.

Indian House
Box 472
Toas, New Mexico 87571

Among them: Comanche Peyote Songs. Vol. 1 1H 2401; Round Dances of Toas Pueblo, Vol. 1. 1H 1001; Navajo Skip Dance and Two Step Songs 1H 1503; Navajo Sway Songs. 1H 1501; War Dance Songs of the Ponca, Vol. 1. 1H 2001.

Northern Cheyenne Arts and Crafts Asso.
Lame Deer
Montana 59043

Peabody Museum of Harvard University
Cambridge, Massachusetts 02100

An album of 5 records of Navajo Creation Chants.

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1501; War Dance Songs of the
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of 5 records of Navajo Creation

Tom Tom Records
Box 1493
Albuquerque, New Mexico 87100

American Indian Sound Chief
c'o Oneida Methodist Mission
RFD 2
West DePere, Wisconsin 54178

Folkways Records and Service Corp.
117 West 46th Street
New York, New York 10000

Among them:

Rhythm and Game Songs, FC 7057
Songs to Grow On, FC 7005
American Game and Activity Songs for
Children, FC 7002
Music Time With Charity Bailey, FC 7307
Counting Games and Rhythms, FC 7056
Activity Songs for Kids, FC 7023
You'll Sing a Song and I'll Sing a Song,
FC 7664
American Folk Songs, FC 7601

Dimensions 5
Box 185
Bronx, N. Y.

Among them: Dance Sing and Listen, D 101
Dance Sing and Listen Again
D111

Recording Library, Music Division
Library of Congress
Washington, D. C. 20540

Institute of American Indian Arts
Cerrillos Road
Santa Fe, New Mexico 87501

Album of records on Hopi, Navajo, Plains,
etc. Indian chants recorded by the E-YAH-
PAH-HAH Indian Chanters.

EXPERIENCES WITH ART MATERIALS

The skill and creativity of the American Indian in craftsmanship is well known, almost synonymous with being Indian. Over the years, the tribes have specialized in work with molding clay; weaving or plaiting wool, grasses and reeds; carving in wood, stone or bone; and in leather and beadcraft. Indians have done fine painting with sand, etched remarkable pictures on stone walls, and decorated their everyday objects with a range of colors, bright and subtle. More recently, Indians of the Southwest have begun to use silver with coral, shell or turquoise to make the exquisite jewelry so widely appreciated today.

As materials and styles of life have changed, so have the products of the different tribes. The kindergarten teachers can get many good ideas from looking at exhibits and attending fairs, by observing objects in use daily, and by studying the many beautifully illustrated publications available today.

In their approach to art, the teachers of Indian children may do well to remember that many of them have had training and experience at home which has increased their muscular coordination. While it is not always the case, teachers have sometimes noticed that 5 year old children understand how to manipulate modeling materials, and show other evidences of skilled fine muscle coordination. In some cases, teachers have not provided materials and opportunities which are sufficiently advanced for their pupils.

Many of the materials a teacher will want to provide are not "art" materials in the strict aesthetic sense. Hammers and nails, for example are not ordinarily regarded in the fine arts category. The child's use of them, how-

ever, may provide opportunity encouraged and feeling onment and tant source ative pers

The approach will rest

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ever, may be artistic if he is given an op-
portunity to explore their possibilities and
encouraged to use them to express his ideas
and feelings. The use of the natural enviro-
nment and tribal experiences are an impor-
tant source of self-identification and cre-
ative personal expression.

The approach to art with a young Indian child
will rest on the objectives of:

Insuring that he see that the products of
his people are valued.

Allowing him opportunity to express intui-
tive design, to experiment with color,
line, texture, design and material.

Creating an awareness of the principles
of design in nature: balance, rhythm and
movement, cyclical and seasonal changes.

Providing knowledge about the care of
equipment and materials.

Noting similarities and differences in
size, shape, color and texture.

These objectives can be fulfilled in a set-
ting where a wide variety of materials are
available, and where the child's interest in
them is encouraged. The teacher will have
to take the initiative in the first two and
the last objective above, and respond sensi-
tively to the cues of the child in the
others. A few skills and techniques can be
given to the child as he finds the need for
them:

How to control the movement of the brush
for example, and how to change direction.

How to keep the colors clear, and the paint from flowing too freely.

The results of pressure, nailing, fastening.

The techniques of shaping, cutting, tearing and weaving, printing, stitching, building, etc.

The skills of using plastic materials, in twisting, pulling, squeezing, rolling, flattening.

In none of the objectives, nor the techniques listed is the need for a finished product implied. The experience itself is the important thing -- the use of materials, the processes, and the conceptualizations...Art experiences will be related to many other elements in the curriculum. Concepts of size, shape and number will carry meaning for mathematics and reading; the products he creates may be the outcome of field trips and of new understandings in social studies; puppets may encourage the use of language, and so on. They are embedded in the entire program, feeding into other areas and flowing out of them as well.

Most good kindergarten textbooks carry a wealth of suggestions for use of creative media. In the following pages, suggestions will center on those which may have special value in schools for Indian children.

Clay: If local deposits of clay are available, be sure to use this source as well as commercial varieties. It may be wise to check with local tribal people about its use. Underhill* suggests that in older times, a potter would speak to the earth, asking permission to take the clay and sometimes leaving an offering, "for pueblo people

feel that clay and plants, ha that man must them." (page 7

Most Indian po coil method wh children to le scratched on, duct can be ca stone, perhaps for a child ex or two.

The clay shoul women bury it

Other plastic used as well. made of flour, che, sawdust m others.

Paints: Commer ment of brush some instructio to mix their o learn about the plant material vary from one another.

In the Southwe subtle shades pear cactus, y scarlet bugler ground daisy, and oak root ba west Indians a plant, sunflowe bean or larkspu pigweed for lig for yellow.

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the earth, asking
e clay and sometimes
"for pueblo people

feel that clay and rocks, like animals
and plants, have their own feelings, and
that man must live on kindly terms with
them." (page 79)

Most Indian potters build pottery with the
coil method which is an easy technique for
children to learn. Designs can be
scratched on, or painted. The dried pro-
duct can be carefully polished with a
stone, perhaps too time consuming a task
for a child except for a burnished area
or two.

The clay should be kept moist. Indian
women bury it in the earth sometimes.

Other plastic modeling materials can be
used as well. Plasticine, play-dough
made of flour, salt and water, paper ma-
che, sawdust mixed with a blender and
others.

Paints: Commercial tempera and an assort-
ment of brushes should be available. With
some instruction, the children can learn
to mix their own colors. It can be fun to
learn about the local dyes, using native
plant materials. The plants used will
vary from one section of the country to
another.

In the Southwest, for example, various
subtle shades are obtained with prickly
pear cactus, yucca, ground cherry, sumac,
scarlet bugler, sage brush, grease wood,
ground daisy, fresh dock leave, woodbetony,
and oak root bark. Also used by the South-
west Indians are the Rocky Mountain bee
plant, sunflower seeds for black, navy
bean or larkspur for blue, red corn or
pigweed for light red, and rabbit brush
for yellow.

Different clays and minerals are used for the mordant to fix the dye when it is being used for cloth. It is worth seeking the wisdom of those skilled in dyeing in the community, and consulting such works as Underhill* and Whiting**. Davidson*** gives instructions for use of such commonly available dye sources as the tomato (for yellow), brown-eyed Susans (for green), and pokeberries for red.

Collage: Even the sky may not be the limit when it comes to finding interesting items for children to use in arrangements on paper, cardboard, or pieces of wood. The items can be adhered with paste, shellac, varnish, or you might want to experiment with native adherents such as pinyon gum.

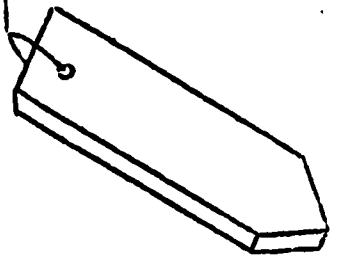
Use: crepe paper and construction paper, shredded, torn, or cut.
all kinds of seeds, pumpkin, melon, etc.
juniper berries, bits of pine cones,
evergreen twigs, alder and birch catkins
feathers, trimmings, yarn, ribbon, felt, fur
dried flowers, weed seed heads, corn, wheat, other grains
string, cord, twine, raffia leather
cloth, cork, raw cotton
sequins, beads, bits of metal or plastic
shells, pebbles, mica shavings
dried seaweed, bits of driftwood and so on

Woodwork: Keep your eyes open to collect materials which can be used to build fairly substantial pieces of equipment for transportation: sleds, wagons, boats, airplanes.

With some assistance, boys can make tomahawks by lashing a flat stone to a sturdy

wooden handle m
It may be paint
mings of leather
like.

Boys in the Sou
Bull Roarer. T
8 inches long,
1/4 inch thick.
stout string or



Sewing: Among
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Hopi. Museum
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***Davidson, M
from Unicorn
645. 20851.

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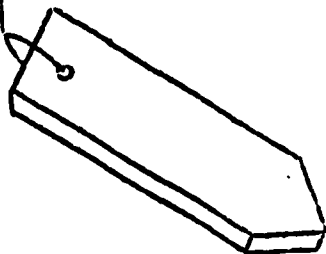
eyes open to collect be used to build fairly of equipment for trans- agons, boats, airplanes.

e, boys can make toma- flat stone to a sturdy

wooden handle made of dowel or tree branch. It may be painted or decorated with trimmings of leather, fur, evergreen, and the like.

Boys in the Southwest may know about the Bull Roarer. This is a strip of wood, about 8 inches long, one inch wide, and 3/8 to 1/4 inch thick. Pierce one end to insert a stout string or cord, about 36 inches long.

Make a pointed end opposite the string insertion. When whirled over head, it makes a fine buzzing sound, or "bull roar." Used to tease or "frighten" others. It is usually painted in bright colors.



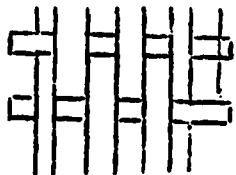
Sewing: Among other sewing projects, puppets can be made by sewing simple skirts or robes to a head of clay, wood, or paper mache. Gourds also lend themselves to puppet heads.

*Underhill, Ruth. Pueblo Crafts. Bureau of Indian Affairs, U.S. Dept. of Interior, Washington, D. C. Can be ordered from the Haskell Institute, Lawrence, Kansas

**Whiting, Alfred F. Ethnobotany of the Hopi. Museum of Northern Arizona, Flagstaff: Northland Press. 1966.

***Davidson, M.F. The Dye Pot. Available from Unicorn, Rockville, Maryland, Box 645. 20851. 1967

Weaving: The skill of passing one set of fibers through another fixed set of fibers,--weaving-- is not beyond the understanding of some young children. The simplest weaving can be done with paper strips, fairly stiff, passed through slits in another sheet of paper in which openings are cut while leaving the edges intact. Simple



looms can be purchased. A variety of fabrics can be used for warp; yarn, yucca strips, bark, felt, cotton, cloth and so on.

Dolls: Children can make simple dolls of cornhusks, tied tightly with strong cord. Or use apples, dried, fixed to a strong stick or dowel and dressed in leaves or cloth.

Hollyhocks make a perishable doll. Stand them on toothpicks to make a doll with a ballet dress.

Clothespins (the straight, wooden type).
Paint a face

Clay

Socks, stuffed with anything, tied and painted. Faces can be sewed with bits of felt, buttons, or other fabrics.

Masks: These are in the tradition of many Indian tribes. One should be aware that in some cultures particular masks have a religious significance. Children can make masks of paper bags, fitting the entire bag over the head as in the style of a Hopi Kachina Doll.

Masks of a paper or fabric can be painted, trimmed with construction paper, feathers, cotton cloth, yarn, flowers or leaves, evergreen needles, and almost anything you can think of.

Necklaces: Using string, yarn or a leather

thong,
bolo ties
of wood
bracelets
short b

Seeds,
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Kites: C
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abric can be painted, tion paper, feathers, lowers or leaves, d almost anything you

g, yarn or a leather

thong, as a base, articles for bolo ties; personal decoration can be made of wooden or glass beads, yarn, bracelets; corn and berries threaded with a short blunt needle.

Seeds, sequins, shells and other trimmings can be glued to clay or wooden bases to be strung onto a cord and used as a pendant.

Kites: Can be made in different styles with paper, reinforced with thin wooden lathes, or of plastic or fabric. Get a skilled person to help.

Other Painted stones.

Ideas: Puzzles made of pictures glued to cardboard or plywood and cut apart.

Finger puppets of clay, old gloves, stretch cloth.

Sand of different colors can be used to make sand paintings.

Spread glue on a stiff cardboard or piece of plywood.

Sprinkle sand over the glue. When dry, shake off excess.

Use one color at a time. When all is dry, spray with a clear lacquer to fix.

HINTS FOR USING CREATIVE MATERIALS WITH CHILDREN

1. Soap flakes added to tempera paint makes the paint easily washed from hands and clothing.
2. Liquid soap added to tempera paint prevents the paint from chipping and peeling when used on surfaces such as glass or metal.
3. If your table tops are not formica, cover tables with oil cloth for finger-

painting or clay work.

4. For a fixative to use on pictures made of colored chalk, use hair spray or a commercial fixative designed for that purpose.
5. If you have no brushes, substitute sticks, twigs, branches from bushes, plants, stones, cornhusks, etc. all found in natural environment.
6. Save shoe boxes so that scrap materials can be separated and put into boxes labeled (with pictures or words) buttons, paper, cloth, wire, beads, etc. This makes easier access when the children are looking for specific materials for collages.
7. Allow the children to use the collage materials to embellish their modeling with clay or dough.
8. Large flat trays or baking sheets may be used for finger painting--the children can put them on the floor if you have limited table space.
9. Use the rolls of plastic-coated shelf paper for finger paint paper --less expensive than regular finger paint paper.

RECIPES FOR CREATIVE MATERIALS

Finger Paint (uncooked)

2 cups of cold water
1 cup wheat paste flour (paper hangers' flour may be purchased in hardware or paint store)
coloring (vegetable colors or tempera paint)

Add flour gradually to water. Stir with

spoon, or
thick, cre

Finger Pa

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add 1 cup
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Easel Pai

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Paint may
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Children
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VE MATERIALS

paper hangers' flour
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ter. Stir with

spoon, or beat with egg beater. Should be
thick, creamy consistency.

Finger Paint (cooked)

blend 1 - 1/4 cups starch
with 1 cup cold water
add to 6 cups boiling water
bring to boiling point, remove from stove
add 1 cup soap flakes (rounded)
beat to blend
add vegetable coloring

(If this mixture is to be kept in closed
jars, add a few drops of oil of cloves or
peppermint to prevent spoiling.)

Children may paint on kitchen table top,
oil-cloth surface, cookie sheets, large met-
al, plastic or aluminum trays, or large
sheets 15 1/2" x 20 1/2" glazed paper, or
shelving paper cut to 15 1/2" x 20 1/2".

Easel Paints

1/2 cup water (warm)
3 tablespoons colored powdered paint or tem-
pera paint.

(may be thickened with small amount of wheat
paste. A few drops of oil of cloves or pep-
permint will keep black paint from spoiling.)

Paint may be placed in small juice or vege-
table cans. To prevent spilling, cans may
be placed in wooden cheese box, open quart
milk carton, or tray with sides.

Children should have newsprint paper 18" x
24", long handled flat brushes 1/2" and
3/4" wide. One brush for each can of paint.

Dough (uncooked)

for each child:

2 cups flour
1/2 cup salt
1/2 cup to 3/4 cup cold water
vegetable coloring preferred

Add the coloring to the water, gradually add this to flour. Knead as for bread. Store in plastic bag in refrigerator.

Asbestos Clay Mixture (for 5-year-old children and older)

for each child:

1 cup asbestos (buy at a building supply store)
1 teaspoon wheat paste
add water to get clay consistency

10-pound bag of asbestos for a class of fifteen children.

*Paste: (cooked)

Mix the desired amount of cornstarch or any powdered starch with a little cold water until it is smooth. Add hot water and boil up once. When cool, it should be the consistency of thin library paste. Keep tightly covered. It is better to make fresh for each use.

*Paste: (uncooked) for paper mache work

To 1/2 cup cold water add sufficient amount of wheat paste to make a creamy, thick paste. Make fresh each day.

Cook for dolls and larger animals (Large paper mache work)

Mix flour and water
1/2 cup flour to
with only a little
Stir in rest of
heat until it thickens
heavy cream. S

Uncooked for paper

Make a thicker

4 to 6 tablespoons
1 tablespoon salt
1 cup water

Tear newspaper
gradually to the
most of it is added
in the flour mixture

Soap Bubble Mixture

In a quart jar

1/4 cup Lux
1 teaspoon sugar
4 tablespoons glycerine

Fill rest of jar with
add 5 drops of

Children may use
toothpicks, and

* from "Your Child's
C. S. Parker.

Mix flour and water in proportions of 1 tablespoon flour to 1 cup water. Mix flour with only a little cold water until smooth. Stir in rest of water, cook over very low heat until it thickens to the consistency of heavy cream. Stir constantly.

Uncooked for paper pulp modeling

Make a thicker paste:

4 to 6 tablespoons flour
1 tablespoon salt
1 cup water

Tear newspaper in small bits. Add water gradually to the paper. Let stand until most of it is absorbed by the paper. Stir in the flour mixture slowly.

Soap Bubble Mixture

In a quart jar mix:

1/4 cup Lux flakes
1 teaspoon sugar
4 tablespoons glycerin

Fill rest of jar with warm water. To color add 5 drops of vegetable coloring.

Children may use various size tin cans, plastic straws, and empty spools.

* from "Your Child Can Be Happy in Bed" by C. S. Parker.

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should be the consisten-
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or paper mache work

add sufficient amount
e a creamy, thick paste.

arger animals (Large pap-

Magic Modeling Goop

2 cups salt
2/3 cup water
1 cup cornstarch (loose)
1/2 cup cold water

Mix salt and 2/3 cup water in saucepan, stirring until mixture is well heated -- 3 to 4 minutes. Remove from heat and add cornstarch which has been mixed with 1/2 cup cold water. Stir quickly. Mixture should be consistency of stiff dough. If mixture does not thicken, place over low heat and stir, about one minute until it forms a smooth pliable mass. Mix can be kept indefinitely if wrapped in clear, plastic bag.

Soap Paint

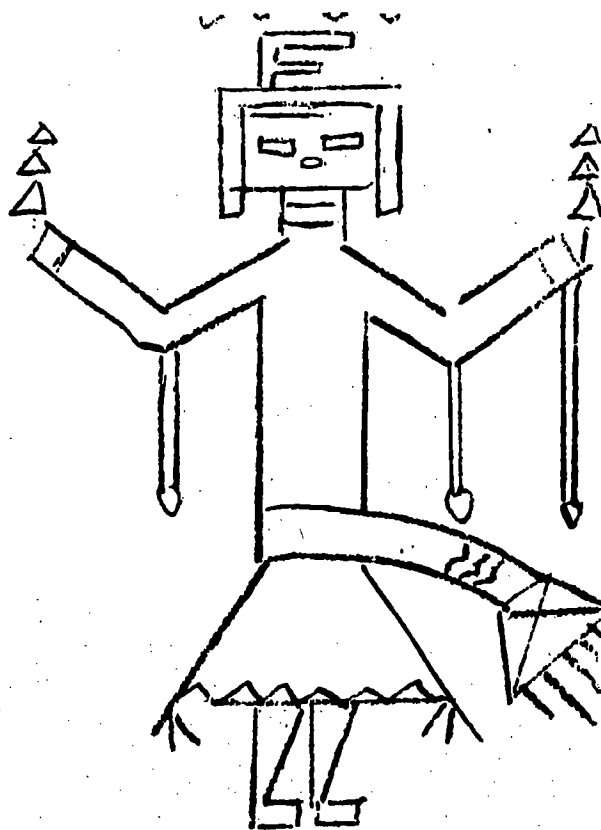
Add warm water, a little at a time to approximately 3 cups of Tide. Mix to consistency of heavy cream. Put into several smaller containers and color with small amount of paint (powder or regular) or food coloring. Can be applied with fingers or with brush.)



e)

water in saucepan, stir-
well heated -- 3 to 4
heat and add cornstarch
with 1/2 cup cold water.
e should be consistency
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ad stir, about one minute
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f wrapped in clear,

le at a time to approx-
e. Mix to consistency
nto several smaller con-
small amount of paint
food coloring. Can be
r with brush.)



**FUN MATERIAL TO SAVE
(Another partial list)**

Aluminum foil	Crayon pieces	Pans
Ball bearings	Crystals	Paper bags
Barrel hoops	Emery cloth	Paper boxes
Beads	Excelsior	Paper cardboard
Belts	Eyelets	Paper corrugated
Blankets	Fabrics	Paper dishes
Bottles	Felt	Paper doilies
Boxes	Felt hats	Paper napkins
Bracelets	Fibre	Paper newspapers
Braiding	Flannel	Paper tissue
Brads	Flit gun	Paper towels
Brass	Floor covering	Paper tracing
Brooches	Gimp	Paper tubes
Buckles	Gimp nails	Paper wallpaper
Buckram	Glass	Paper wrappings
Burlap	Gourds	Phonograph records
Buttons	Hat boxes	Photographs
Candles	Hooks	Picture frames
Cartons	Inner-tubes	Pine cones
Canvas	Isenglass	Pins
Celluloid	Jars	Pipe cleaners
Cellophane	Jugs	Plastic bags
Celotex	Lacing	Plastic board
Chains	Lampshades	Reeds
Chalk	Leather remnants	Ribbon
Chamois	Linoleum	Rings
Clay	Marbles	Rope
Clock springs	Masonite	Rubber bands
Cloth	Metal foil	Rubberized cloth
Colored pictures	Mirrors	Rug yarn
Confetti	Muslin	Safety pins
Containers	Nails	Sand
Copper foil	Necklaces	Sandpaper
Cord	Neckties	Sea shells
Corn husks	Oilcloth	Sealing wax
Corn stalks	Orange stick	Seeds
Costume jewelry	Ornaments	Sheepskin

Taken from: The Elementary Course of Study, Interim Report -
Bulletin 2338. 1949 Pennsylvania Department of
Public Instruction

**FUN MATERIAL TO SAVE
(Another partial list)**

Crayon pieces
Crystals
Emery cloth
Excelsior
Eyelets
Fabrics
Felt
Felt hats
Fibre
Flannel
Flit gun
Floor covering
Gimp
Gimp nails
Glass
Gourds
Hat boxes
Hooks
Inner-tubes
Isenglass
Jars
Jugs
Lacing
Lampshades
Leather remnants
Linoleum
Marbles
Masonite
Metal foil
Mirrors
Muslin
Nails
Necklaces
Neckties
Oilcloth
Orange stick
Ornaments

Pans
Paper bags
Paper boxes
Paper cardboard
Paper corrugated
Paper dishes
Paper doilies
Paper napkins
Paper newspapers
Paper tissue
Paper towels
Paper tracing
Paper tubes
Paper wallpaper
Paper wrappings
Phonograph records
Photographs
Picture frames
Pine cones
Pins
Pipe cleaners
Plastic bags
Plastic board
Reeds
Ribbon
Rings
Rope
Rubber bands
Rubberized cloth
Rug yarn
Safety pins
Sand
Sandpaper
Sea shells
Sealing wax
Seeds
Sheepskin

Shoelaces
Shoe polish
Snaps
Soap
Sponges
Spools
Steel wool
Stockings
Sweaters
Tacks
Tape
Thread
Tiles
Tin cans
Tin foil
Tongue depressors
Towels
Tubes
Twine
Wall board
Wax
Window blinds
Wire
Wire eyelets
Wire hairpins
Wire hooks
Wire mesh
Wire paperclips
Wire screen
Wire staples
Wooden beads
Wooden blocks
Wooden boards
Wooden clothespins
Wooden dowels
Wooden sticks
Wool
Yarn
Zippers

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Indian Art of the American. Appleton, Leroy H. New York, Scribner & Co. 1950.

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Read and Color Books: Pueblo, Navajo, Hopi and Zuni, Indians of the Plains, Famous Chiefs, Apache.

Cut and Color Books: Kachina Dolls, Indian Dances.

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SIMPLE GAMES FOR KINDERGARTEN CHILDREN

To help kindergarten children:

1. Improve self-concept.
2. Develop ability to listen with understanding.
3. Develop ability to follow directions.
4. Increase visual perception.
5. Ask questions.
6. Be more articulate.

GAMES

1. Have a child place four small sticks under four moccasins, one stick is marked. The other children guess which stick is marked.
2. Identify school sounds such as pencil sharpener, pages of book being turned, hands, bells, scissors cutting, clock.
3. Identify familiar sounds with eyes closed such as closing door, knocking, clapping hands, running water, walking across floor, stamping, coughing.
4. Use instruments for variation in pitch: high, low, loud, soft.
5. Take a walk and listen to outdoor sounds.
6. Use a tape recorder and identify children's voices.
7. "Wiggle Waggle." One child is chosen to be IT. He names parts of his body: left hand, thumb, nose, right foot, head, left ear, both hands. The children wiggle the part names.
8. "Simon Says."
9. "Looby Loo."
10. "Hokey Pokey." You put your left foot in, you put your left foot in, you put your left foot in and turn yourself about. That's what it's all about.
11. Hide a loud ticking clock and have children find it.
12. Have one child be a mother cat, sheep, dog, or horse. Have him call the animals hide in the room. The mother cat, sheep, dog, or horse calls the animals by listening to "meows", "barking", "baaing", or "neighing".

SIMPLE GAMES FOR KINDERGARTEN CHILDREN

To help kindergarten children:

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GAMES

Place four small sticks under four moccasins, one stick being marked. Have children guess which stick is marked.

Identify sounds such as pencil sharpener, pages of book being turned, clapping, scissors cutting, clock.

Identify familiar sounds with eyes closed such as closing door, knocking on door, clapping, running water, walking across floor, stamping, coughing.

Identify words for variation in pitch: high, low, loud, soft.

Have children listen to outdoor sounds.

Record and identify children's voices.

"IT." One child is chosen to be IT. He names parts of the body such as: thumb, nose, right foot, head, left ear, both hands. As he names the part, wiggle the part names.

"You put your left foot in, you put your left foot out, you put your hand and turn yourself about. That's what it's all about."

Use a ticking clock and have children find it.

Have a child be a mother cat, sheep, dog, or horse. Have him cover his eyes while another child is in the room. The mother cat, sheep, dog, or horse locates the animal by listening to "meows", "barking", "baaing", or "neighing".

13. Have small group of children in a semicircle. Have and hop, clap, or jump, then ask, "What did I do?"
14. "I Spy". Have a child hide an object and have several loudly when they are close, and softly when they are
15. Repeat a list of words and have the children listen a sound like the others.
16. Dramatize stories and act out the animals in games and
17. Blindfold a child and have him go around the room with things. Have him ask questions to get clues.
18. Have children guess what imaginary objects might fit shapes.
19. Have children listen to short stories that are familiar
20. One child says, "I saw a child this morning." "What
21. "Did you ever see a Lassie - a Laddie - substitute name your sister - your dog - your cat - etc.
22. To the tune of "Here We Go Round the Mulberry Bush"

"My head - my naa' khook,
 My shoulders - my tal-li-khok,
 My knees - my sit-khook,
 My toes - my poo-to-ghook,
 Let's all be strong together."

Words are repeated three times as the different parts

23. Home on the Tundra - to the tune of Home on the Range

Oh give me a home between Unalakleet and Nome,
 Where the moose and the caribou play.
 Where nothing will grow cause it's covered with snow
 From June to the following May

Home, home in the snow, where it's mild if it's nine
 Oh the tundra's for me by the cold Bering Sea
 And the life of the gay Eskimo.

A group of children in a semicircle. Have a child go behind the children and clap, or jump, then ask, "What did I do?"

Have a child hide an object and have several children try to find it. Clap when they are close, and softly when they are far from the object.

List of words and have the children listen and tell which word or words do not belong with the others.

Read stories and act out the animals in games and songs.

Have a child and have him go around the room with a staff member touching various objects. Have him ask questions to get clues.

Children guess what imaginary objects might fit in boxes of various sizes and

Children listen to short stories that are familiar to them, and play the parts.

Child says, "I saw a child this morning." "What was he doing?" Child demonstrates.

Children never see a Lassie - a Laddie - substitute names - your mother - your father - your brother - your dog - your cat - etc.

Lyrics of "Here We Go Round the Mulberry Bush" - from Alaska:

My naa' khook,
My naa' khook,
My sit-khok,
My sit-khok,
My poo-to-ghook,
My poo-to-ghook,
Be strong together."

Repeated three times as the different parts of the body are touched.

Tundra - to the tune of Home on the Range (from Alaska):

A home between Unalakleet and Nome,
Where moose and the caribou play.
Spring will grow cause it's covered with snow
Until the following May

in the snow, where it's mild if it's ninety below
Tundra's for me by the cold Bering Sea
Life of the gay Eskimo.

24. To the tune of Here We Go Round the Mul-
berry Bush --
This is the way we ride a horse.....
This is the way we build a hogan.....

25. To the tune of We Are Climbing Jacob's
Ladder --
We are climbing up the mesa.....
We are finding little pebbles.....
We are riding slowly slowly.....
We are carding wool together (GIRLS).....
We are carrying wood for fire (BOYS).....etc.

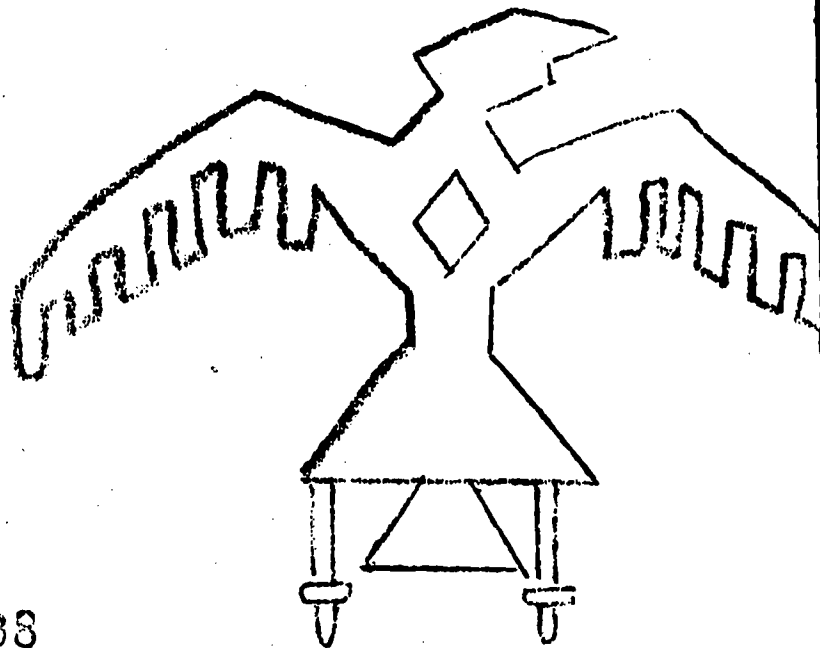
For last line usually sung "Soldiers of the Cross", substitute
"Children of the School" or ??????????

26. Making animal sounds in both the native language and English..
in native tongue?
in English?

What does the cat say (same as above)

What does the bird say (same)

Etc. -- Make up your own with the familiar animals of the local



We Go Round the Mul-

ride a horse.....
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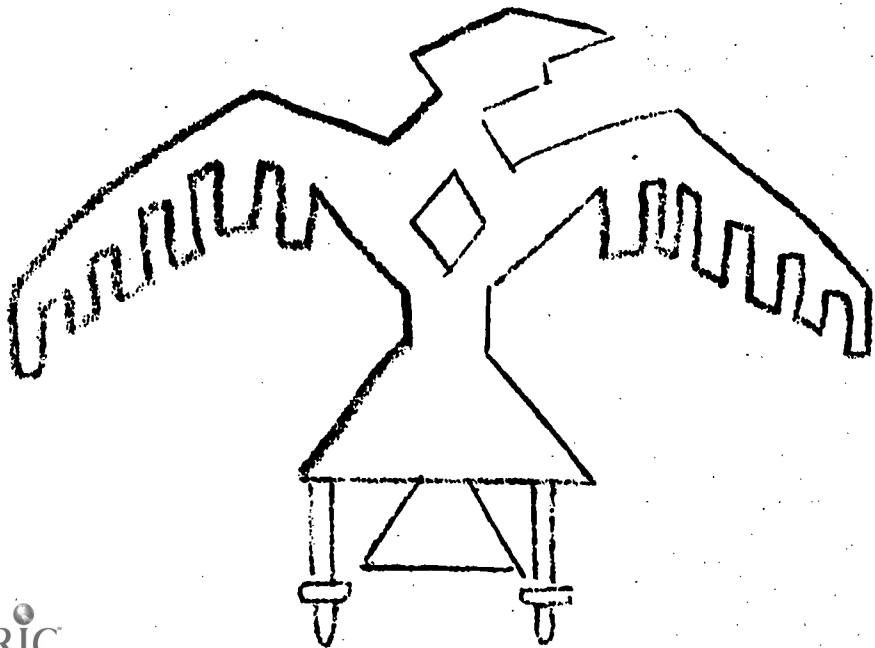
y sung "Soldiers of the Cross", substitute "Indian Children We" or
ool" or ??????????

in both the native language and English.. What does the dog say --

y (same as above)

ay (same)

own with the familiar animals of the locale.



GAMES TO MAKE

1. A matching board lotto game can be constructed using familiar objects for children, for example, the matches would consist of pictures of the following:

mukluks	twins
mittens	earrings
socks	glasses
animals: dog	ears
reindeer	eyes
caribou	hands
	feet

2. Another lotto game could be made by matching Things That Eskimo children use, pictures or drawings of the following:

kyack and paddle	fire
parka and cover (ah-tee-look)	snowman
harpoon and whale	drum
boat and motor	wolf
fish and net	muktu

mother and father
mother and baby
hide and scraper

3. Number boards could be made using pictures of: whale, cats, ducks, fish, mittens, knives and candles.

What objects could be used with Navajo, Seminole, or Cherokee group you are teaching?

GAMES TO MAKE

board lotto game can be constructed using familiar items. For Eskimo or example, the matches would consist of pictures or drawings of:

ukluks	twins
mittens	earrings
socks	glasses
animals: dog	ears
reindeer	eyes
caribou	hands
	feet

to game could be made by matching Things That Go Together. Again, for children, pictures or drawings of the following items could be arranged:

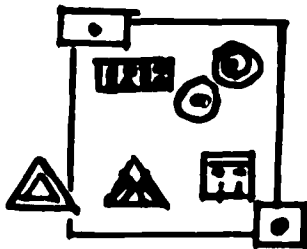
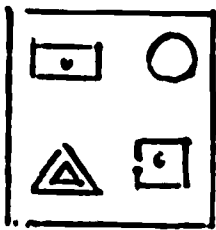
yack and paddle	fire and driftwood
arka and cover (ah-tee-look)	snowmobile and sled
arpoon and whale	drum and wand
boat and motor	wolf and gun
fish and net	muktuk and ooloo

mother and father
mother and baby
hide and scraper

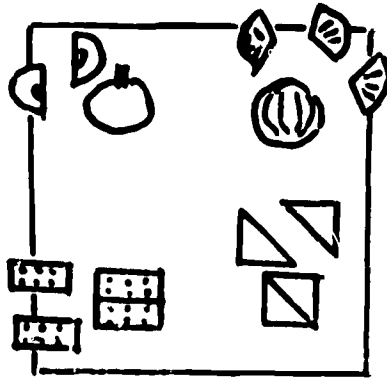
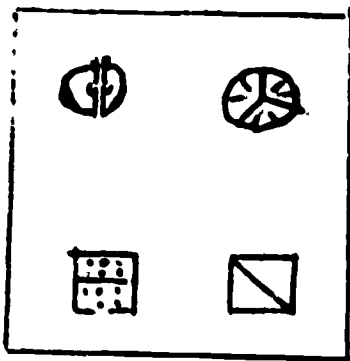
ds could be made using pictures of: whale, walrus, caribou, seals, dogs, fish, mittens, knives and candles.

s could be used with Navajo, Seminole, or Cherokee children? With the re teaching?

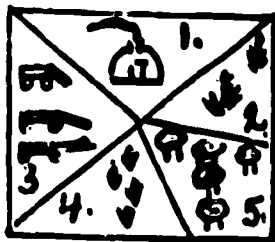
FORM AND NUMBER BOARDS
 (Made by Kindergarten Teaching Staffs, Training Session,



A form board with oblong and square. When pictures are placed underneath are pictures of a rug, a basket, a tepee, typical of Pueblos.



A form board using familiar objects that kindergarteners will have seen. Orange, graham cracker.



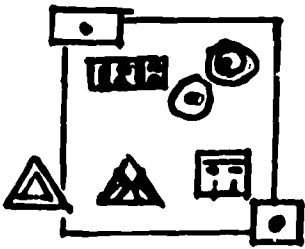
A number board using familiar objects: a hogan, cactus plants, wagon, corn, sheep, typical of Navajos.



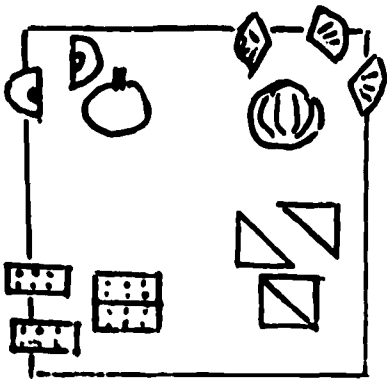
Domino
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FORM AND NUMBER BOARDS

by Kindergarten Teaching Staffs, Training Session, Summer 1968)

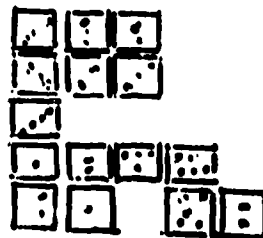


A form board with oblong, circle, triangle and square. When pieces are lifted out there are pictures underneath of familiar objects: a rug, a basket, a tepee and a square house, typical of Pueblos.



A form board using familiar foods that kindergarteners will have at school: an apple, orange, graham cracker and toast.

A number board using familiar objects: a hogan, cactus plants, wagons, corn, sheep, typical of Navajos.



Dominoes made with native seeds on cards.

DEVELOPMENT OF HEALTH AND SAFE

The major aim of a health program is to produce sturdy Indian children with optimum mental, emotional, social, and physical health - children with energy and enthusiasm for life's activities, children with good attitudes about themselves and others -- all within a safe and healthful environment which fosters and maintains the children's well-being.

Health education should be practical and based on the problems which the child faces in his daily living at home, school, and in the community.

In the kindergarten classroom with the help of teachers and nurse, children learn to respect and use their bodies; to gain knowledge of the importance of good health habits including rest, good food, and exercise, as well as basic rules of safety, and to incorporate them in their daily living.

The kindergarten teacher should be aware of differences among children in mental and physical needs. Like many other parents, Indian parents may not always understand developmental stages of child growth. Interaction among parents, teachers, and health personnel may be necessary before there is an understanding of these stages and an acceptance of them.

Health education in the kindergarten gives the child an opportunity to develop positive attitudes toward health which he can apply to his own behavior, and helps the staff to become more aware of necessary differences in approach to the health of Indian children.

OBJECTIVES

- a. To learn to have respect for his own bod-

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DEVELOPMENT OF HEALTH AND SAFETY CONCEPTS

Health program is to provide children with optimum mental, and physical health - and enthusiasm for life's with good attitudes about -- all within a safe and which fosters and maintains well-being.

It should be practical and based on the child faces in his school, and in the community.

Classroom with the help of children learn to recognize; to gain knowledge of good health habits including, and exercise, as well as safety, and to incorporate them into living.

Teachers should be aware of children in mental and physical by other parents, Indian ways understand development growth. Interaction with staff, and health personnel where there is an understanding and an acceptance of differences.

The kindergarten gives children the opportunity to develop positive attitudes which he can apply to his life. It helps the staff to be sensitive to necessary differences in the behavior of Indian children.

Respect for his own body

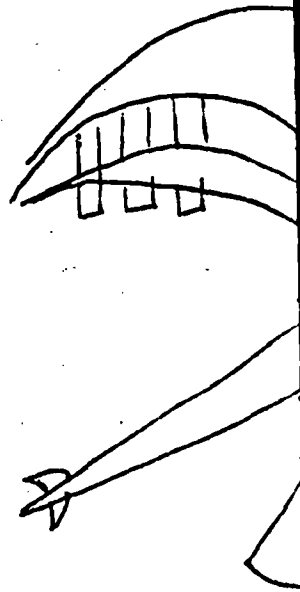
and family needs.

- b. To associate health practices with personal comfort and well-being.
- c. To learn how to care for his body - to be aware of aches, pains, fatigue, over-excitement, care of minor cuts and bruises.
- d. To learn good health habits.
- e. To develop rapport with and trust in medical personnel.
- f. To learn to use equipment safely indoors and outdoors.
- g. To learn how to maintain safe habits while riding in the bus.
- h. To learn how to leave the classroom in case of emergency.
- i. To learn how to handle animals safely.

EXPERIENCES

1. Make toilet facilities available so child can use them easily and with a minimum degree of direction (showing children where toilets and sinks are, encouraging them to flush the toilet and wash hands after using it).
2. Make it possible for the child to escape comfortably from continuous exposure to total group. (Nooks and corners in the classroom and playground; arranging for reading and rest corners where children may be alone; eating in small groups in a relaxed unhurried atmosphere).

3. Invite the nurse, doctor, and dentist into the classroom to talk with the children and give them the opportunity to handle and try out some of the medical equipment; to ask questions; and to act out the process of immunization, the treatment of splinters, cuts and bruises, and the care of teeth.
4. Visit the various offices of nurse, doctor and dentist to become acquainted with the medical personnel and their equipment.
5. Help child learn how to blow his nose correctly (hold tissue over bridge of nose without closing off either nostril and gently blow); to turn head aside when coughing or sneezing, and not put mouth down on bubbler of the drinking fountain.
6. Provide dramatic play materials associated with health, such as stethoscopes, flashlights, tongue depressors, dolls, beds, doctors' bags, nurses' caps.
7. Supervise children as they handle carpentry tools, scissors, and sewing materials, ladders, climbing apparatus, jumping boards, boxes and barrels.
8. Dramatize riding the bus.
9. Practice exiting from classroom with mock emergency situation.
10. Give children practice in picking up, holding, carrying, and stroking animals.



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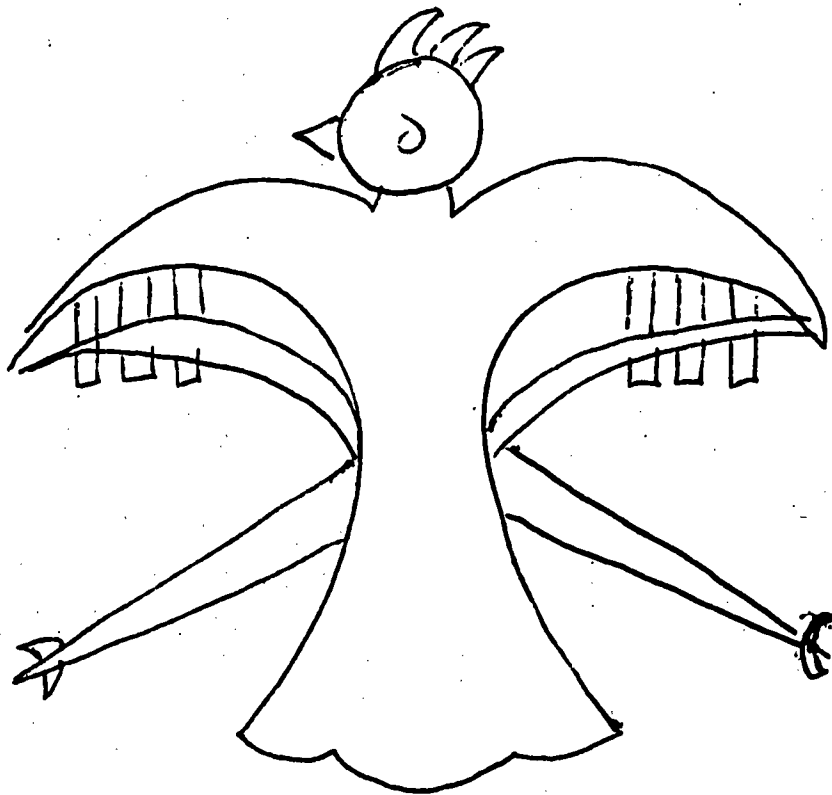
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THE ROLE OF THE FOOD PROGRAM IN THE KIND

The child's body is the most important and complex machinery he will ever possess. How well it functions depends to a large extent on the quality and quantity of the foods he eats. Kindergarten children need foods that will help them grow, that will build muscle, bones, blood, and sound teeth. They need foods which will help them stay well. At this age children use tremendous amounts of energy in running, climbing, and jumping. Research reveals a direct relationship between nutrition and the ability to learn. In trying to help the child achieve a balanced diet, look at those things which are the regular staples of his diet and investigate how nutritional balance is achieved locally.

In addition to the nutritional aspects of the kindergarten food program, there is a vital role played by the adult. The child's attitude toward food is significantly influenced by the adult's own attitude toward food and eating. Eating a meal with his peers and an interested adult, in a small group at a child-size table, usually provides a setting where he can feel comfortable. An interested and relaxed attitude toward eating makes it possible for children to enjoy mealtime.

The use of foods and food preparation in the classroom cuts across virtually all areas of learning: it encourages conversation and questions; Mathematics can be illustrated through various ways of measuring ingredients and portions for serving and in setting tables; Science concepts can be learned through the transformation of materials; liquids to solids, solids to liquids, and changes of texture through cooking; Language is involved throughout the food experience in the labels, color, size, shape, etc; Social Science in-

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THE ROLE OF THE FOOD PROGRAM IN THE KINDERGARTEN CURRICULUM

the most important and will ever possess. How depends to a large extent quantity of the foods he children need foods that that will build muscle, und teeth. They need p them stay well. At e tremendous amounts of limbing, and jumping. irect relationship be- the ability to learn. In hild achieve a balanced things which are the regu- diet and investigate how is achieved locally.

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volves experiences with community foods. Another extremely useful, actually crucial, aspect of the food program is the opportunity it provides for the development of Social Competency in the children. For example, handling equipment, sharing in the mixing of ingredients, setting the table, and serving food are all important social skills which children can learn.

The joy of an attractive table with colorful food arranged on plates can give not only the much desired bodily nourishments, but it is part of an Aesthetic experience as well. Color, texture, and the shape of foods affect the eye and mouth in a pleasing fashion and nourish the soul as well as the body.

Cooking in the kindergarten has many important features. One of the earliest satisfying experiences children have with their mothers centers about eating. To help children in their transition from the familiar home setting to the school environment, cooking is a major building stone for constructing the bridge.

THE CHILD'S FAMILY

The child's eating habits and attitudes are influenced by his family life and relationships. Food customs are influenced by a variety of factors such as social, cultural, religious, geographic, etc. In planning meals at the kindergarten, nutritionists will recognize the individual food customs and eating habits among families of the children.

It is important the kindergarten teaching staff plan closely with the child's family. (See Parent Involvement in the Kindergarten)

THE OTHER PEOPLE INVOLVED IN THE FOOD PROGRAM

The food service personnel, the principal, the sanitarian and health officer are all essential members of the kindergarten food program team. They are the people, with the teaching staff who can provide the ideas, can plan necessary procedures with equipment and supplies to see that the food service will work in each individual situation. It is essential that the teaching staff work closely with them to assure the success of the program.

HINTS FOR FOOD SERVICE MANAGEMENT (Must be Adapted to Individual Situation)

The kindergarten program for young Indian children emphasizes food service which includes breakfast or mid-morning snack, lunch and afternoon snack depending on the length of the school day.

Through satisfying experiences in meal service and in cooking, young children develop good eating patterns and attitudes. They learn to:

- a. eat a variety of wholesome foods.
- b. find pleasure in eating.
- c. appreciate mealtime as a time for companionship and communication with others.
- d. master simple mechanics in eating.
- e. develop an interest in preparing simple foods.

Food is only one part of the mealtime experience. Pleasant, comfortable eating experiences in a good physical environment (suitable size tables and chairs, plates, cups and utensils easily managed by small hands) are as important as proper food.

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PEOPLE INVOLVED IN THE FOOD PROGRAM

Service personnel, the principal, the nurse and health officer are all essential members of the kindergarten food program. They are the people, with the teachers who can provide the ideas, can plan procedures with equipment and ensure that the food service will meet the individual situation. It is essential that the teaching staff work closely together to assure the success of the program.

FOOD SERVICE MANAGEMENT (Adapted to Individual Situation)

The program for young Indian children provides food service which includes a breakfast or mid-morning snack, lunch and a snack depending on the length of the day.

By providing experiences in meal serving, young children develop good eating patterns and attitudes. They

are given a variety of wholesome foods. They learn to assure in eating. They learn to treat mealtime as a time for cooperation and communication with others. They learn the simple mechanics in eating. They develop an interest in preparing simple

As a part of the mealtime experience, a comfortable eating environment (suitable physical environment (suitable chairs, plates, cups and utensils adapted by small hands) are as well as proper food.

The home like, social situation, where children and grownups eat together in small groups (six to seven children with an adult) at tables set for family-style service, gives the teachers an opportunity to know the children in an atmosphere not duplicated in the classroom and the child has full opportunity for participation in the total process. (See all sections on Curriculum for learning experiences).

Routines before and after meals are as important as the meal itself. At lunch, for example, children come from outdoor play (or indoor experiences), in small groups, go to the lavatory, wash hands and get ready for a calm, leisurely meal. While most of the children finish routines and enjoy quiet activities with an adult, such as songs, stories, etc. designated children (2 or 3) and an adult clean and set tables. The adult fills serving bowls with food, fills pitchers with beverage and with children place these on tables for each group. Trays and serving carts are useful. Serving equipment and food are delivered to the classroom approximately 10 minutes before serving time. Teachers have earlier informed food service personnel of the number of people to be served.

Food is served as soon as the children are seated at the table.

During the meal the children eat in an unhurried relaxed atmosphere. There is conversation about their interests with friends and adults. Children pass the food, serve themselves and pour their own beverage.

Teachers help the children to assess small portions but make them feel free to ask for and have as much as they can comfortably eat.

Manners are taught by example. The child is given freedom to eat in his own way. Food, prepared by the kitchen in bite-size pieces, (of meat, vegetables and fruit) may be eaten with the fingers, those who can manage a fork will use it, if food is cut in small enough pieces. Bread is cut in halves or quarters. Butter is softened.

Sponges are provided for spills.

The children are not forced to eat, and deserts are never withheld in order to coerce them into cleaning their plates. One of the goals of educating at the table is to build a positive attitude toward food. Food, therefore, should never be used as a controlling device as this may have the opposite effect.

When a child is finished eating he is helped to clean up: throw paper goods away, scrape and stack used dishes in designated places.

Children who have finished may wish to go to the bathroom, then to a restful activity.

Adults and designated children return serving dishes and unused food to cart, to be returned to kitchen; wipe tables, brush up crumbs, and join companions.

Breakfast service can be easier if the teaching staff:

makes necessary food preparations for the breakfast meal. To simplify the food operation, do as much as possible in advance.

double check to be sure that the necessary foods and equipment are available for the following day.

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by example. The child is eat in his own way. Food, (cut in bite-size pieces, vegetables and fruit) may be eaten by those who can manage a fork. Food is cut in small enough pieces to be cut in halves or quarters.

cleaned for spills.

Children are not forced to eat, and desist from eating in order to coerce them to finish their plates. One of the goals at the table is to build confidence toward food. Food, therefore, should not be used as a controlling device. Children who have the opposite effect.

When a child finishes eating he is helped to clean up paper goods away, scrape up crumbs in designated places.

When a child is finished may wish to go to another activity to a restful activity.

When children return serving food to cart, to be returned to table, brush up crumbs, and

can be easier if the teach-

Food preparations for the day. To simplify the food preparations as much as possible in ad-

Be sure that the necessary equipment are available for the

store foods properly:

carrots and celery sticks in ice water with lid in refrigerator

raisins, crackers and cereal in a dry cool place

bananas at room temperature

cheese and milk in appropriate containers in refrigerator.

A GUIDE FOR FOOD SERVICE FOR BIA KINDERGARTENS. (To be adapted to various situations in BIA schools)

The chart on the following pages outlines basic procedures for using service trucks for meal service during a long kindergarten day for breakfast or morning and afternoon snacks and lunch. It is based on the principle that there is greater economy of time and effort when equipment from a previous meal is placed directly on the truck ready for the next service. This involves using a lunch equipment truck for each kindergarten classroom plus one extra truck for transporting snacks and hot food to all kindergarten classrooms.

The chart is based on food service to three classrooms in a situation where the kitchen and classrooms are located in the same building. Adaptations will need to be made according to various physical facilities and length of kindergarten day in BIA schools.

Bureau of Indian Affairs
Curriculum Development and Program Review
June, 1969

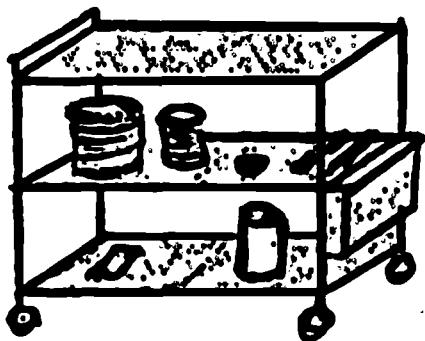
LUNCH EQUIPMENT TRUCKS

1 per classroom



etc.

As set up the afternoon before



2nd Shelf:
dinner plates
dessert plates
cups
silver
napkins
trays (optional)

3rd Shelf:
sponge
can for silver
(optional)

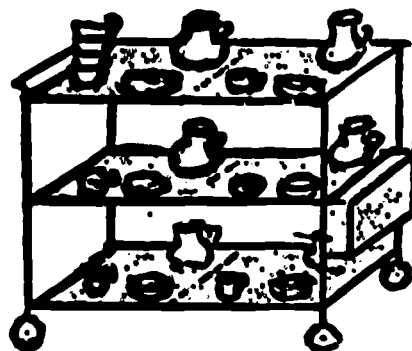
SNACK AND HOT FOOD TRUCK

1 per school



8 A.M.

As set up the afternoon before



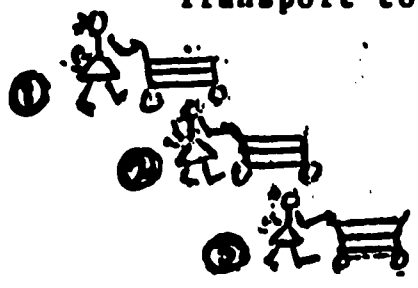
Trays for each group contain:
pitcher
bread containers
cups

A.M.
SNA
T
OR
BREA

Add to each truck
Pitchers (from morning snack)
bread (containers from morning snack)
strips or salad
dessert

BEFORE
LUNCH

Transport to



C
L
A
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M

A.M.

SNACK TIME Add juice, crackers and vitamins for all groups.
OR
BREAKFAST



Transport to classroom (1
(2
(3

1. After snack collect cups, pitchers, etc.
2. Wash pitchers and bread containers and put on lunch equipment truck.
3. Put aside cups for washing after lunch.
4. Leave food truck empty.

(morning snack)
(from morning snack)

**BEFORE
LUNCH**

ort to

C
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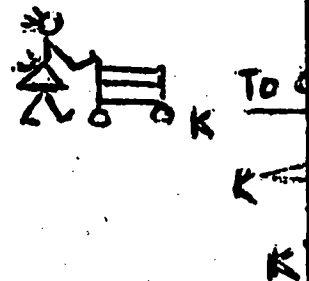


LUNCH EQUIPMENT TRUCK

SNACK AND HOT

LUNCH

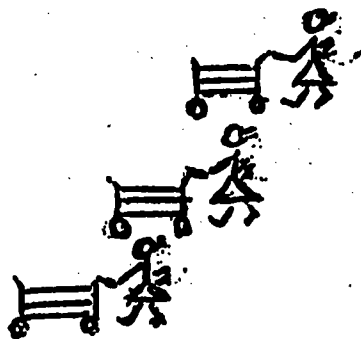
Place milk and one group at a room.



Children scrape and stack dishes

Return empty t

AFTER LUNCH



1. Return each truck to kitchen
2. Wash and sterilize dishes
3. Stack equipment on trucks for A.M.
4. Cover.

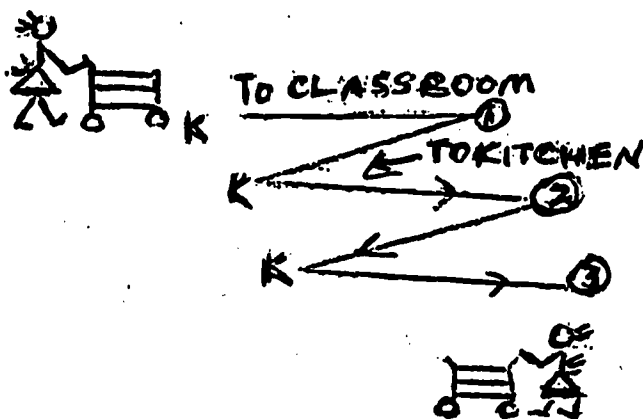
After dishwash chers, cups, e same manner as

RUCK

SNACK AND HOT FOOD TRUCK

LUNCH

Place milk and casseroles of hot food for one group at a time and transport to classroom.



Return empty truck to kitchen.

AFTER LUNCH

and stack dishes



truck to kitchen
utilize dishes
put on trucks for A.M.

After dishwashing, set up truck with pitchers, cups, etc. for P.M. snack in the same manner as for A.M. snack (see above).

P.M.
SNACK
TIME

Add the milk
etc. for all

Transport to

After snack,
etc. and was
for A.M. and

4 P.M.



**P.M.
SNACK
TIME**

**Add the milk and cookies or sandwiches,
etc. for all groups**

**Transport to classrooms (1
(2
(3**

**After snack, collect cups, pitchers,
etc. and wash and sterilize. Set up
for A.M. and cover.**

4 P.M.



**LIST OF EQUIPMENT AND SUPPLIES NEEDED FOR
FOOD SERVICE IN CLASSROOM**

(20 children, 3 table settings)

- 1 doz. casserole (bowls, stainless steel, with cover, 2 quart
- 3 pitchers with cover, 1 quart
- 3 baskets, bread
- 4 trays, fiberglass 14"x18", serving
- 2 doz. fruit dish, Melmac
- 2 doz. plate 8", Melmac
- 2 doz. cup 7 oz. stacking
- 2 doz. fork, stainless steel
- 2 doz. knives, stainless steel
- 2 doz. teaspoon, regular
- 1 doz. tablespoon, serving
- 1 standard duty utility cart, 3 shelf
- 1 hot food truck - if food carried some distance
- 2 tray cutlery
- napkins
- 1 utility caddy 29"x 18 1/2", with disposal bags
- 4 sponges for wiping spills
- 1 large garbage container for carrying flatware and dishes, if food carried some distance.

COOKING EXPERIENCES

In designing cooking activities, the teacher may see her goals as helping the child to:

- Understand how food is prepared.
- Plan, read recipes, make a recipe book.
- Use measuring utensils.
- Sample new and unusual foods.
- Appreciate food of different tribes and lands.
- Value his own food and its method of preparation as part of his heritage.

This is not to be viewed as the child's from his social ics, or later these components should be experienced.

Home and school child can be of classroom tastes, and brought into is made to ting for it his home and

Tasting and by the available customs. If done out of should be duty to compare will be valuable parents into cooking experience for help. Take to provide in another priate to y

Like other ing experie ganized. C materials a ence is to ceded by mu keep the gr child must

**E AND SUPPLIES NEEDED FOR
CLASSROOM**

table settings)

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cover, 1 quart

ass 14"x18", serving

, Melmac

Melmac

stacking

stainless steel

stainless steel

regular

, serving

utility cart, 3 shelf

- if food carried some dis-

9"x 18 1/2", with disposal

ing spills

ontainer for carrying flat-

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NG EXPERIENCES

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as helping the child to:

food is prepared.

pes, make a recipe book.

utensils.

unusual foods.

of different tribes and

ood and its method of pre-
art of his heritage.

This is not to suggest that cooking is to be viewed as an isolated activity apart from the child's cultural heritage, or separate from his social studies, science, mathematics, or language arts curriculum. Each of these components of the cooking experience should be developed as a part of the entire experience.

Home and school experiences of the Indian child can be connected through the vehicle of classroom cooking. Utensils, odors, tastes, and sights familiar to the child are brought into the classroom. Thus, the child is made to feel at ease in the school setting for it is no longer so alien to him, his home and his tribe.

Tasting and cooking experiences are dictated by the availability of resources and local customs. If cooking in the home is normally done out of doors, then classroom cooking should be done out of doors. The opportunity to compare the materials and experiences will be valuable. Invite parents or grandparents into the class to demonstrate a cooking experience; assist the parent in her role as teacher, showing respect and deference for her knowledge and skills as an expert. Take children to houses of parents to provide a chance to taste and to share in another person's home, if this is appropriate to your area.

Like other activities in the classroom cooking experiences must be well planned and organized. Check and double check equipment, materials and room setup. If the experience is to be a happy one, it must be preceded by much planning with youngsters, keep the group small, 4-5 children. Each child must know his responsibility and role

before he embarks on this exciting adventure of cooking. The teacher takes the responsibility for the accurate heat of the oven and for putting the prepared dish into and taking it out of the oven. The teacher carefully supervises the use of the stove or hot plate.

When charts of recipes are made for young children, learning to read them precedes the cooking experience. It is advisable to have the necessary ingredients and utensils on a table below the recipe chart. Experiment with using a level teaspoon. Measure water or dry ingredients into one, one half, one fourth cups (or whatever measurements recipe needs). Children may find the pictured ingredient on the chart and the real ingredient on the table.

LIST OF EQUIPMENT AND SUPPLIES FOR COOKING EXPERIENCES

(To be adapted to individual situation. Also see Equipment and Supplies Housekeeping and Family Life Play).

- 1 hot plate, 2 burners
- 1 electric skillet
- 1 toaster
- 1 rotisserie oven
- 1 small refrigerator w/ice cube maker
- 1 blender
- 4 plastic mixing bowls, full size
- 2 baking tins, full size
- 1 frying pan, full size
- 12 cookie cutters
- 2 egg beaters, full size and good quality
- 2 rolling pins, full size
- 6 wooden spoons, full size
- 2 measuring cups w/spoons full size
- 4 plastic containers for salt, flour, etc.
- 1 muffin tin, full size

works on this exciting adventure
The teacher takes the responsi-
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e prepared dish into and taking
oven. The teacher carefully
use of the stove or hot plate.

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the real ingredient on the tab-

MENT AND SUPPLIES FOR COOKING

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and Supplies Housekeeping and
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burners
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ven
erator w/ice cube maker

g bowls, full size

full size

full size

ers
full size and good quality

full size

s, full size

ps w/spoons full size

ainers for salt, flour, etc.

full size

1 double boiler, full size
1 sifter, full size
2 cookie sheets, full size
6 dish cloths
4 dish towels
6 plastic aprons to protect clothing
6 tablespoons
1 large, 4 quart sauce pan, w/lid
1 small 1 quart sauce pan, w/lid
1 each, can opener and vegetable peeler
1 each, paring knife, butcher knife,
strainer large and small
4 pot holders
2 rubber spatulas

COOKBOOKS

Driver, H.E. Indians of North America.
Chicago: University of Chicago Press.
1961

Kimball, Yeffe and Jean Anderson. The Art
of American Indian Cooking. Garden City,
N. Y. Doubleday and Co. 1965.

McClain, Sam (publ.) Authentic American In-
dian Recipes. P. O. Box 2, Pawhuska, Ok-
lahoma. 1958

Students of Shishmaref Day School. Eskimo
Cook Book. Alaska Crippled Children's
Association, Box 912, Anchorage, Alaska.
Price 60 cents postpaid.

Wright, Muriel. American Indian Corn Dishes.
Chronicles of Oklahoma. Vol. 36, No. 2
Summer, 1958

PAMPHLETS

Food for Groups of Young Children Cared For
During the Day -- Helen M. Hille, Insti-
tutional Nutrition Consultant, U. S. De-
partment of Health, Education, and Wel-

fare, Social Security Administration, U. S. Children's Bureau, 25 cents.

Handbook of Food Preparation -- American Home Economics Association, 1600 20th St., N.W., Washington, D. C., 50 cents.

Food Storage Guide for Schools and Institutions -- P.A. 403, Agricultural Marketing Service, U. S. Department of Agriculture, Washington, D. C., 25 cents.

Your Child From One to Six -- U. S. Children's Bureau, Publication No. 30, U. S. Department of Health, Education and Welfare, Washington, D. C., 20 cents.

Feeding Little Folks -- Published by National Dairy Council, Chicago, Ill. Can be obtained from State Dairy Council.

Food For the Family With Young Children -- Prepared by Consumer and Food Economics Research Division, U. S. Department of Agriculture, Washington, D. C., 10 cents.

Government publications may be purchased by writing the Superintendent of Documents, Washington 25, D. C. Be sure to enclose the required funds.

RECIPES FOR COOKING WITH CHILDREN (For further recipes ask the parents)

The following recipes are examples of cooking activities that can be done with children. Preparation of cereals, applesauce, cocoa, chocolate pudding, frosting, and candies are acceptable activities, but to further the child's acceptance of the value of his culture, typically Indian recipes are included.

Hominy (Indian

White corn is (if available) Corn is then washed off. Kernels that are parched on a fire. The outer coat of pop corn.

Piki (Wafer Br

A fire is built and has been oil. When the surface is several hands corn meal. Baking powder. meal from the This mixture is away from the

Chewing Gum

Milkweed or corn gum.

The Blackfoot recipes:

Indian Grease

4 cups of flour
3 t. baking powder
1 t. salt
1 1/2 cups water

Stir flour, baking powder, and salt in a bowl, gradually adding water until the dough is too moist to handle. Place dough on

ty Administration, U. S.
25 cents.

aration -- American Home
on, 1600 20th St., N.W.,
50 cents.

r Schools and Institu-
Agricultural Marketing
rtment of Agriculture,
25 cents.

o Six -- U. S. Children's
No. 30, U. S. Department
n and Welfare, Washington,

-- Published by National
ago, Ill. Can be ob-
airy Council.

ith Young Children --
r and Food Economics
U. S. Department of Ag-
on, D. C., 10 cents.

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(as ask the parents)

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e done with children.
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osting, and candies are
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the value of his cul-
n recipes are included.

Hominy (Indian Pop Corn)

White corn is soaked in moist juniper ashes
(if available).

Corn is then boiled; ash and hulls are
washed off.

Kernels that were soaked in salt water are
parched on hot sand.

The outer coat will split, yielding a kind
of pop corn.

Piki (Wafer Bread), Hopi

A fire is built under a stone slab which
has been oiled.

When the surface is hot, it is covered with
several handfuls of thin gruel from blue
corn meal.

Baking powder can be used to prevent the
meal from turning red.

This mixture cooks quickly and can be peeled
away from the stone.

Chewing Gum

Milkweed or cotton weed is a form of Hopi
gum.

The Blackfeet Indians offer many interesting
recipes:

Indian Grease Bread

4 cups of flour
3 t. baking powder
1 t. salt
1 1/2 cups water

Stir flour, baking powder and salt into a
bowl, gradually adding the water. If the
dough is too moist, add more flour, knead
dough till it no longer sticks to hands.
Place dough on a floured surface.

Shape dough into round balls, then flatten balls. Punch holes in the center. Deep fry in a large skillet, half filled with liquid shortening. Fry them for about five minutes on each side. Serve hot or cold.

1/4 cup sh
1/4 cup su

Mix the dr
tening tog
sugar to t

Raised Fry Bread

1 to 1 1/4 cup warm milk 2 tsp. salt
2 T. soft shortening 1 package dry yeast
2 T. sugar 3 cups sifted flour

Dissolve yeast in Milk. Add shortening, salt, sugar and one-fourth of the flour. Beat until smooth, scraping sides and bottom of bowl frequently. Add remaining flour and blend until smooth. Let rise in warm place about 30 minutes. Punch down and knead. Let rise again. Break into doughnut size pieces and shape flat, cutting a slit into hot fat, turning the bread until both sides are golden brown. Drain on a paper towel and serve while warm. A favorite way to eat fry bread is to dip it into a small amount of syrup.

Baked Trou

1 or more
Brush cavi
cavity tig
large stic
al springs
slices ove
and pepper
Bake for 1

Sauer Barr

3 cups sau
zen)
9 cups wat

-- Delores Hall
Browning, Montana

Cracklings

Dice fat from beef, pork, bacon rind, or salt pork. Place diced fat in a baking pan and set in a medium low oven. Drain pieces of fat as they bake. Continue this process until diced fat is crisp. Cool and salt.

Wash the b
cover with
utes. Whe
paste of 2
Slowly add
until the
Serve whil
added if d

-- Delores Hall
Browning, Montana

Indian Pennican

5 cups dry meat
3 cups mashed cherries

Jam or Jel

Wrap fresh
and boil i
water and
amount of
vor. Add

round balls, then flatten
s in the center. Deep fry
, half filled with liquid
hem for about five minutes
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milk 2 tsp. salt
ng 1 package dry yeast
3 cups sifted flour

Milk. Add shortening, salt,
th of the flour. Beat un-
ng sides and bottom of bowl
remaining flour and blend
rise in warm place about
down and knead. Let rise
doughnut size pieces and
g a slit into hot fat,
until both sides are golden
paper towel and serve while
way to eat fry bread is to
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eloree Hall
rowning, Montana

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fat in a baking pan and set
en. Drain pieces of fat as
use this process until diced
1 and salt.

eloree Hall
rowning, Montana

rice

1/4 cup shortening
1/4 cup sugar

Mix the dry meat, mashed cherries, and shor-
tening together in a large bowl. Add the
sugar to the mixture and serve.

-- Thomas Horn
Browning, Montana

Baked Trout

1 or more large trout, cleaned and washed.
Brush cavity with oil or butter. Stuff
cavity tightly with 2 chopped onions, 4
large sticks of celery, chopped, and sever-
al springs of parsley. Lay several bacon
slices over the trout. Sprinkle with salt
and pepper or any other desired seasoning.
Bake for 1 hour at 375 degrees.

Sauer Berry Soup

3 cups sauer berries (dried, fresh, or fro-
zen)
9 cups water

Wash the berries. Place in saucepan and
cover with water. Boil for about 30 min-
utes. When the berries are cooked, make a
paste of 2 T. flour, 3 T. sugar and water.
Slowly add the paste to the berry soup. Cook
until the desired thickness is obtained.
Serve while still hot. More sugar may be
added if desired.

Jam or Jelly

Wrap fresh choke cherries in a thin cloth
and boil in water. Add equal amounts of
water and sugar to the cherry juice. The
amount of sugar depends on the desired fla-
vor. Add a package of Sure-Jel.

-- Carolyn Blackman
Browning, Montana

Ba na ha'

1 pound dry peas
corn meal (plain)
corn shucks

Soak peas in water overnight, drain. Cook until tender. Drain and save liquid. Moisten corn meal with above liquid. Add cooked peas. Roll into a ball about the size of a medium tangerine. Place this roll in corn shuck and tie with strip of corn shuck. Put this in a pot of water and boil for 30 minutes to 1 hour.

This rolled ball served as bread and was eaten with fresh meat.

-- Kathy King, Rosanell
Phillips
Choctaw, Mississippi

Mix ingredients together until it forms a ball. Shape into small balls (teaspoon size) flatten with hand, place on pan and bake. Heat oven to 350 degrees, bake 8 minutes.

Breakfast in a Glass

1 egg
1 cup milk
1/2 cup fruit

Place in blender and blend.

Corn on the cob

2 cups water
20 ears (p)
Control -

Cover and close vent in 15 minutes

Pop Corn

1 cup pop
1/2 cup oil
1 - 2 tsp.
1/4 - 1/2

Place corn in a pan. Heat over low heat. When light corn stops popping, remove from heat. Seal. Yield 4 quarts

Spritz

Mix thoroughly

Work in with

Force the dough into ungreased pan. Bake until golden brown. 350 degrees F. 10 minutes.

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n meal with above liq-
peas. Roll into a ball
a medium tangerine.
n corn shuck and tie
n shuck. Put this in a
boil for 30 minutes to

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heat.

Kathy King, Rosanell
Phillips
Choctaw, Mississippi

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o small balls (tea-
n with hand, place on
t oven to 350 degrees,

ss

nd blend.

Corn on the Cob - Electric Skillet

2 cups water
20 ears (place in skillet with 1 tsp. sugar)
Control - 250 degrees F

Cover and open vents until water boils,
close vents, turn temperature to 200. Cook
in 15 minutes.

Pop Corn - Electric Skillet

1 cup pop corn
1/2 cup oil
1 - 2 tsp. salt
1/4 - 1/2 cup butter

Place corn and oil into skillet, set temp-
erature at 400 degrees F vents closed.
When light goes off, and leave lid on until
corn stops popping, approximately 2-3 min-
utes. Season with salt and melted butter.
Yield 4 quarts.

Spritz

Mix thoroughly: 1 cup soft butter
2/3 cup sugar
3 egg yolks
1 tsp. flavoring (almond
of vanilla or 1/4 cup
grated almonds.

Work in with the hands: 2-1/3 cups flour.

Force the dough through cookie press onto
ungreased baking sheet in desired shapes.
Bake until set...but not brown...Bake 400
degrees F. 7 to 10 minutes. Yield about 6
doz.

Apple Sauce

Let each child peel an apple (using a vegetable peeler) - put the apples in a pot with just enough water to start them cooking. When tender mash; add sugar (4 cups for 24 apples) cook again for 10 minutes.

Vegetable Soup

After talking about vegetables that make good soup, children might take a trip to the kitchen or grocery to buy vegetables - carrots, turnips, potatoes, onions, tomatoes, a soup bone. Cover soup bone with water in a large kettle. Simmer slowly for 2 hours. Peel vegetables cut in small pieces and add to soup bone. Add salt. Cook 40 minutes.

Jello

Making jello is fun. Measuring, mixing, cutting and serving are all important skills to be developed.

Biscochitos - Mexican Cookies

- 1 cup sugar
- 2 cups shortening
- 1 tsp. anise seed
- 4 cups white flour
- 2 cups whole wheat flour
- 1 tsp. salt
- 2 tsp. baking powder
- 3/4 (about) cup water

Cream lard with hand. Add sugar; beat until light and fluffy. Add anise seed and flour which has been sifted with salt and baking powder. Add just enough water to make mixture hold together. Roll 1/2" thick and cut into fancy shapes. Dip in sugar and bake in moderate oven.

Bread

1 cup
Add
Stir
short
Add
Then
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Ther
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1 an apple (using a vegetable peeler) peel the apples in a pot with water to start them cooking. When done add sugar (4 cups for 24 apples) and cook 40 minutes.

Use vegetables that make good soups. Take a trip to the kitchen and buy vegetables - carrots, onions, tomatoes, a soup bone with water in a large pot and cook slowly for 2 hours. Peel the vegetables in small pieces and add to soup. Cook 40 minutes.

Measuring, mixing, cutting are all important skills to

Can Cookies

2 cups whole wheat flour
1 tsp. salt
2 tsp. baking powder
3/4 (about) cup water

and. Bake until light and fluffy. Use whole wheat flour which has been sifted with baking powder. After baking, let cookies cool on a wire rack to make mixture hold together. Cut into fancy shapes. Bake in moderate oven.

Bread

1 cup lukewarm water.
Add 1 cake yeast.
Stir until yeast melts. Then add 2 tsp. shortening.
Add 2 T. sugar; stir.
Then add 2 cups flour--be sure dough is very stiff.
Then set in warm place until it doubles itself (about 1 hour).

For more adventurous classes try using this same bread recipe for cinnamon rolls. After dough has risen the first time roll the dough out, sprinkle with sugar and cinnamon, dot with a small amount of butter, roll, cut, allow rolls to rise and then bake.

There is no end to cooking possibilities in the classroom, -- with just a hot plate preparing rice, dried beans, potatoes or fruit juices becomes an adventure.

Jelly

Put 2 cups grape juice and 3 3/4 cups sugar in large sauce pan.
Mix Well
Bring to boil.
Add 1/2 cup liquid pectin, stirring constantly.
Bring to full rolling boil.
Boil hard 1/2 minute.
Remove from heat; skim.
Pour into 5 jelly glasses.
Cool.

These cooking experiences are not isolated from other phases of the school curriculum. Rather they may enhance and excite learning in many instructional areas.

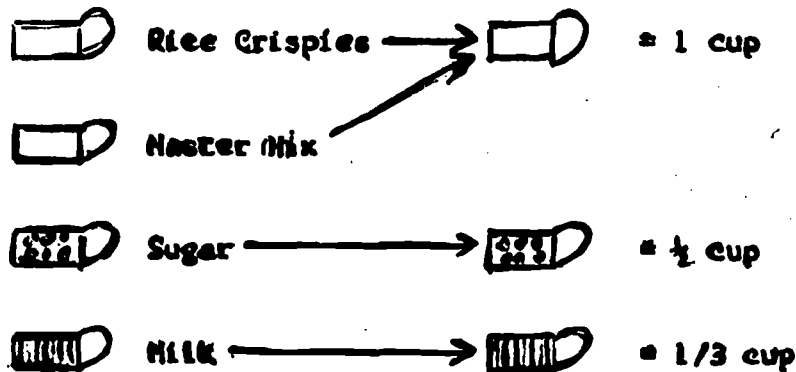
Wacky Cake

Take an ungreased square or oblong cake pan 9 x 13 x 2 and sift into it:

1 c. sugar	then add:
1-1/2 c. flour	1 tsp. vinegar
1/2 tsp. salt	1 tsp. vanilla
1/4 c. cocoa	1/3 c. salad oil
1 tsp. soda	1 c. cold water

Stir this mixture around the pan until there are no lumps. Then bake 30 to 35 minutes in 350 degree oven. Candy mint on top.

Crispy Cookies



Mix crispies, Master Mix and sugar. Add milk and stir. Drop by spoonful on baking sheet. Bake 375 degree oven, 10 to 12 minutes.

Master Mix

To be used for biscuits, griddle cakes, muffins, etc.

9 cups sifted all-purpose flour
1/3 cup baking powder
1 tablespoon salt
2 teaspoons cream of tartar

1 cup nonfat
2 cup shortening
refrigerator

Sift together
Cut in shortening
two knives
corn meal.
room temperature
master mix
level off

Biscuits

1 cup of B
1/3 cup of

Knead 8-10
pat to 1/2
cut, place
greases, bak

pudding Co

3/4 cup of
1 pkg. ins
1/4 cup of

1 cup nonfat dry milk powder
2 cup shortening which does not require refrigeration

Sift together dry ingredients three times. Cut in shortening with pastry blender or two knives until mixture looks like coarse corn meal. Store in covered container at room temperature. NOTE: To measure the master mix, pile it lightly into a cup and level off with a spatula.

Biscuits

1 cup of Bisquick
1/3 cup of milk (mix with fork)

Knead 8-10 times. Place on floured board, pat to 1/2" thick. Dip cutter in flour and cut, place on pan. Heat oven to 450 degrees, bake for 15 minutes.

Pudding Cookies

3/4 cup of Bisquick
1 pkg. instant pudding mix, desired flavor.
1/4 cup of vegetable oil
1 egg

or oblong cake pan
it:

add:
p. vinegar
p. vanilla
t. salad oil
cold water

the pan until there
30 to 35 minutes in
bake on top.

 = 1 cup

 = 1/2 cup

 = 1/3 cup

and sugar. Add milk
ul on baking sheet.
to 12 minutes.

griddle cakes, muf-

flour

ar

BREAKFAST MENUS
Orders for 50 Children

FIRST WEEK

Dry Cereal with sugar
50 small (individual) boxes
use brand that can be eaten from box

Bananas (cut in half)
5-2/3 pounds

Milk
6-1/2 gallon preferred or
50 individual cartons

Sugar
50 1 teaspoon packages

MONDAY

Sliced Cheese Make open faced sandwiches
3-1/4 pounds

Saltine Crackers
2 pounds

Grapes, seedless
5 pounds

Milk
6-1/2 gallon preferred or
50 individual cartons

TUESDAY

Peanut Butt
3 pounds

Jelly
3-10 ounce

Bread, enri
3-1/4, 1
Make sand

Oranges
2-1/4 doz

Milk
6-1/2 gal
50 indivi

Graham Crac
1-2/3 pou

Carrot Stic
2-1/4 pou

Raisins
4-1/4 pou

Milk, choco
6-1/2 gal
cartons
1-1/2 pou

BREAKFAST MENUS

Orders for 50 Children

FIRST WEEK

ar
ual) boxes
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erred or
tons
kages

MONDAY

Peanut Butter Mix with Jelly
3 pounds

Jelly
3-10 ounce jars

Bread, enriched white
3-1/4, 1 pound loaves
Make sandwiches, cut slices in 1/4's

Oranges
2-1/4 dozen

Milk
6-1/2 gallons preferred or
50 individual cartons

open faced sandwiches

TUESDAY

Graham Crackers
1-2/3 pounds

Carrot Sticks
2-1/4 pounds

Raisins
4-1/4 pounds

Milk, chocolate
6-1/2 gallons preferred or 50 individual
cartons
1-1/2 pounds instant cocoa mix, add to milk

WEDNESDAY

THURSDAY

Dry Cereal
50 individual packages

Pineapple-Grapefruit juice
1-1/4 #10 can

Milk
6-1/2 gallons preferred or 50 individual
cartons

Sugar
50 1-teaspoon packages

FRIDAY

BREAKFAST MENUS
Orders for 50 Children
SECOND WEEK

Dry Cereal
50 individual packages

Orange Juice
1-1/4 #10 can

Milk
6-1/2 gallons preferred or 50 individual
cartons

Sugar
50 1 teaspoon packages

MONDAY

Bread, white enriched
3-1/4 1 pound loaves

Butter - cream butt
2/3 pound

Cinnamon - 2 tables

Sugar, granulated -

Fruit Cocktails
6-2/3 #303 cans

Milk
6-1/2 gallons pre
cartons

Dry Cereal - 50 ind

Apples - quartered
6-1/4 pounds

Milk - 6-1/2 gallon
individual carton

Sugar - 50 1 tsp. p

Sliced Cheese - 3-1

Saltine Crackers
2 pounds

Celery Sticks
2-1/3 pounds

Milk, Strawberry
6-1/2 gallons pref
cartons
1-1/2 pounds insta

ages

juice

ferred or 50 individual

ages

FRIDAY

ST MENUS

50 Children

D WEEK

ages

ferred or 50 individual

ages

MONDAY

Butter - cream butter with cinnamon & sugar
2/3 pound

Cinnamon - 2 tablespoons

Sugar, granulated - 3 cups

Fruit Cocktails
6-2/3 #303 cans

Milk
6-1/2 gallons preferred or 50 individual
cartons

TUESDAY

Dry Cereal - 50 individual packages

Apples - quartered
6-1/4 pounds

Milk - 6-1/2 gallons preferred or 50
individual cartons

Sugar - 50 1 tsp. pkgs.

WEDNESDAY

Sliced Cheese - 3-1/4 pounds

Saltine Crackers
2 pounds

Celery Sticks
2-1/3 pounds

Milk, Strawberry
6-1/2 gallons preferred or 50 individual
cartons
1-1/2 pounds instant strawberry milk mix

THURSDAY

Graham Crackers
1-2/3 boxes

Peanut Butter - mix peanut butter with raisins
- 3 pounds and make open face sandwiches
and quarter

Raisins
1 pound

Applesauce, red
7 #303 cans; red food color

Milk
6-1/2 gallons preferred or 50 individual
cartons

FRIDAY

BREAKFAST MENUS

Orders for 50 Children

THIRD WEEK

Dry Cereal
50 individual packages

Raisins - 1-1/2 pounds

Milk - 6-1/2 gallons preferred or 50 indi-
vidual cartons

Sugar - 50 1 teaspoon packages

MONDAY

Bread,
3-1/4

Peanut
See W

Cantalo
6-1/4

Milk -
indiv

Dry Cer

Peaches
4 #2

Milk -
indiv

Sugar

Eggs,
4-1/4

Orange
2-1/4

Milk -
indi

peanut butter with raisins
make open face sandwiches
quarter

food color

ferred or 50 individual

FRIDAY

AST MENUS

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D WEEK

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preferred or 50 indi-

n packages

MONDAY

Bread, brown wheat
3-1/4 1 pound loaves

Peanut Butter and Jelly
See Wednesday Week I

Cantaloupe
6-1/4 cut up and sliced

Milk - 6-1/2 gallons preferred or 50
individual cartons

TUESDAY

Dry Cereal - 50 individual packages

Peaches, slices
4 #2-1/2 cans

Milk - 6-1/2 gallons preferred or 50
individual cartons

Sugar - 50 1 teaspoon packages

WEDNESDAY

Eggs, hardcooked, peeled
4-1/4 dozen

Orange Slices
2-1/4 pounds

Milk - 6-1/2 gallons preferred or 50
individual cartons

THURSDAY

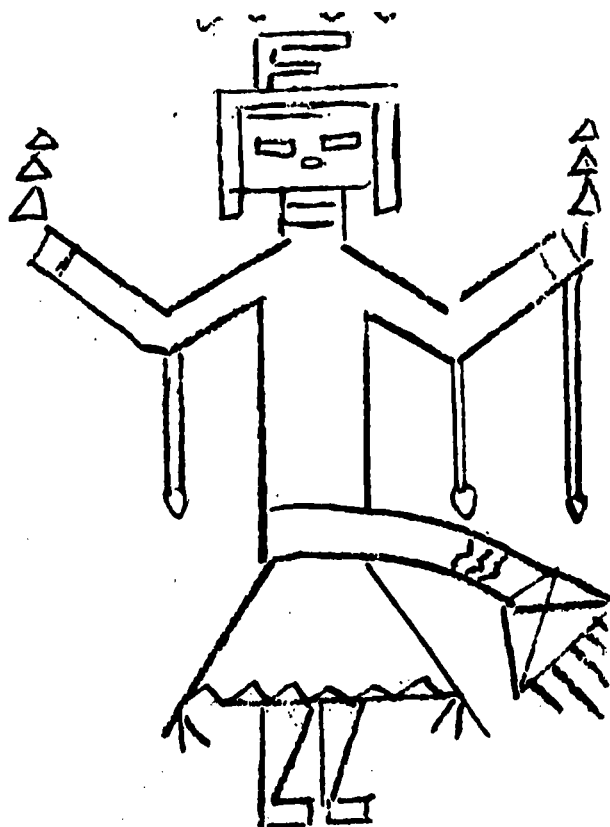
Celery, washed, but not cut
2-1/3 pounds

Peanut Butter - used as filling in celery
1 pound

Graham Crackers
1-2/3 pounds

Milk
6-1/2 gallons preferred or 50 individual
cartons

FRIDAY

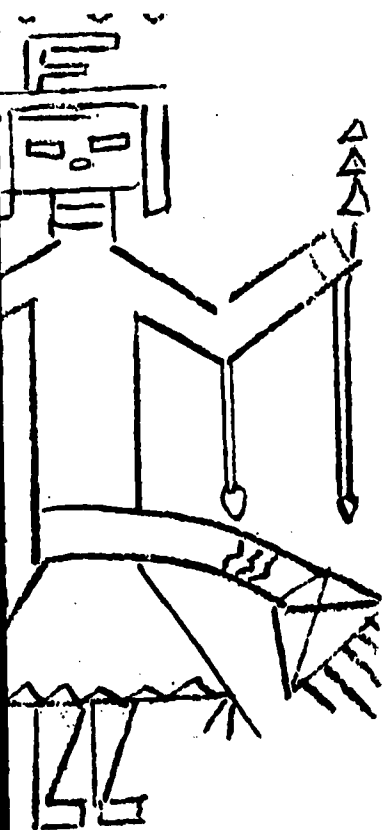
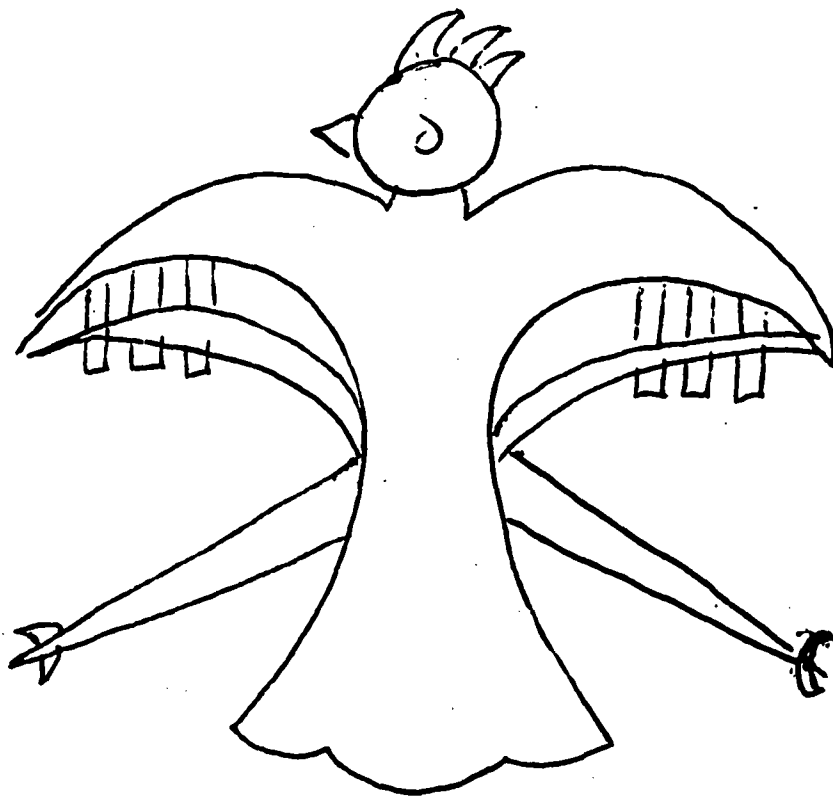


out not cut

used as filling in celery

preferred or 50 individual

FRIDAY





SUPPORTIVE SERVICES



PARENT INVOLVEMENT IN THE KINDER

Both parents and teachers are educators of the child. The child will be aided in achieving the best education of which he is capable when parents and teachers work together, each respectful of the other's indispensable contribution.

Parent involvement in the bilingual kindergarten must become a true partnership of home and school, with two-way responsibility for the education of the young child. "The goal must be to establish a mode of communication and decision making where the outcome is a blend of what parents want and know their children need most and what educators know and understand about children, learning and growth."¹

The comprehensive kindergarten program involves parents in a way only recently attempted in this country through the Head Start Program. Parent involvement is important because the child's sense of security is rooted in his family and he needs close contact with an emotionally significant adult for varying lengths of time as he moves out to the world of school. The teaching staff can gain from the family information which will assure a smooth transition from home to school. Parents who participate in the early educational programs of their children generally understand better what the school is doing, feel that the school is genuinely interested in their children, and learn ways to help in the educational process.

Since the purpose of the kindergarten program, by its very design, is to assure success in current and future learning, it is important that each parent understand his role in the comprehensive program.

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PARENT INVOLVEMENT IN THE KINDERGARTEN PROGRAM

teachers are educators of the child and will be aided in achieving the development of which he is capable when parents and teachers work together, each recognizing the other's indispensable contribution.

Parent involvement in the bilingual kindergarten program is a true partnership of home and school with two-way responsibility for the well-being of the young child. "The goal is to establish a mode of communication and cooperation where the outcome is a program that parents want and know their children are getting and what educators know about children, learning and teaching."

Parent involvement in the kindergarten program is in a way only recently attempted through the Head Start program. Parent involvement is important because a child's sense of security is rooted in the home and he needs close contact with a significant adult for varying periods of time as he moves out to the world. The teaching staff can gain from parent participation which will assure a smooth transition from home to school. Parents who participate in the early educational program for their children generally understand the school is doing, feel the school is genuinely interested in their children and learn ways to help in the program.

One of the goals of the kindergarten program, parent involvement, is to assure success in the child's learning, it is important that parents understand his role in the program.

The presence of some parents in the classroom each day reminds Indian children that their people are important, that what they have experienced at home is valued, and that Indian life and language will continue. Thus parents can assist the teacher by showing her the importance of certain Indian artifacts, such as the loom for the Navajos, by using the child's first language with him, by sharing information about the local cultural patterns, and by following the teacher's wishes for helping in the classroom.

The teacher and the teacher-assistant can help parents, either singly or in small groups, understand how each is important, i. e., by helping the child move toward self-direction in the classroom. The parent can (1) read or tell stories; (2) carry on individual conversations; (3) make equipment and augment the store-bought play materials with stuffed toys, hobby horses; (4) be an interested fellow eater at breakfast, snack-time, and lunch so that all adults in the classroom eat with small groups of children; (5) accompany the children on the bus to and from school and on field trips; (6) interpret what the child is trying to convey when he speaks in his mother tongue and repeat the thought or word in English if possible.

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1. Dr. Barbara Biber - Challenges Ahead for Early Childhood Education, National Association for Education of Young Children, Washington, D. C.

so that the child will be helped in both languages; (7) move into small groups of children as the teacher directs, to supervise, re-direct, or enrich activity.

The parent may not be acquainted with the specialized techniques used by teachers in the schoolroom. The parents' educational efforts are usually more informal and geared to a specific and immediate life situation. Under the guidance of the regular teaching staff, a cadre of parent-teachers can be developed if the staff

1. Recognizes the role of the parent in the child's education,
2. Accepts each parent where he is and helps the parent to perform a role in the classroom which enhances the child's pride in his parent and in himself thereby fostering the child's participation in the classroom process.

By encouraging parents to visit and participate in the kindergarten program, the staff will:

1. Enhance the child's self-concept as he sees a member of his family welcomed by the school.
2. Gain helpful information about the child's early history, including his likes, dislikes, living habits, talents, and desires.
3. Help the parent grow in objectivity as he sees the child in a new setting with a group.
4. Provide an opportunity for the parent to work with other children under staff

guidance.

5. Facilitate the task of the family can join another p

OBJECTIVES

- a. To create an opportunity to see his parent
- b. To provide an opportunity to share with the parent and hopes about experience.
- c. To involve the parent in the daily kindergarten
- d. To incorporate the parent into the planning of the school program.
- e. To interpret the child's behavior to the parents to relate to the children are growing in school.

EXPERIENCES

1. Make parents feel comfortable providing seating
2. Facilitate participation in transportation as necessary for parents of the family.
3. Through home visits, talking, and sharing, the teacher learns about the family.

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guidance.

5. Facilitate parents' understanding of the task of the school so that the family can join the school in producing another permanent learner.

OBJECTIVES

- a. To create an opportunity for the child to see his parents and teachers together.
- b. To provide an opportunity for parents to share with the staff their knowledge and hopes about the children's school experience.
- c. To involve the parent in the ongoing daily kindergarten program.
- d. To incorporate the basic family culture into the planning and implementing of school program.
- e. To interpret the activities of the children in the program and to enable the parents to relate to the staff how their children are growing and learning while in school.

EXPERIENCES

1. Make parents feel at home and welcome by providing seating and meaningful jobs.
2. Facilitate participation by providing transportation and interpreters when necessary for parents and other members of the family.
3. Through home visits, formal and informal talking, and sharing information, the teacher learns about the child and his family.

4. Facilitate participation of the parents in the classroom through carrying out special activities such as cooking, reading stories, story telling, making learning materials,* going on field trips with the children, etc.
5. Encourage the parent to bring to school those things which have significant meaning to the child and his family - such as native costumes, arts and crafts, tribal foods, seasonal songs and dramatizations.
6. Plan time for parent and staff to share with one another their mutual concerns. Parents are people who have a variety of interests and needs apart from those of being the parents of a kindergarten child.
7. Plan field trips for and with parents.
8. Plan a community evening in accord with local customs and traditions.
9. Take pictures of children and families.

* Mothers of the Big Cypress Kindergarten children have made doll clothes in typical Seminole patterns for them.

SUPERVISION FOR IMPLEMENTATION OF THE BILINGUAL KINDERGARTEN PROGRAM

Supervision as educational leadership is the concept basic to the role of the principal and the education specialist. Working toward the achievement of agreed upon educational goals is the function of supervision. Constantly searching for better ways to advance the purposes and smooth operation of the kindergarten program makes the role of the supervisor a key one in coordinating and integrat-

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participation of the parents in the classroom through carrying out activities such as cooking, reading, story telling, making learnings,* going on field trips with parents, etc.

Encourage the parent to bring to school items which have significant meaning for the child and his family - such as folk songs, arts and crafts, tribal dances, songs and dramatizations.

Encourage the parent and staff to share their mutual concerns. Invite people who have a variety of needs apart from those of the parents of a kindergarten child.

Field trips for and with parents.

Community evening in accord with local customs and traditions.

Needs of children and families.

Big Cypress Kindergarten made doll clothes in typical patterns for them.

IMPLEMENTATION OF THE BILINGUAL PROGRAM

Educational leadership is the key to the role of the principal as a specialist. Working toward the goal of agreed upon educational objectives is the function of supervision. Continuing for better ways to advance the smooth operation of the kindergarten makes the role of the supervisor in coordinating and integrating

all of the facets into the curriculum: Health, Guidance, Social Services, parents and community.

Helping teachers to organize the classroom and think through the many parts of the program is one of the ways the supervisor assists in the initiation of new programs. By maintaining a climate of experimentation, flexibility, and safety to make mistakes the staff is aided in carrying out the new ideas desired in a program. Acceptance of the contributions of the staff as they see need to modify original planning creates opportunities for better feedback and stronger commitment to the program. Involvement of the staff in evaluating the outcomes of the program serves as a basis for further planning and innovations.

New ideas for kindergarten programs seem to take root better if parents and community take part in the original planning. Innovations relating to organization, methods, and content of the curriculum require careful exploration with and explanation to the parents of the young children in the program so that the program's purposes and goals may be fully understood. Involvement of the parents on a continuous basis helps both the community and the staff reach the goals they desire. Principals and education specialists are the key liaison people to bring the staff and parents into necessary and comfortable working relationships.

Supervision has the further task of inspiring staff members to continually develop their skills and their own unique qualities of teaching. Principals and education specialists together with the kindergarten staff develop a program for ongoing education. Important parts of this in-service

program are awareness of new information in regard to content areas, knowledge of new ways of working together, and new concepts in learning theory.

Understanding of the place the content introduced has and the meaning of the activities developed to help the children acquire control over this content in relation to the First Grade becomes a concern of the total staff of the school. Articulating the experiences children may have for learning and growing from Head Start through kindergarten and into the primary grades is of major concern to the principal and total school staff. In-service programs can clarify and enhance the meanings and soundness of the activities proposed.

OBJECTIVES

- I. To help initiate a comprehensive bilingual kindergarten program.
- II. To assist staff and parents in developing meaningful working relationships.
- III. To sustain the kindergarten program as it serves children and their parents throughout the year.
- IV. To assist teachers in maintaining a balance in the curriculum and incorporate all of the comprehensive services.
- V. To develop a significant in-service education program through regular staff meetings. (Daily for kindergarten staff, weekly for groups of teachers, monthly with principal and/or education specialist and intermittently with consultants.)
- VI. To assist staff in developing evaluation procedures.

EXPERIENCES

1. Establish meet-
garden staff,
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and parents fo
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2. Have time prio
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4. Involve in the
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ignificant in-service edu- through regular staff ly for kindergarten staff, ups of teachers, monthly and/or education special- ittently with consultants.)

f in developing evaluation

EXPERIENCES

1. Establish meetings of principal, kindergarten staff, education specialists, selected members of the local community, and parents for initial planning of objectives and scope of program. This group could form the nucleus of a functioning Parent Advisory Committee to formulate policy, e.g. priorities of applicants for kindergarten.
2. Have time prior to opening of school for staff to meet and to plan the opening weeks of school, select specific materials and equipment, organize activity zones in the classrooms and store supplies which are accessible to teachers and to children, outdoors as well as indoors.
3. Arrange for staff and parents of the kindergarten children to meet with representative members of the various components of the comprehensive services (Health, Guidance, and Social Service) prior to the opening of school or shortly after school opens.
4. Involve in the classrooms as visitors or for participation in the program selected community representatives and parents of the kindergarten children. Size of room, teacher's experience in working with parents, and familiarity of the teacher with the native language determines the number of parents that can be absorbed meaningfully and comfortably into the classroom activities on any one day. Establish a "Parent Room" where parents may meet together by themselves, or with invited guests to speak to them; to sew, make dolls and construct

equipment for the kindergarten class; where the teachers may have close contact with the parents.

5. Encourage parents to join class on both short and extended field trips; to supervise small groups of children in work and play activities; read and/or tell stories; and share songs and activities of native culture in both the mother tongue and English.
6. Organize regular meetings of staff and parents to talk about the activities of the program, to analyze the behavior of individual children, to plan for their growth and learning, to incorporate parents' and staff suggestions into the program for experimentation, and to evaluate the effects of the activities on the children's enjoyment of school. Other meetings are planned to discuss ways of helping staff work efficiently together and to resolve interpersonal difficulties.
7. Plan regular staff meeting of kindergarten and primary teachers and assistants to discuss the activities introduced into the kindergarten curriculum to insure articulation and expansion the following year. Share ideas and things-to-do, modify and re-organize the curriculum experiences to enhance children's learning opportunities.
8. Organize regular meetings to include personnel representing the comprehensive services so that staff can use information reported and thus gain insight into how to help children and their families use these services. Arrange for appropriate times to introduce these people into the classroom and to administer services.

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for the kindergarten class; teachers may have close contact with parents.

invite parents to join class on both extended field trips; to supervise groups of children in work and activities; read and/or tell stories; share songs and activities of culture in both the mother tongue and English.

hold regular meetings of staff and parents to talk about the activities of the program, to analyze the behavior of individual children, to plan for their individual learning, to incorporate parents' and staff suggestions into the program, to experiment, and to evaluate the results of the activities on the basis of the enjoyment of school. Other meetings are planned to discuss ways of working together efficiently and to solve interpersonal difficulties.

hold a regular staff meeting of kindergarten teachers and assistants to discuss the activities introduced into the kindergarten curriculum to insure continuity and expansion the following year. Share ideas and things-to-do, and re-organize the curriculum extension to enhance children's learning experiences.

hold regular meetings to include parents representing the comprehensive program so that staff can use information and thus gain insight into how children and their families use social services. Arrange for appropriate people to introduce these people into the program and administer services.

9. Organize an ongoing in-service program planned cooperatively by principals, education specialists, and staff around the concerns, interests, needs, and problems of the total kindergarten program.
10. Invite consultant help to observe the program and to share with the staff and supervisors new ideas, innovations, and information from results of current research in education and learning theory.
11. Help teachers develop their own unique and personal teaching styles by encouraging experimentation, sharing ideas and feelings with other staff members (set up encounter groups, and individual conference time) encourage attendance at workshops and in-service sessions.
12. Arrange time and have on hand models of evaluation procedures for teachers to analyze and from which to choose what is applicable to their own situations. Encourage teachers to keep 1) anecdotal information and 2) anecdotal records current on each child so that growth charts may be developed.

SOCIAL SERVICES IN A COMPREHENSIVE EARLY CHILDHOOD KINDERGARTEN PROGRAM

A comprehensive social service program is a family-centered program, not just education for the child. In regard to education, going back to its Latin root, educare means to lead out of the person that which is within him. It does not mean to fill up as one fills up a jug. With this idea in mind, we

can better see education's relatedness to a family-centered program. In such a program the social services should serve as the kind of mortar one puts around bricks to hold them together and thereby construct a wall. Social services are those integrative activities in the kindergarten program which tend to hold the whole wall of family living together, to support it and strengthen it. We see the social services intermingling and bringing together activities of specialists which tend to strengthen the family as a unit: the health needs of the child, the teacher, the community and its concern for the child and his family. The social service needs of the child are in reality community needs. Working with parents in all programs is of highest priority in the social services.

We have a tremendous task in learning about human relations and mental health: the kindergarten program for the child before he enters formal school represents an opportunity for him to learn how to live, how to get along with other people, with his peers, with his parents, with other adults and with those in authority. This requires a sense of self-direction and the self-esteem and sensitivity to others essential to the achievement of positive mental health. This is an area where the social worker can be helpful - getting people to communicate with one another. The social worker can help the staff which is working with children and families to understand each other. Parents are essential in any child development program since it is within the family that the child first learns how to regard himself and develops his own self-image. How people look at him as he joins other groups is related to the image which he developed in his family, an image which he carries as an essential part of his personality.

It makes no difference what parents may be, the child is the child of his family. The social worker must see this development. The social worker must see the situation and learn from it.

There are other terms of social service in the kindergarten program. Graduate workers who have a sense of human behavior could complement the curriculum of the child. The social worker's observations about individual children in a small group which the teacher is building.

The social worker is the person for the staff to learn about the families. The social worker's knowledge about social services can be transferred within the kindergarten program.

The social worker's complement of the program is positive human relations as well. The social worker both preservice and the social service members of staff are essential.

Social services must be one of our primary concerns in working with these kindergartens and young children? The social worker's programs can go back to the Christian era philosophy. "It is when the people lead themselves that we lead ourselves." That is the leadership. That is the social services help themselves, to lead themselves.

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should serve as the kind
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gram which tend to hold
family living together, to
strengthen it. We see the
intermingling and bringing
of specialists which tend
family as a unit: the
child, the teacher, the
concern for the child and
social service needs of the
community needs. Work-
all programs is of high-
social services.

task in learning about
mental health: the kin-
of the child before he
represents an opportuni-
now to live, how to get
ple, with his peers, with
other adults and with those
requires a sense of self-
self-esteem and sensitivity
to the achievement of
th. This is an area where
can be helpful - getting
together with one another. The
help the staff which is
and families to under-
parents are essential in
the program since it is
that the child first learns
and develops his own
able look at him as he
is related to the image
of his family, an image
an essential part of his

It makes no difference how poor or ignorant
parents may be, they are his parents, members
of his family. The social worker understands
this development. Staff must confront this
situation and learn to work with parents.

There are other things that are important in
terms of social services in a child develop-
ment program. Graduate professional social
workers who have studied subjects about hu-
man behavior could be helpful in the devel-
opment of the curriculum for the daily act-
ivities of the children. There are obser-
vations about individual children and the
small group which would be helpful to the
teacher in building the curriculum.

The social worker can serve as a resource
person for the staff and come to know more
about the families and the community. His
knowledge about social and cultural differ-
ences can be translated into activities
within the kindergarten.

The social worker in planning for the devel-
opment of the program can help bring about
positive human relations on the staff level
as well. The social worker can also help in
both preservice and in-service training of
the social service aides and in training
members of staff and volunteers.

Social services make a contribution to one
of our primary concerns: Where are we go-
ing with these kindergarten programs for
young children? The whole meaning of these
programs can go back to the Chinese pre-
Christian era philosopher, Laotze, who said,
"It is when the people can say we have done
this ourselves that you really have good
leadership." That is where we are going.
Social services help people do things for
themselves, to learn for themselves skills

by which to live in this complex world. Social service persons and other professionals help with this by training people so that knowledge and wisdom can be a resource for the everyday man and child. Not only are there things that families can do for their children, but they are in a position to teach others these skills. Perhaps we could share our technology and know-how about community services with the common man. Developmental provisions are necessary for growth. Creative leadership must be found to mobilize them for social service.

Excerpts from statements of Dr. Ira Gibbons, Director, Social Services, Project Head Start OEO at BIA Conference on Early Childhood Education, Albuquerque, New Mexico, March, 1968

DEVELOPING A COMPREHENSIVE SOCIAL SERVICE PROGRAM FOR THE FAMILY

The social service component of the family centered bilingual kindergarten aims to provide experiences which will build strong healthy persons, not only physically but also mentally and emotionally.* This means a plan needs to be developed to guarantee each family member an opportunity to become a helpful, contributing person who contributes to family, school, and community life.

Social service as a family centered activity seeks direction from the community social service agencies. The program would be so designed as to insure aid for families who need help to remedy or alter deficiencies and to lessen pressures and stresses.

As the family unit strengthened, opportunity

is expanded for come educational the family. In vice program to the specific goal

1. To promote standing o
2. To promote education
3. To promote derstanding goals.
4. To promote education hood to in community.

OBJECTIVES

- I. To promote standing of
- II. To promote cation in t activities.
- III. To promote derstanding goals.
- IV. To promote ucation ran to institut

EXPERIENCES

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d stresses.

strengthened, opportunity

is expanded for the family members to be-
come educational resources for children in
the family. In order for such a social ser-
vice program to evolve from the kindergarten
the specific goals are:

1. To promote family interest and under-
standing of the school goals.
2. To promote family involvement in the
education program and activities.
3. To promote school interest in and un-
derstanding of family and community
goals.
4. To promote community involvement in
education ranging from the neighbor-
hood to institutions in the wider
community.

OBJECTIVES

- I. To promote family interest in under-
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- IV. To promote community involvement in ed-
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to institutions in the wider community.

EXPERIENCES

1. Plan for a variety of ways in which the
parents may assist in the classroom.
Refer to section on Parent Involvement.
2. Encourage the teaching staff to work
closely with the social worker to be

sure of a clear understanding of each other's roles and objectives so that well-established plans may be made.

3. The social worker should be available to give information to families about community resources and how to use them. He is responsible for referrals and continuity in care when a variety of services are needed. The kindergarten teacher should be informed about the plan for any of the families in her group.
4. The social worker should plan to observe and participate in the kindergarten program so that he knows the child and his family in the school setting as well as at home. This helps the child and parent to know better the social service staff member.
5. Social worker should consult with teaching staff about the individual child's educational, social, and emotional problems and provide information about home conditions and social environment. The teacher also brings information about the child at school and, if she has visited the home, about the home; and together the two plan ways of solving the problem.
6. Social worker should gather and record relevant information about the needs of the children and their families together with the nature of the social service staff activity for providing help. The information should be available to teaching staff and administrators as well as the social service staff members.
7. Social worker should mobilize community resources to provide for adequate housing, food, clothing, and income maintenance

where the

8. Social workers in these situations in the past have implemented this report in their planning and to meet the

RE

The kindergarten teacher's responsibility for gathering information about the child's growth and development may be gained by keeping records of the child's behavior which reflect as objectives of the way the child's materials and

The staff should observe the behavior by how one works and the way he or she behaves before, when seen more objectively and each can contribute to help as free as possible of the staff may be helpful in discussions and questions may discuss the meaning of each child is staff members. In writing descriptions is helpful to

clear understanding of each child's needs and objectives so that well-planned plans may be made.

The social worker should be available to provide information to families about community resources and how to use them. He should be available for referrals and continue to be available when a variety of services are needed. The kindergarten teacher should be informed about the plan for any child in her group.

The social worker should plan to observe and participate in the kindergarten program so that he knows the child and his behavior in the school setting as well as in the home. This helps the child and parent understand the social service staff's role.

The social worker should consult with teaching staff about the individual child's educational, social, and emotional problems and obtain information about home conditions and social environment. The teaching staff provides information about the child's behavior and, if she has visited the home, about the home; and together the two work on solving the problem.

The social worker should gather and record information about the needs of children and their families together with the teaching staff and the nature of the social service program and the responsibility for providing help. The social worker should be available to teachers and administrators as well as to the social service staff members.

The social worker should mobilize community resources to provide for adequate housing, food, clothing, and income maintenance

where these are lacking in the family.

8. Social worker should assess the conditions in the community environment which have implications for the school program. This report should be used for basis of planning the social service program to meet the needs of the family.

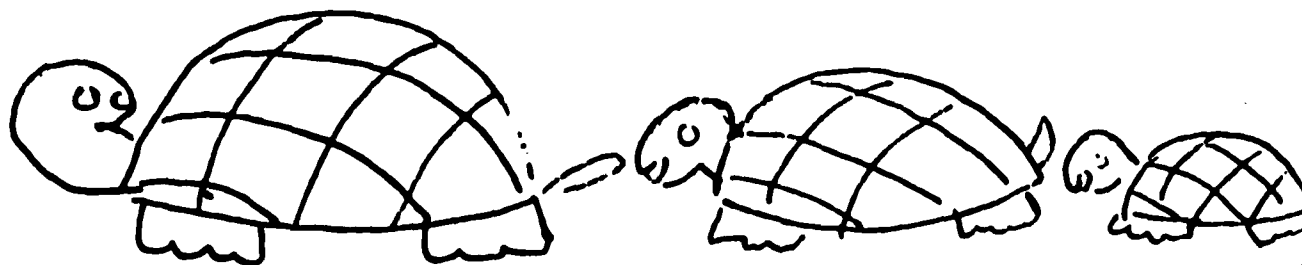
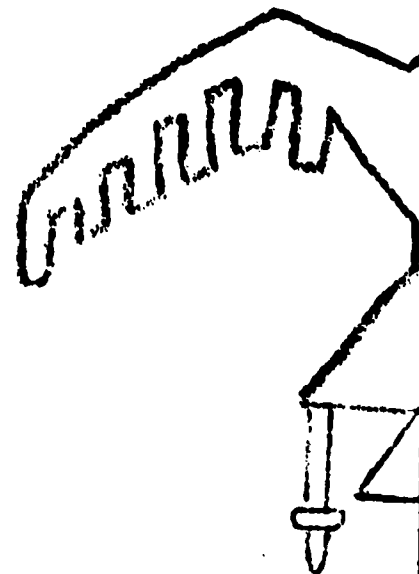
REPORT OF CHILD'S GROWTH

The kindergarten staff has the responsibility for gathering information regarding each child's growth in the classroom. This information may be used as feedback to report to the parents and as a record of the child's growth and development. This information is gained by keeping daily observation records of the child in the classroom. They should reflect as objective a judgment as possible of the way the child seems to behave and use materials and equipment.

The staff should be aware that the way each child sees the behavior of others is influenced by how one would like to see others behave and the way he expects others to be. Therefore, when several people keep records, a more objective report is likely to result and each can share what he sees. In an effort to help keep the reports on children as free as possible from the personal feelings of the staff, the following suggestions may be helpful. After reading the statements and questions following, the staff may discuss with one another the possible meaning of each remark and how application is made to the children in the class. As each child is discussed, the different ideas staff members have should be written down. In writing descriptions of the children, it is helpful to record the specific ways in

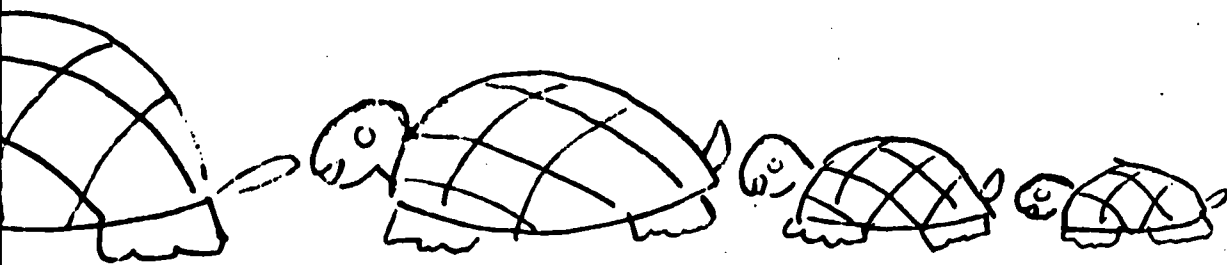
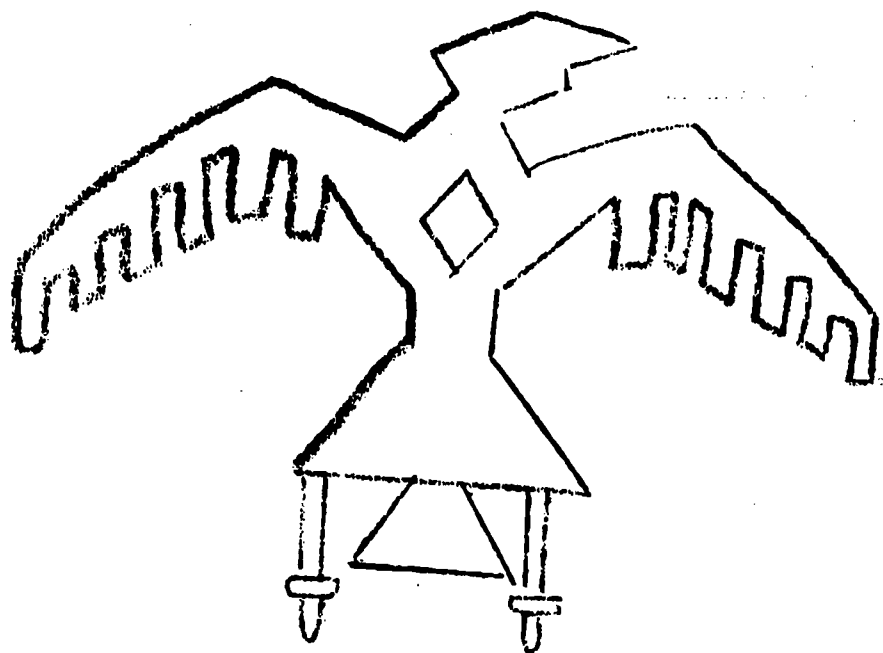
which they actually do things. Rather than writing descriptions such as "This child is a lovely, friendly child who always tries to please," the staff should try to write concrete behavioral descriptive statements. For example, one might say, "This child seems to withdraw from new activities when they are first introduced, but if an adult apparently coaxes him, he will try to stay at the new activity, but only if someone is close to him to give him encouragement."

Reports on each child should be made and filed at least every three months. Final reports are developed from the quarterly ones and the continuous daily anecdotal records. Periodic evaluations of each child in the classroom will (1) provide feedback information for parents, (2) assess the growth and development of the child during the school year, (3) provide a basis for planning further curriculum experiences and promote growth in learning, and (4) sharpen the observational powers of the teaching staff.



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REPORT OF CHILD'S GROWTH

_____ Kindergarten _____

Report on _____

School Period _____ To _____

Days Present _____ Days Absent _____

Position in Group (according to age) _____

Description of any handicap: _____

Teacher _____ Teacher Assistant _____

I. Physical Development.

A. Is the child energetic and forceful? Some children seem to be. The child who is lacking in vigor has a low energy output. A vigorous child is not necessarily speedy or quick, nor is he. The vigorous child performs powerfully and with a display of energy.

B. Is the child healthy? Does he have many medical or health problems? How often does he miss school frequently for medical reasons? What is the nature of the problem?

C. Does the child see himself as being capable of doing things that require physical strength or does he view himself as being inferior in physical ability? How does the child feel about his own ability to do things physically? How does he feel about his body? Is he typically involved in big-muscle activities such as running, jumping; or in small-muscle activities, such as buttoning?

REPORT OF CHILD'S GROWTH

_____ Kindergarten _____ Date of Report: _____

Birthdate: _____

To _____

Days Absent _____

(according to age) _____

by handicap: _____

Teacher Assistant _____

Development.

child energetic and forceful? Some children seem to waste motion and energy. Child who is lacking in vigor has a low energy output. Be sure to note that the child is not necessarily speedy or quick, nor is he necessarily efficient. Vigorous child performs powerfully and with a display of energy.

child healthy? Does he have many medical or health problems? Is he absent from school frequently for medical reasons? What is the nature of his problems?

child see himself as being capable of doing things which other children do? Does he view himself as being inferior in physical ability? How does he feel about his own ability to do things physically? How does he use his body? Is he typically involved in big-muscle activities, such as climbing, jumping; or in small-muscle activities, such as crayoning, pasting, or drawing?

II. Emotional Development.

- A. Is the child cheerful, happy, good-natured, laughing, good sense of humor; or on the contrary, is he morose, discontented, unhappy, sad? Disregard the degree to which the child is contented, consider the degree to which the child probably enjoys his life.
- B. Does the child seem to like to sit close to an adult, to be touched, to wink, or smile?
- C. Does the child react emotionally to many and frequent changes in situation, and quiet?

III. Social Development.

- A. Does the child continually seek out the company of others, and make friendly acceptable advances? His success in making such advances is a measure of his friendliness. Friendliness also implies an ability to respond to the advances of others.
- B. Does the child attempt to dominate social situations, to plan the activity of the group? Does he lead? How does he respond to being a leader? Is he a good follower?
- C. Does he seem to be fearful of social situations, to be hesitant when confronted by changing social situations?

IV. Cognitive Development.

- A. How well does he know his colors, shapes, numbers, etc.? Does he know his name? How good is his memory, from one situation to another situation?

velopment.

child cheerful, happy, good-natured, laughing, pleased; and does he have a sense of humor; or on the contrary, is he morose, gloomy, depressed, discontented, unhappy, sad? Disregard the degree to which the child pleases you. Consider the degree to which the child probably enjoys himself.

child seem to like to sit close to an adult? Does he enjoy a hug, pat, smile?

child react emotionally to many and frequent situations or is he passive?

opment.

child continually seek out the company of other children and adults and readily accept advances? His success in such contact is an indication of friendliness. Friendliness also implies an adaptive response on his part to advances of others.

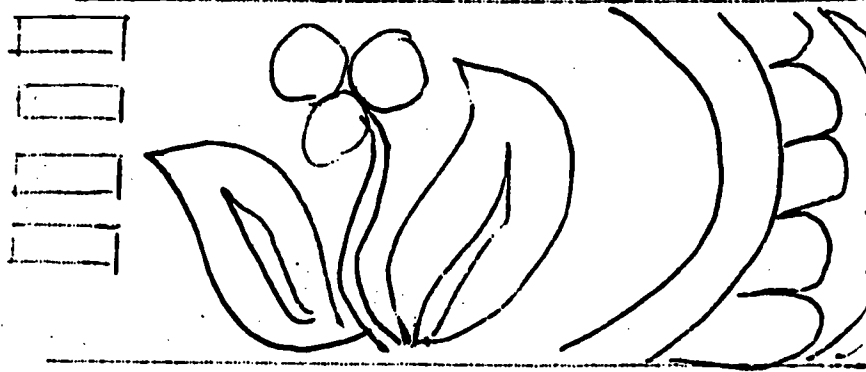
child attempt to dominate social situations, to take the initiative to direct the activity of the group? Does he lead? How successful is he in his attempt to be a leader? Is he a good follower?

child seem to be fearful of social situations? Is he apprehensive or shy and withdrawn when confronted by changing social situations?

velopment.

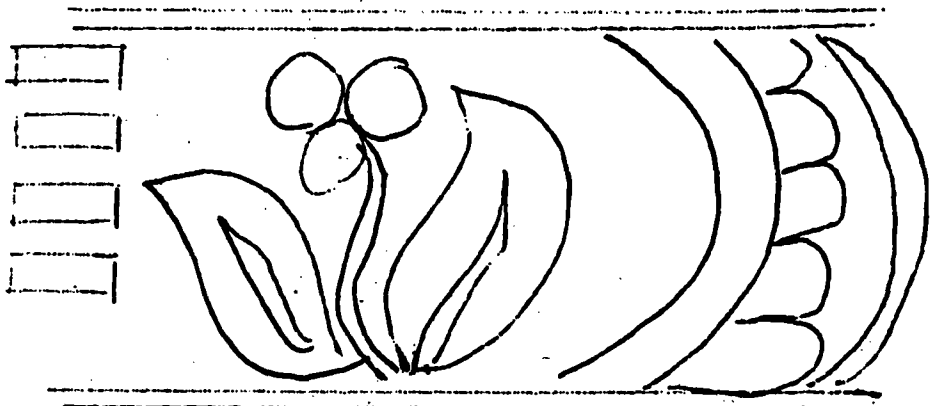
child does he know his colors, shapes, numbers, directions, such as down, under, over? Does he know his name? How good is his memory? Can he transfer his learning from one situation to another situation?

- B. Does he stick with a difficult task or does he give up at difficulty in following simple directions or does he get stimulated by new and novel material or does he refrain in the unfamiliar? How curious is he?
- C. Does he react favorably to difficult problem-solving situations himself from situations which demand intellectual ability from the teacher or others? The child's self-concept is he approaches difficult new material. How does he see new problems?



ck with a difficult task or does he give up quickly? Does he have
in following simple directions or does he catch on quickly? Is he
by new and novel material or does he refrain from becoming involved
miliar? How curious is he?

ct favorably to difficult problem-solving situations? Does he remove
m situations which demand intellectual ability, or does he seek help
acher or others? The child's self-concept is revealed by how eagerly
es difficult new material. How does he see himself when faced with
s?



In a comprehensive early childhood education program, the health section should be comprehensive and include numerous activities in which many people participate under the leadership of a health director, preferably the doctor, who will be responsible for the school health program. The following outline of school health services gives some ideas as to the activities and the people involved.

I. Appraisal Aspects

Health history of child and parents obtained from parents by social worker, nurse, teacher. Screening tests such as height, weight, vision, hearing, TB skin test, laboratory tests such as hemoglobin, urinalysis, done by technicians or trained aides.

Medical examination including developmental assessment by physician.

Dental examination by dentist or dental hygienist.

Health assessment of classroom by teaching staff and nurse.

II. Preventive Aspects.

Communicable disease contact. Immunizations by doctor or nurse.

Health check of personnel in contact with children, such as teaching staff, bus driver, and also food handlers.

Suggest health check on family members by social worker or nurse where indicated.

III.

COMPREHENSIVE HEALTH PROGRAM

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of personnel in contact with
h as teaching staff, bus
also food handlers.

h check on family members
ker or nurse where indica-

Safety environment and safety measures
in buildings are a responsibility of
the school board and must be according
to public health regulations. In rooms
the teacher should check on the chang-
ing environment according to the pro-
gram.

Proper sanitary facilities are provided
by the school under public health regu-
lations.

First aid equipment for injuries and
sudden illness, when minor, should be
available for the use of the teaching
staff.

Plans should be made to take care of
serious situations to include transpor-
tation to adequate facilities, such as
a hospital, by administrative personnel.

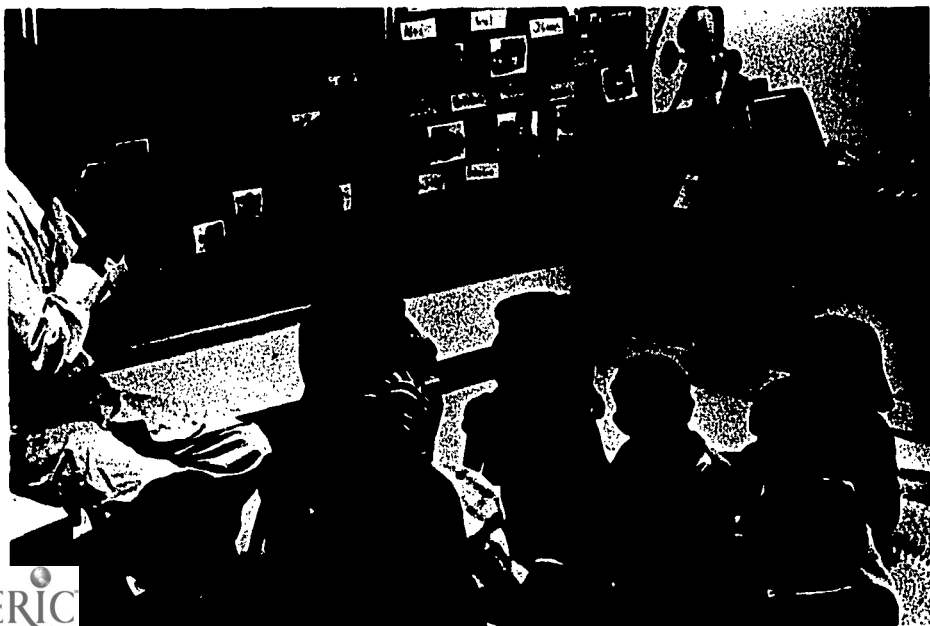
Technical assistance and consultation
in regard to content and evaluation of
health subject matter used in teaching
can be obtained from the physician,
dentist, dental hygienist, nurse.

III. Remedial Aspects

Follow-up services arranged by social
worker, nurse, principal, include cor-
rection of remedial defects, and health
counseling for child and his family.



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3615 Wisconsin Avenue, N.W.
Washington, D. C. 20016

Bits and Pieces - Imaginative Uses for Chil-
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Childhood Education In-
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aginative Uses for Chil-

Children and Oral Language (joint committee)
of ACEL;ASCD; I.R.A.; N.C.T.E.

Don't Push Me!

Equipment and Supplies

Housing for Early Childhood Education: Cen-
ters for Growing and Learning

How Good Is Our Kindergarten?

Implications of Basic Human Values for Edu-
cation

Play - Children's Business

Toward Better Kindergartens

From:

2. Association for Supervision and Curricu-
lum Development
1201 Sixteenth Street, N. W.
Washington, D. C.

Leadership for Improving Instruction (Year-
book)

Organizing for Improved Instructions

Role of Supervision and Curriculum, Direc-
tor in a Climate of Change (Yearbook)

Supervision in Action

Using Current Curriculum Development

From:

3. Bank Street Publications
69 Bank Street
New York, New York

Hochman, V. and Greenwald, H. Science Experiences in Early Childhood Education

Gilkeson, Elizabeth C. Let's Talk About Our Children

Johnson, Harriet The Art of Blockbuilding

Packet for Parents

Packet for Nursery School Teachers

Packet (second) for Nursery School Teachers

From:

4. Bureau of Indian Affairs
Department of Interior
U. S. Government
Washington, D. C. 20242

Indians of the Gulf Coast
Indians of North Carolina
Indians, Eskimos and Aleuts of Alaska
Indians of Montana and Wyoming
Indians of the Dakotas
Indians of Eastern Seaboard

Early Childhood Education for American Indians - Proceedings of a conference on Early Childhood Education for American Indians, March 5-7, 1968 at the University of New Mexico, Albuquerque, New Mexico

From:

5. National Association
of Young Children
1834 Connecticut Avenue
Washington, D. C.

Lady Allen of Howland
Lady Allen of Howland

Baker, Katherine

Beyer, Evelyn -
Teacher-Parent

Friedman, David
as Play Material

Haupt, Dorothy
Nursery School

Jones, Betty J.
Children?

From:

6. National Day
Chicago, Illinois

Feeding Little Children

Food for Young Children

From:

7. National Education
Department of
Nursery Education
1201 Sixteenth Street
Washington, D. C.

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University of New
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From:

5. National Association for the Education
of Young Children
1834 Connecticut Avenue, N. W.
Washington, D. C. 20009

Lady Allen of Hurtwood - Play Parks
Lady Allen of Hurtwood - Space for Play:
The Youngest
Children

Baker, Katherine Read - Let's Play Outdoors

Beyer, Evelyn - Sharing - A New Level in
Teacher-Parent Relationships

Friedman, David, et al. Water, Sand and Mud
as Play Materials

Haupt, Dorothy - Science Experiences for
Nursery School Children

Jones, Betty J. - What Is Music for Young
Children?

From:

6. National Dairy Council
Chicago, Illinois 60606

Feeding Little Folks

Food for Young Children

From:

7. National Education Association
Department of Elementary, Kindergarten,
Nursery Education
1201 Sixteenth St., N. W.
Washington, D. C.

Blockbuilding

Kindergarten Education

From:

8. Office of Child Development, HEW
Project Headstart
Washington, D. C.

Rainbow Series of Pamphlets Project Head Start

Beautiful Junk - (a book of ideas for pre-school equipment)

From:

9. Child Development Group of Mississippi
(O.E.O.)
Jackson, Mississippi

From the Ground Up - a book of ideas for pre-school equipment

From:

10. Science Research Associates
259 East Erie Street
Chicago, Illinois

Grant, Eve. H. Parents and Teachers as Partners

Piers, Marie - How to Work With Parents

From:

11. Educational Resources Information Center
U. S. Department of Health, Education
and Welfare: Office of Education
Washington, D. C. 20202

Educational
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Facts

Health
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Your Child

ADDRESS

1. Child Development
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Office of Education
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Educating Children in Nursery Schools and
Kindergartens

Educating Disadvantaged Children Under Six

Facts About Nutrition

Health Auxiliaries in the Indian Health Pro-
gram

Your Child from 1 to 6

ADDRESSES FOR ADDITIONAL RESOURCE MATERIAL

1. Children's Bureau, Office of Child De-
velopment, Department of Health, Edu-
cation and Welfare.
Washington, D. C.
2. Child Study Association of America
9 E. 89th Street
New York, New York
3. David Cook & Company - Publishers
850 N. Grove Avenue
Elgin, Illinois 60120
4. Merrill Palmer Institute
71 Terry Avenue
Detroit, Michigan
5. Metropolitan Life Insurance Company
1 Madison Avenue
New York, New York 10010
6. Play Schools Association
120 W. 57th Street
New York, New York

337

7. **Public Affairs Pamphlets**
22 E. 38th Street
New York, New York
8. **Society for Visual Education**
1345 Diversey Parkway
Chicago, Illinois 60614
9. **Your State Department of Education.**

FILMS

The following films are available, on a free-loan basis, Talking Pictures Service, Inc.

DISCIPLINE AND SELF-CONTROL

B/W, 25 min.

This film discusses the problem of discipline as one of children. The film shows how a teacher can establish conventional disciplinary problems; discusses adequate supervision and control, and shows how to help a child accept control.

ORGANIZING FREE PLAY

B/W, 22 min.

This film focuses on the facet of early childhood education for school children and their teachers in the physical surroundings. The film discusses these questions: What is free play? How does one control free play? An excellent training film. AUDIENCE GUIDE highlighting the meaning of "free play" and ORDERED IN QUANTITY WITH THE FILM THROUGH MODERN TALKING PICTURES SERVICE. DISCUSSION GUIDE AND PROGRAM MANUAL, designed exclusively for use with the film, develops in detail the salient points of "free play" philosophy with or without the film and may be ordered from The Office of Educational Resources, Washington, D. C. 20201

HEAD START TO CONFIDENCE

B/W, 20 min.

The film illustrates the vital need for every child to be recognized and worth as a person. It shows a teacher's various means of motivating preschool children through controlled achievement, language, and Spanish translation available. AUDIENCE GUIDES, in bulk quantities, available. DISCUSSION GUIDE AND PROGRAM MANUAL, to be used with the film, developed for program directors and/or discussion leaders. Order from Office of Educational Resources, Washington, D. C. 20201

JENNY IS A GOOD THING

Color, 18 min.

Head Start's newest film release. Dramatically shows concepts -- that the Nutrition program plays a major role in the activities in a quality Head Start center. A film for the best examples of the child teaching process to the children of Lancaster. Title song, "Jenny", an original music score by Mary music fame.

FILMS

films are available, on a free-loan basis, through the libraries of Modern Talking Picture Service, Inc.

SELF-CONTROL

B/W, 25 min.

MTP #9055

addresses the problem of discipline as one of teaching and living with young children. The film shows how a teacher can establish control in a friendly climate and prevent discipline problems; discusses adequate supervision, and the dangers of over and under-discipline. It shows how to help a child accept control.

FREE PLAY

B/W, 22 min.

MTP #9053

addresses the facet of early childhood education called Free Play. Using pre-recorded films and their teachers in the physical surroundings of the nursery school, the film asks these questions: What is free play? How do children learn from free play? How to control free play? An excellent training film, also available in Spanish. An excellent film highlighting the meaning of "free play" as a curriculum of discovery may be made available with the film through Modern Talking Picture Service, Inc. The new DISCUSSION GUIDE AND PROGRAM MANUAL, designed exclusively for the use of discussion leaders, covers all the salient points of "free play" philosophy. It is recommended for use with the film and may be ordered from The Office of Child Development, HEW, Washington, D. C. 20201

SELF-CONFIDENCE

B/W, 20 min.

MTP #9054

addresses the vital need for every child to have a sense of his own importance and self-worth. It shows a teacher's various means of building the self-confidence of children through controlled achievement, language and performance of useful tasks. Discussion Guide and Program Manual available. AUDIENCE GUIDES, in bulk, will be sent with the film upon request. DISCUSSION GUIDE AND PROGRAM MANUAL, to be used with or without the film, has been prepared for program directors and/or discussion leaders. Please order from Office of Child Development, Washington, D. C. 20201

THE THING

Color, 18 min.

MTP # 9273

Best film release. Dramatically shows one of Head Start's most important concepts. The Nutrition program plays a major role and is an integral part of the daily routine at a quality Head Start center. A film for training staff members and introducing parents of the child teaching process to the community at large. Narrated by Burt Reynolds. Includes the song, "Jenny", an original music score by Noel Stookey, of Peter, Paul and Mary.

A Leader's Discussion Guide (Rainbow Series #3E) accompanies the instructions on discussion techniques, insights into the full sign nutrition program, and suggesting questions to use in discussing t is part of the total Nutrition Kit and also may be ordered in bu Start, 1200 19th Street, N. W., Washington, D. C., 20506. Atten Film also available in Spanish.

Addresses of Modern Talking Service Film Libraries, for ordering

Atlanta, Georgia 30308
714 Spring Street, N.W.
Mr. Thomas L. Gunter
875-5666
Area code 404

Los Angeles, Ca
1145 N. McCadder
Mr. Harry Sanfo
469-8282
Area code 2

Cedar Rapids, Iowa 52404
c/o Pratt Educational Media, Inc.
200 Third Avenue, S. W.
Mrs. Louise Nordstrom
363-8144
Area code 319

Milwaukee, Wisco
c/o Roa's Films
1696 North Astor
Mrs. Roa K. Bird
271-0861
Area code 4

Charlotte, North Carolina 28202
503 North College Street
Mr. Max Austin
377-2574
Area code 704

Minneapolis, Min
9129 Lyndale Ave
Mr. Cairan Eiger
884-5383
Area code 6

Chicago, Illinois 60611
160 E. Grand Avenue
Mr. William Gallagher
467-6470
Area code 312

San Francisco, C
16 Spear Street
Mr. William Schw
982-1712
Area code 4

Detroit, Michigan 48235
15921 W. 8 Mile Road
Mr. Kermit Cable
273-2070
Area code 313

Seattle, Washing
c/o Rarig Presen
2100 North 45th
Mrs. E. A. Rarig
633-3878
Area code 20

ion Guide (Rainbow Series #3E) accompanies the film, presenting clear in-
ussion techniques, insights into the full significance of Head Start's Nu-
nd suggesting questions to use in discussing the film itself. The Guide
al Nutrition Kit and also may be ordered in bulk through Project Head
treet, N. W., Washington, D. C., 20506. Attention: Miss Sue Sadow.
e in Spanish.

n Talking Service Film Libraries, for ordering:

0308 Los Angeles, California 90038
N.W. 1145 N. McCadden Place
er Mr. Harry Sanford
469-8282
Area code 213

52404 Milwaukee, Wisconsin 53202
nal Media, Inc. c/o Roa's Films
S. W. 1696 North Astor Street
rom Mrs. Roa K. Birch
271-0861
Area code 414

arolina 28202 Minneapolis, Minnesota 55420
Street 9129 Lyndale Avenue, S.
Mr. Cairan Eigen
884-5383
Area code 612

60611 San Francisco, California 94105
er 16 Spear Street
Mr. William Schweizer
982-1712
Area code 415

8235 Seattle, Washington 98103
ad c/o Rarig Presentation Services, Inc.
2100 North 45th Street
Mrs. E. A. Rarig
633-3878
Area code 206

Washington, D. C. 20036
Suite 4, 2000 "L" St., N. W.
Mrs. Maria Denis
659-9234
Area code 202

Omaha, Nebraska 68102
c/o Modern Sound Pictures, Inc.
1410 Howard Street
Mr. Keith T. Smith
341-8476
Area code 402

Philadelphia, Pennsylvania 19107
1234 Spruce Street
Mrs. E. H. Dunn
545-2500
Area code 215

The following films are available on a free-loan basis :
Washington, D. C.

BLOCKS.....A MEDIUM FOR PERCEPTUAL LEARNING

The second in a series of training films for teachers of
film focuses on the perceptual learnings that are inher-
derived from how the child perceives the blocks with wh
he builds. (Source: Campus Film Productions, New York

LEARNING THROUGH THE ARTS

The film shows experiences with language arts, response
use of paint and clay. It shows how discovery and expr
natural and joyous part of life of the young child. (S
Robertson Blvd., Los Angeles, California)

GUIDING BEHAVIOR

Teachers deal with common developmental problems of 3,
Churchill Films)

20036
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are available on a free-loan basis from BIA Central Office, Education,

A MEDIUM FOR PERCEPTUAL LEARNING 17 min.

ies of training films for teachers of early childhood education. The
perceptual learnings that are inherent in block building and which are
e child perceives the blocks with which he works and the space in which
: Campus Film Productions, New York City, N. Y.)

E ARTS 22 min.

riences with language arts, response to music and rhythm, imaginative
ay. It shows how discovery and expression through the arts can be a
part of life of the young child. (Source: Churchill Films, 662 N.
s Angeles, California)

20 min.

common developmental problems of 3, 4 and 5 year olds. (Source:

SETTING THE STAGE FOR LEARNING

22 min.

Pictures equipment and simple "props" - arranged for many kinds of le
Churchill Films)

LITTLE WORLD

20 min.

Shows how a child development center looks and operates, the necessary
days program in action. (Source: Health and Welfare Materials Center)

Available from McGraw Hill, 333 W. 42 St., New York, N. Y., for \$15.00

A CHANCE FOR CHANGE

30 min.

Shows how a community built a strong child development center using the

OTHER SOURCES OF FILMS

Educational Film Guide (annually)
H. W. Wilson & Co.
950 University Avenue
New York, New York

Dairy Council of California
Imperial and San Diego Counties
4604 University Avenue
San Diego, California 92116

Educators Guide to Free Films
Educators Progress Service
Randolph, Wisconsin

Selected Films in Child Life
Department of Health, Education
and Welfare
Washington, D. C.

Superintendent of Documents
U. S. Government Printing Office
Washington, D. C.

ARNING

22 min.

ample "props" - arranged for many kinds of learning. (Source:

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(Source: Health and Welfare Materials Center, New York City, N.Y.)

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Dairy Council of California
Imperial and San Diego Counties
4604 University Avenue
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Selected Films in Child Life
Department of Health, Education
and Welfare
Washington, D. C.

Superintendent of Documents
U. S. Government Printing Office
Washington, D. C.

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