Although this syllabus is one result of an eight-week program designed to train Indian aides for work on reservations, it is also written to be used by all persons who will serve as educational aides or sub-professionals. Materials are presented to provide the aide with an understanding of child development, all facets of the curriculum, Indian cultural heritage, and community relationships. The concluding section is a compilation of ideas, tasks, and processes related to audiovisual education and communication in the classroom. (SW)
INDIAN TEACHER-AIDE HANDBOOK

By CARYL STEERE
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The Indian Education Center at Arizona State University, prior to and during 1964, became acutely aware of the need for trained Indian teacher-aides to assist in funded pre-school programs being developed on Indian reservations throughout the nation. In response to this awareness, which in large measure resulted from contact with tribal leaders and their demands for such a training program, the Indian Education Center developed a proposal which was submitted to the Community Action section of the Office of Economic Opportunity.

To develop the plan most intelligently for a training program for Indian teacher-aides, staff members of the Indian Education Center visited some 20 reservations, asking questions and trying to learn from tribal leaders and school officials the kind of program they felt was needed. Out of these contacts a program was developed which had these objectives:

1. To provide pre-school education and instruction for the teacher-aide.
2. To establish the foundation for effective working relationships between the teacher and teacher-aide.
3. To provide the information about Indian culture necessary to understand the Indian child.
4. To assist the teacher-aides in understanding the value and purpose of education.
5. To develop the teacher-aides into vital forces who can make education understandable to the people in their local communities.

Initial difficulties were encountered in getting the program funded in time to alert the individual teacher-aides and to hire the necessary staff. However, the Community Action Office in Washington rallied magnificently in obtaining final approval of the training program, so that, although the program was started later than planned, it was held and aides were trained on the campus of Arizona State University for an eight-week period during the summer of 1965.
Facilities of the campus Laboratory School were utilized, with Indian pre-school children from the neighboring Salt River Indian reservation attending and providing a constant demonstration classroom. Instructional areas covered in the training included:

1. Primary and pre-school education
2. Child development
3. English
4. Community in the school
5. Indian education and Indian values
6. Creative activities
7. Directed teaching
8. Teacher and teacher-aides relationship, and
9. Audiovisual and communications techniques.

The purpose of this Indian teacher-aide training program was to provide meaningful experiences so as to equip the aides to operate with more confidence and at a more effective level in and out of the classroom. The educational level of the aides ranged from as high as several years of college to the other extreme of several years of elementary schooling.

Every aide was highly motivated and dedicated to return and assist his or her tribe in the development of an effective pre-school program.

The need for pre-school education for Indian children long has been recognized by Indians and other specialists in the field of Indian education. The Bureau of Indian Affairs has expressed vocally the desirability of having Indian children start school no later than the age of 5. This never has been possible through Bureau of Indian Affairs schools because Congress appropriates funds only for Indian children after the age of 6. This meant that the non-English-speaking Indian child, or, for that matter, the culturally disadvantaged Indian child, would enter a pre-first experience at the age of 6, and would begin the first grade at age 7. In other words, through no fault of the Indian child or the Indian parent, Indian children were a year retarded from the beginning.

This problem had been recognized for many years, but little was done until the passage of the Economic Opportunity Act. One of the most frequently requested programs by Indian tribes under Title II, Community Action Programs, has been pre-school training.

Approximately 20 tribes today have funded pre-school programs which allow Indian children to obtain a “headstart.” The success of the pre-school or Head-start program in large measure will rest on the skill and effectiveness not only of the teachers but of the teacher-aides. In many cases, an Indian teacher aide who is knowledgeable about his or her tribe, its culture, and the local community can be a far more effective teacher with the pre-school group than can a professionally trained teacher imported from a distant state unfamiliar with the needs and values of Indian people.

The Indian teacher-aide training program conducted at Arizona State University during the summer of 1965 was predicated on, and dedicated to, the concept that the success of Indian pre-school programs rested in large measure on the effectiveness of the teacher-aides.
Certainly, the staff of the training program was responsible for the tremendous success which the program enjoyed. The staff included:

Caryl Steere—Director
Patricia Kukulski—Co-Director
Joseph Steere—Photographer and Audio-Visual Instructor
Albert Kukulski—Coordinator
Betty Meador—Demonstration School Classroom Teacher
Edith Krueger—Project Secretary

It would be impossible to acknowledge adequately the significance of the parts played by all the persons who contributed to the success of the training program; however, we should like especially to express our appreciation to:

Dr. G. D. McGrath—Dean, College of Education, Arizona State University
Dr. Roy Doyle—Assistant Dean, College of Education, Arizona State University
Mr. William Stansell—Principal, Campus Laboratory School
Mr. Noel Scott—Reservation Principal, Salt River Reservation
Mr. Filmore Carlos—Chairman, Salt River-Pima Maricopa Tribe
Mrs. Joyce Huggins—Child Care Consultant, Child Welfare Department, State of Arizona

And, finally, in editing this book, members of the staff of ASU’s Bureau of Publications, especially Mr. Broderick Johnson whose advice and kind assistance were tremendously helpful.

Robert A. Roessel, Jr., Ed.D.
Professor of Education
SECTION I

THE TEACHER-AIDE AND THE CHILD

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CARYL STEERE
COLLEGE OF EDUCATION
ARIZONA STATE UNIVERSITY
SYLLABUS FOR TRAINING OF TEACHER-AIDES

PREFACE

This syllabus is an outgrowth of the Indian Teacher-Aide Training Program at Arizona State University conducted during the summer of 1965. The eight-week program was sponsored by the Office of Economic Opportunity to train Indian aides for work with teachers in the developing pre-school programs on the reservations. The syllabus is written to be used by all persons, however, who will serve as aides or sub-professionals working under the direction and supervision of certified personnel; and the authors hope that it will be useful to teachers as they work with teacher-aides.

NEED FOR THE SYLLABUS

A syllabus was planned as part of the pilot program to train Indian teacher-aides to work in pre-school classrooms on the various reservations. As the institute progressed, it became obvious that a written guide would be needed for adequate functioning of the sub-professional on his or her job. The institute enrollees expressed the need for the kind of material presented in this syllabus, and their understandings set the tone and the pace which characterize the format and material. As Community Action Programs are being funded and as programs for the pre-school child are mushrooming, it is hoped that this syllabus may be useful as a guide to the teacher-aide in many of these projects.

USE OF THE SYLLABUS

It is intended to be used as a guide for the teacher-aide to supplement the program directed by the teacher, and may serve as a guide for the aide working with younger children or older children. The principles are the same. It is understood that the material will be adapted to the problems, the individual children, the varied cultural and environmental conditions in which it will be used. To function at a high level in the classroom and in the community, the aide must have an understanding of child development, all facets of the curriculum, the cultural heritage, and community relationships in his particular area.
I. EXAMINING THE OBJECTIVES

A. OBJECTIVES OF THE TEACHER-AIDE AS HE OR SHE WORKS WITH THE CHILD

1. To gain an understanding of the physical, mental, and emotional and social characteristics and developmental stages of the pre-school child.

2. To gain a knowledge and an awareness of specific individual differences in children and to develop specific techniques of working with them.

3. To gain an understanding of the importance of the curriculum in relating to growth.

4. To gain an understanding of the importance of creative activities for pre-school children.

5. To gain an understanding of the resources available for educating the pre-school child.

6. To gain this understanding and experience by observation and participation in the classroom.

B. OBJECTIVES OF THE INDIVIDUAL AIDE IN BECOMING ACQUAINTED WITH THE JOB

1. To understand the purposes of kindergarten education.

2. To become acquainted with the classroom and the materials.

3. To become acquainted with a kindergarten daily schedule.

4. To learn to keep a neat, well organized notebook.

5. To know personal qualifications in the position of teacher-aide:
   a. to appear neat in manner and dress in the classroom.
   b. to cooperate with teacher and staff members.
   c. to talk and listen to young children.
   d. to show enthusiasm for the work and for children.
   e. to keep a sense of humor and to overlook petty irritations.
   f. to be imaginative in assistance and approach to classroom duties.
   g. to understand the need for good health and to be rested and relaxed while working with young children.
   h. to see things to do and to go ahead on her own, with the teacher's approval, to do them.
   i. to accept responsibility and to be dependable, giving a sense of security to the children.
   j. to accept a child as he is and to guide him in his needs with patience and understanding.
II. UNDERSTANDING THE YOUNG CHILD

A. CHARACTERISTICS OF YOUNG CHILDREN

1. INFORMATION ON AGES AND STAGES

Children are more alike than they are different. This makes it possible to educate them in groups. Children of ages 3, 4, and 5 years are more like one another than are children of ages 6, 7, and 8. They will pull wagons, ride tricycles, climb and slide, pretend they are playing house, listen to stories, run and roll, walk and skip to music, play with water, love animals, ask questions, and demand attention. They need to talk and they love to laugh and be boisterous. But each year the way the child does each of these things will change.

Children grow with individual patterns and at different rates. Some children may develop rapidly in certain areas but slowly in others. This makes it important for the aide to know what is characteristic of children at different ages and to understand that growth for all children is continuous but that each child progresses at his own rate. Certain characteristics appear in children of pre-school age.

THE THREE-YEAR-OLD

The three-year-old is growing from his baby-stage into that of childhood.

Physical Characteristics:

The three-year-old is rapidly developing good motor control. He is especially concerned with using his large muscles, and enjoys active motor activity.

He is more sure on his feet.
He is learning to dress and undress himself but he still needs some help.
He is learning to go to the toilet by himself.
He can run rapidly or slowly, turn sharp corners and make sudden stops.
He is quite independent in feeding himself.
He may be able to button and unbutton side and front buttons if they are large enough.

Intellectual Characteristics:

He can speak in three- and four-word sentences. He uses pronouns, "I," "me."
He has a vivid imagination and likes to tell tales.
He is interested in the things around him and begins to ask "why."
He usually does not name colors but notices them. His understanding of shape and form still is limited.
He likes to name things and to investigate them.
He likes to have a feeling of finishing and completing a job.
He likes to imitate, whether it is sounds, motions, animals, people.
He is ready to learn and to listen.
He enjoys rhythm and having fun to music.

*Social and Emotional Characteristics:*
He is beginning to cooperate with other people and to enjoy playing with other children. However, he is just beginning to learn to share and to take turns.
He is interested in other people.
He likes activity and tends to act while he talks.
He is beginning to control his outbursts.
He may have fears that he begins to associate with something specific—a dog, for example.
He may begin to stutter.
He begins to be interested in the opposite sex.

**THE FOUR-YEAR-OLD**
The four-year-old is more sophisticated and independent. He is able to do many things for himself.

*Physical Characteristics:*
He is more vigorous in his active play than he was at three. He moves faster but he has more ability to control his movements in such ways as sudden starts and stops.
He tries to button his clothes and is interested in lacing his shoes.
He shows an interest in experimenting with crayons, clay, and paints.

*Intellectual Development:*
He speaks in four-and five-word sentences and uses words for their pleasant sounds instead of their meanings. He participates in activities just for the fun of being active.
He tells lengthy stories, whether true or make-believe, carries on long and involved conversations, and, in general, likes to hear himself talk.
He has little understanding of what is past, or concern for the future. What is "right now" is important to the four-year-old.
He is learning the difference between what is real and what is "make believe."
He can listen for longer periods of time and he is beginning to think for himself.
He is interested and curious about the new things he is finding in the expanding world around him.
He enjoys listening to stories, particularly those about animals, people, and real things.

Social and Emotional Characteristics:
He is sociable and, though he likes companionship, he may be boastful, bossy, and talkative and name-calling. “I’ll sock you,” is a common threat.
He may develop fast friendships with children of his own sex.
He is beginning to cooperate with other children in play, as evidenced by his willingness to participate in associative play and in dramatic play activities. However, he still enjoys opportunities to play by himself.
This age likes to be independent, and he is trying and testing his new abilities. This may make him change his behavior quickly from quarrelsome and fighting to cooperative and charming.
He may have unreasonable fears, such as a fear of the dark.
He likes to ask questions.

THE FIVE-YEAR-OLD
Fives are much more capable than fours, but we still must remember that young children are physical in their responses.

Physical Characteristics:
He is rougher and noisier than he was at four. He runs faster, climbs higher and more freely. His play is vigorous. He runs, climbs, reaches, grasps, and shouts.
He has better balance and muscle control than he had at four.
He has better control of his hands and legs. He begins to handle jobs such as lacing his shoes, and buttoning his clothes. His coordination is still to be refined. He needs lots of practice, no matter what the skill is that he is developing.
His eyes still are not ready for close work. He sees things at a distance.

Intellectual Characteristics:
Fives love to talk. Words have a fascination for them. This child has a good memory. He invents new words; he rhymes; he enjoys new words; he expresses his ideas freely.
His efforts to “grow up” may cause him to be a person of contrasts. This may be shown in his language when he sometimes uses many big words but at other times resorts to baby-talk.
He likes to be given responsibility.
He is not always sure of the difference and is learning what is “real” and what is “make-believe” in the grown-up world.
He is beginning to have a time-sense. He begins to know what happened yesterday and what might happen tomorrow.
Five-year-olds begin to have a good deal of information based upon what they have observed. They enjoy participation in group discussion and planning where they have the opportunity to demonstrate their abilities to learn and to be curious about the growing world around them.

His attention span is increasing but it varies according to his particular interest, his experience, and his individuality.

The five-year-old is curious and this curiosity is constant and knows no bounds.

He begins to understand sex differences and to know the role of mothers and fathers in his life.

Social and Emotional Characteristics:

He is more self-confident, stable, and cooperative.

He plays best with one child and can “give and take” in the group for short periods of time.

He enjoys cooperative play and participates with other fives in planning and carrying out group activity.

He prefers children of his own age and development.

He is growing in his ability to share his songs, his pictures, and his stories with the group.

He is learning to use his voice to solve problems instead of hitting and grabbing.

2. BASIC NEEDS OF CHILDREN

The seven basic needs as described by Helen Heffernan and Vivian Edminster Todd (The Kindergarten Teacher, Boston: D. C. Heath and Company, 1960, p. 26) have been useful in working with the sub-professional who will work with the classroom teacher. These have been adapted in the present guide to meet the needs of this classroom aide in her work.

They are as follows:

Self-confidence
Belonging to the group
Achievement
Freedom from fear
Freedom from guilt
A variety of experiences
Love, or relating to those around you with an emotional tie

a. Self-confidence

The aide will have opportunities as she works with the children to help the child develop self-confidence. The child who feels worthwhile and successful is the child who will be learning.
b. Belonging to the group

This need is closely related to how the child feels about himself as a person. Each child wants to be a friend to other children; he needs to feel that he is a worthwhile member of the group. An aide may help the child to find his place in the group. Through her relationship to the children, her evidences of affection, her understanding of individual behavior and her acceptance of the child, she contributes an important part to the atmosphere that makes each child feel accepted in the group. For instance, after an illness, she welcomes the child, by her friendliness and sincerity, back into the group and helps him to make the transition between what the group had been doing before he left and what will be happening that day.

c. Achievement

It is important for each child to be successful at something. The aide can be helpful in an effort to see that each child has some time during each day when he is able to do an activity with a feeling of success.

d. Freedom From Fear

The child who is preoccupied with fears is the child who cannot give his attention to learning. It is important to let the child talk about things that are troubling him. To bring information to the child, and to help him understand and dispel unknowns that cause fears are responsibilities that the aide must assume. The aide should be a good listener.

e. Freedom From Guilt

The child who feels guilty will be the child who will be fearful of trying new situations or ideas. The aide will be helpful in meeting the child's basic needs when she fully understands why a child behaves as he does, what is characteristic of the behavior of young children, and how to teach the child without making him feel that his behavior is "bad." It is important that the aide let the child know he is accepted, even though his behavior is unacceptable.

f. Variety of Experiences

Children's growth comes from many first-hand experiences in many areas of activity. A well-balanced program for children is one that will satisfy children's needs in many different ways.

g. Love, or Relating to Those Around You With an Emotional Tie

Children are honest in their feelings and quick to feel and to know when adults are approving of them. Children are little mirrors that reflect the love of those around them.

B. GUIDELINES IN THE STUDY OF THE YOUNG CHILD:

1. HOW IS THE CHILD MEETING THE DEMANDS MADE UPON HIM?

Physically?
- Is he healthy?
- Does he tire more quickly than the other children?
* Does he show that he is under a nervous strain?
* Has he a problem with vision, with hearing, with speech, with coordination?

Emotionally, socially, intellectually?
* Is he able to listen?
* Is he cooperative?
* How does he play with the other children?
* Does he accept the routines of the day? Can he follow directions of both teacher and aide?
* Does he have any special abilities? What things are easy for him and what things are hard for him?
* Can he express himself clearly with words? Is he successful in English as well as in his own language?

2. WHAT IS THE EXPERIENCE OF THIS CHILD?

What is his home life?
* What is his home like?
* Who are his brothers and sisters and what is his place in the group?
* Has he traveled away from his home?

What kind of a child is he?
* Is he able to do things by himself with confidence?
* Is he fearful and timid?

How does the child feel toward other people?
* Does he have friends?
* Does he relate to the adults?
* Is he hostile and unhappy?

What are the things this child likes best to do?
Example: talk, draw, play outdoors, care for pets, sing, plant and dig?

C. ASSIGNMENT NO. 1

On the following pages are observations for the aide to complete. They were planned with the intent of aiding understanding of the children in the classroom. Use the previous page as a guideline for the activity.
<table>
<thead>
<tr>
<th>The Ways He Is Like 5s</th>
<th>The Ways He Is Unlike 5s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>What the Child Did</td>
<td>What the Teacher Did</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>What the Child Said (the actual words)</td>
<td></td>
</tr>
</tbody>
</table>
OBSERVING A CHILD

Now try adding your part in the child's experience:

<table>
<thead>
<tr>
<th>What the Child Did</th>
<th>*What Did You Do?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What the Child Said</th>
<th>*What Did You Say?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
OBSERVATION OF A CHILD
(After several weeks in school)

Observe one child this week and fill out the following:

Physical characteristics: (What does he look like?)

How does the child move about in his play?

Intellectual characteristics: (Does his performance compare favorably with that of others of his age?)

What special things can be do?
Social characteristics: (How does he adjust to other children?)

How does he play with children in the kindergarten?

Emotional characteristics: (How well does he accept and react to the world around him?)

Is he fearful or shy? Does he need a great deal of attention? Is he happy?
III. GUIDING THE YOUNG CHILD

Whatever a child does has meaning. He tells with every movement of his body how he feels. Children are more alike than different, and knowing some of the differences and knowing when the differences are important is a skill that an aide will need to develop. It is necessary to remember that each child is important as an individual and that differences are to be respected. Children’s feelings come to school with them, and adults must try to understand the language of children’s behavior.

A. KNOWLEDGE AND AWARENESS OF DIFFERENCES

Learn about children by watching them play together. Work and interact with the children each day and notice differences. Discover whether one child stands out more than the others. A description of one child may help to illustrate how children are different.

Joe was one of the five-year-olds who was bigger than the other boys in the group. Joe did not feel like doing what the other children were doing. Whenever the group was together he was on the edge doing what he pleased, such as playing with blocks, looking at a book, or playing with dishes in the doll corner. He rushed from one thing to another. He was restless and unable to listen. He demanded individual attention from the adults and wanted his own way in everything he did. Such behavior is very evident in the early sessions of any group. As a result of these observations it is important to think, “What may have caused this behavior?” “Why is he like he is?” “Why does he act as he does?” Joe may be described as an aggressive child who is pushing out at the world around him.

A good way of observing individual differences among children and a way of developing some understanding of meanings behind a child’s behavior is to study one child. Compare what this child does with the characteristics described as typical of children for his age-group. (Pages on ages and stages, Section II)
The following format has been helpful to aides in understanding the individual differences in children. This format continues in detail the behavior of Joe as he was described earlier in this chapter.

**INDIVIDUAL DIFFERENCES**

<table>
<thead>
<tr>
<th>The Way He is Like 5s</th>
<th>The Way He is Unlike 5s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. He is very active.</td>
<td>1. He is more active, with less control than other 5s in group.</td>
</tr>
<tr>
<td>2. He is noisy and strong.</td>
<td>2. He is much stronger than other 5s.</td>
</tr>
<tr>
<td>3. He is a boy.</td>
<td>3. He is larger. He is heavier than other 5s. He is taller than other 5s in the group.</td>
</tr>
<tr>
<td>4. He loves to play, is social.</td>
<td>4. He is uncooperative in his play more frequently than other 5s, selfish in his demands.</td>
</tr>
<tr>
<td>5. He wants to be part of a group.</td>
<td>5. He is unable to control himself — fights, quarrels, hits, kicks, destroys other children's work, generally resistant to routines.</td>
</tr>
<tr>
<td>6. He likes attention.</td>
<td>6. He demands individual adult attention more than the others.</td>
</tr>
<tr>
<td>7. He is curious and likes to look at books.</td>
<td>7. He is restless, has a short attention span, and does not finish what he starts.</td>
</tr>
<tr>
<td>8. He wants to learn.</td>
<td>8. He does not succeed or feel successful, but rushes from one activity to another.</td>
</tr>
<tr>
<td>9. He tries to communicate.</td>
<td>9. His speech is unclear and he has limited vocabulary.</td>
</tr>
</tbody>
</table>

Such observations should be written for development of a better understanding of the individual differences among children at any age level. Use this information as an aid in understanding and solving problems.

**B. REASONS BEHIND SPECIFIC BEHAVIOR**

After some observations and clarification of how the child is different from the other children, as well as the ways in which he is like the other children, then begin to think about possible causes which make the child behave as he does.

The basic needs of children, again, are highly important.

- Self-confidence
- Belonging to the group
- Achievement
- Freedom from fear
Freedom from guilt
A variety of experiences
Love, or relating to those around you with an emotional tie.

To continue, follow the little boy, Joe, and observe what may be some of the reasons why he behaved as he did.

<table>
<thead>
<tr>
<th>His Behavior</th>
<th>Possible Causes in Relation to Basic Needs of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Joe gained attention by patting the adult and saying, “Look at me.” He needed someone to hold his hand when he tried a playground activity. He often said “Come,” to make his wishes known. He wanted constant adult attention and would misbehave to gain the attention he craved.</td>
<td></td>
</tr>
<tr>
<td>1. Self-confidence: Joe was the sixth child in a small, poor home. Nobody talked to Joe except to give him orders. Nobody cared.</td>
<td></td>
</tr>
<tr>
<td>2. He was unable to share. He was unable to follow routines. He expected to do what he wanted to do when he wanted to do it.</td>
<td></td>
</tr>
<tr>
<td>2. Belonging to the group: With no father in the home and being one of many, he had no feeling of belonging. The family had moved often. Very little security in his world and he learned not to expect it.</td>
<td></td>
</tr>
<tr>
<td>3. He had almost no area in which he could perform with success. He could not build with blocks because he fought with friends. Unable to listen. Understanding of language limited. He had a short attention span. He was never able to practice a skill or to finish what he began.</td>
<td></td>
</tr>
<tr>
<td>3. Achievement: Lack of opportunity to test and try or learn by doing. Lack of opportunity to be listened “to” by understanding adult. It was possible that Joe lacked sufficient rest because of crowded home conditions. He also may have had dental needs and problems from lack of nutrition.</td>
<td></td>
</tr>
<tr>
<td>4. He cringed when adults went near him if they tried to direct his play. He was afraid of new experiences. He did not try to do new things.</td>
<td></td>
</tr>
<tr>
<td>4. Freedom from fear: Fighting in the home. Family has moved many, many times. Joe was confused.</td>
<td></td>
</tr>
<tr>
<td>5. He did not smile. He could not rest. He could not look at the adult. He did not want to be reasoned with.</td>
<td></td>
</tr>
<tr>
<td>5. Freedom from guilt: Joe’s feelings were affected by family problems in which quarreling, fighting, and troubles were common daily occurrences.</td>
<td></td>
</tr>
</tbody>
</table>
6. He had a limited vocabulary. His coordination was poor. He resisted new experiences and was reluctant to try something new.

6. A variety of experiences: Joe had moved many times, but no adults had discussed or talked about his environment to him. What he found out, he learned by himself. He had little opportunity to test himself. Adults did not encourage Joe to try new things or reward him for trying and succeeding.

7. Joe showed no affection. He made no effort to please anyone, or to do anything that he was requested to do.

7. Love, or relating to those around you with an emotional tie: Nobody really thought Joe was very important.

We have chosen a child with problems of a more serious nature as an example, but please realize that most of the children with whom an aide works will enjoy school and be happy most of the time. Any child has a bad day now and then and will need the teacher’s and the aide’s guidance and comfort. It will take time to understand all of these feelings and to know what may have been some of the causes which make a child behave as he does. The success of this process will depend upon the aide’s feelings about the child and her ability to accept and respect the child as a person. He came to school with a personality which has been the result of what has happened to him for many days, many months, many years. He will not change overnight. The aide, by respect and patience, will have an important influence on meeting these basic needs of a child.

C. TEACHING TECHNIQUES IN GUIDING THE YOUNG CHILD

It is important to see each child as a person, to respect him as an individual who is fun and an enjoyable companion. This means that the aide will not give directions to children as though he or she were a policeman. Adults must not take advantage of their size and age. Children, like adults, do not always feel like doing the things they know they should do. We know that young children, in particular, are experimenting and testing the ways through which they learn acceptable behavior. An understanding adult will provide a bridge or a path for a child to return to the group after misbehavior, without the stigma of having been “a bad boy,” or a “bad girl.”

The way one talks to children is important. The following examples may be helpful in evaluating one’s self regarding ways to improve in working with children. The first time you use this check sheet, fold the sheet along the dotted line. Test yourself. Keep adding to your list.

GUIDING YOUNG CHILDREN

Some suggested terms that may be used in guiding young children. The guidance should be brief, firm, and positive.

**SAY**

1. Sit down and slide down the safe way.
2. Dig in the sand and make a tunnel — build a sand castle.

**DO NOT SAY**

1. Don’t walk up the slide.
2. Don’t throw sand.
3. Sit in the swing.
4. Use both hands when you climb.
5. Use scissors the safe way and leave them waiting on the table.
6. Walk 'way around the swing.
7. Move back on your rug and be more comfortable. I will hold the picture so you may see.
8. Wipe your brush three times on the jar the way we tried it in class yesterday.
9. Remember to put your apron on.
10. Time to wash your hands.
11. Drink your milk.
12. I'll help you wash and dry your hands.
13. Turn the pages carefully.
15. Keep the puzzle pieces on the table.

3. Don't stand in the swing.
4. You'll fall if you aren't careful.
5. Don't walk with the scissors.
7. Don't lean forward on your rug, the other children cannot see.
8. Don't drip paint on the floor.
9. Don't get paint on your clothes.
10. Don't you want to wash your hands?
11. Don't you want your milk?
12. Don't put your hands on anything, they are dirty.
13. Don't tear the book.
14. Shall we go inside?
15. Don't drop the puzzle pieces on the floor.

Add more as you listen and work with children.
TEACHING TECHNIQUES IN GUIDING THE YOUNG CHILD

Here is another way of testing yourself in your work. Check one.

1. I am enjoying my time with young children?  
   NEVER | SOMETIMES | MOST OF THE TIME
2. I speak with a calm, kind voice?  
3. I speak directly to the child and I do not call to him across the room or playground?  
4. I speak to the child in short, meaningful sentences which he can understand?  
5. I get down to the child's physical level and I stoop or sit to be closer to him?  
6. I keep a happy expression and a pleasant voice most of the time?  
7. I use the "let's talk it over" approach with children?  
8. I help the child to learn what is the right "thing to do"?  
9. I remember that children learn by doing?  
10. I do not ask a child to do something because I say so?  
11. I do not threaten or scold children?  
12. I do not have an "I mean it" face or "I dare you" expression?  
13. I do not act like a policeman or a boss, because I am bigger than children?  
14. I do not make a child upset by saying "you are a big boy now"—"you should not act like a baby"?

Now you add to this list, and check yourself as you work with children.
Assignment:
Observe one child and write a detailed account of that child's activities for fifteen minutes. Write only what you see happen or conversation that you hear.

<table>
<thead>
<tr>
<th>What the Child Did:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What Did the Teacher Do?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What the Child Said:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(The Actual Words)</td>
</tr>
</tbody>
</table>
CHILDREN MAY GATHER INFORMALLY AROUND THE NUMBERED SQUARES PAINTED ON THE FLOOR.

A KINDERGARTEN FLOOR PLAN
IV. INFLUENCING THE LEARNING OF THE YOUNG CHILD

The successful teacher-aide will learn very early in her experience that the success of her day with children will, to a large extent, be dependent upon the room arrangement, choice and arrangement of materials and how these will be used, and the atmosphere among the people involved.

A. INFLUENCE OF THE ENVIRONMENT:

1. THE ROOM

A glimpse into a classroom will reveal the kind of learning that is taking place. It is important to see the room through the child's eyes. Does the child feel free to move about? It should be a place where children work and live, talk and listen, think and reflect. Materials for children's work need to be readily available to them. Children are helped to learn to live in an orderly world when their room is arranged in an orderly way. Early in their acquaintance with the new environment in the classroom, they learn that tomorrow's work may depend upon today's care of materials. Arrangements in a room should result in a happy thinking and doing atmosphere where pressures are minimized because good planning has been effective.

Adequate physical space will enable children to move without feeling the tensions that come from restricting children in small areas. Within that space, a large rug and story rocker will enable the group to come together easily for discussions and planning. Within the large area there should be provision for small areas to enable children to gather according to interests and friendships.

We refer you to the picture in this manual which presents suggestions for room arrangement, and also to the chapter on program planning. Many adaptations of space can be made according to the buildings that are available, but, no matter what the handicaps of the available space, it is important that the basic needs of children be met by adapting the area to the ways in which children can learn best. For instance, we have observed a house which was used to good advantage. The larger living room area was used for group work and play activities, while smaller bedrooms became project centers which provided for small group activity such as story telling, drama, and art.

B. INFLUENCE OF THE ADMINISTRATION:

Much of the success of the program will be dependent upon the understanding of goals and the visions held by the leaders in the community responsible for the framework under which the program will be administered. A willingness to exchange opinions and experiences and to examine new ideas will be the basis for a successful program. This will be true regardless of the numerous handicaps that may be involved, such as physical space, transportation problems, the ordering of supplies, or the hiring of a skillful teaching staff.

The aide will need to be aware of and sympathetic to the complicated problems involved in the administration of new programs for young children.

These programs may be enriched greatly by discovering, welcoming, and utilizing the ideas and wisdom of professional people who are eager to share in the development of beginning programs.
C. INFLUENCE OF THE TEACHER:

The number one influence in the environment will be the teacher. Her basic philosophy and the esteem in which she holds herself, the other adults and the children, will color the atmosphere. The teacher helps the children be whatever age they are, and does not expect more of them than they can do. She must have a basic belief in the ability of children to learn and grow under her direction and planning. She should delight in a child's development day by day. Whatever the teacher thinks, the way she thinks, and the way she feels are characteristics that help to define the quality of learnings which occur daily.

D. INFLUENCE OF TIME:

Quotes from “A Time to Grow” by Agnes Snyder:

THE ROOTS OF GROWTH*

Children need time to grow—
You cannot hurry human growth
It is slow and quiet,
Quiet and slow
As the growth of the tree.
Only when its roots go deep,
Deep within the earth that nourishes it—
Its own earth,
Its own soil—
Will its branches spread wide,
Wide as the earth is wide.

Such learnings take place when a child has time to explore, to investigate, to admire, to delight, to feel, to test, to try. The child needs time to react to experiences without being hurried. It is more important to watch the children than to keep your eyes on the clock.

The old saying that “time takes care of things” is very often the answer to numerous problems which appear momentous as one works daily with children. It is important to be aware of problems but to realize that some are the result of changing behavior patterns and that they will solve themselves if children are given time to grow.

V. PLANNING THE PROGRAM FOR THE YOUNG CHILD

A. GROWTH THROUGH ROUTINE:

Children feel more secure when they can count on a pattern of happenings in their day. Try to plan days in which there is consistency, with the activities in the daily routine always following in the same order.

SUGGESTED DAILY SCHEDULE

8:40- 9:00 Opening exercises, health inspection, flag salute and flag song, calendar, let’s think about things.

The teacher-aide can help children in play-acting adult roles. A glimpse into this classroom reveals the kind of learning which is taking place.
9:00- 9:50 Activity time—a work, play creative time correlating language arts, social studies, mathematics, science, and art projects.

9:50-10:00 Clean up time and activity evaluation.

10:00-10:15 Outdoor activities—large muscle development, woodworking, outdoor playhouse.

10:20-10:35 Rest period on rugs—music appreciation.

10:35-10:45 Snack time.

10:45-11:00 Story and poetry time—dramatization.

11:00-11:25 Music and rhythms—folk dancing, singing games, records, rhythm bands—use of visual and audio aids. Visit library Tuesday and Friday if possible.

11:30 Dismissal.

BEGINNING THE DAY TOGETHER:

When the child arrives at school it is important that an adult be ready to greet him in a friendly manner. While the children are arriving, individual children need to be directed to the various activities of their choice in the room. This will eliminate the confusion and excitable behavior that may happen if preparations have not been made for constructive activity.

Some kindergarten teachers use this flag salute to begin the day with their children:

Red, white and blue.
I love you.

This may be followed by a patriotic song the children and teacher enjoy together, or by a record. Marching with small flags to music is another way to enjoy the beginning of the day.

Getting acquainted songs such as the following are used by kindergarten teachers to help children know each other's names, become aware of colors, and just have fun together.

To the tune of “Here We Go Round the Mulberry Bush,” sing “Craig has a red shirt, red shirt, red shirt, Craig has a red shirt on today,” etc. “Mary has a new skirt, a new skirt,” or “Johnny has new shoes, new shoes,” etc.

What does the aide do while the teacher is busy with all this activity and the children. He or she may be sitting with the children and lending a supporting arm to little Jim who finds it hard to sit still. He or she may be helping Mary who suddenly wants to get something out of her sweater pocket and encouraging her to come back to the group. Or, the aide may be greeting a late comer or may be in the circle lending a helping hand with the activity.

All of this usually takes about fifteen minutes. Some teachers refer to this period of getting started together in the morning as “Sharing time.” Whatever it is called, it sets the feeling tone for the day.

A child may show something he has brought that day for the group to see. Maybe he will share a happening or a thought with his friends, first a few and then many, as he feels safer in the group. This provides an environment that encourages children to talk.
Beginning a day together.
Singling out children in this sharing experience makes them more aware of themselves as individuals. Young children cannot sit still and listen for long periods; so the teacher and the aide can vary this with a finger play or a wiggle or body movement song.

Here are ideas to help:

I wiggle my fingers  
I wiggle my toes  
I wiggle my shoulders  
I wiggle my nose  
Now no more wiggles are left in me  
So I'll fold my hands  
And sit as still as I can be.

Stand up and say:

Left hand, right hand  
Swing yourself around  
Left hand, right hand  
Sit right down.

Children will enjoy making their own wiggle songs.

Touch your toes  
Touch your knees  
Twirl around once  
And sit down please.  
Stand up tall  
Sit down small  
Tall — small  
Roll like a ball  
Now —  
Put on a shawl  
Fall —  
And be small.

Try this finger play for gaining the attention of the group.

THESE ARE GRANDMOTHER'S GLASSES

These are Grandmother’s glasses,  
(Make circles around each eye with fingers)  
This is Grandmother’s cap  
(Hold fingers interlocked over head)  
This is the way she folds her hands  
(Fold hands)  
And lays them in her lap  
(Lay hands in lap.\(^1\))

Try to create an atmosphere in the room that will help the child feel and say “I like this place, I like what they do, I feel happy and safe here. I will come back tomorrow.”

\(^1\)Scott & Thompson, Rhymes For Finger and Flannel Boards, Webster Publishing Co., Pasadena, California, 1960.
Following are several get acquainted activities:

**CIRCLE BALL HELLO**

**Objectives:** To help create a relaxed and friendly atmosphere for the first few days of school.  
To help children learn their own names.  
To help children learn the names of others in the group.

**Materials:** A large ball.

**How you interest the children:**  
"We are going to roll this ball to each other today. I will show you how the game is played."  

**Procedure:** Children sit in a circle and the teacher sits in the middle. As she rolls the ball toward a child she says, "Hello, my name is ______________. What is your name?" Then the teacher encourages the child to say "Hello, my name is Tommy." Continue in this manner until as many as possible are able to have a turn, or until they tire of the game.

**MYSTERY FEEL**

**Objectives:** To develop the sense of touch.  
To increase the child's vocabulary.

**Materials:** A bag, a box, a purse or a basket, whatever is handy. Objects of different textures for children to feel, for example: cotton, rocks, pine cones, feathers, balls, leaves, etc. Limit the number of objects to three or four and change each time you play the game.

**How you interest the children:** Hold up the basket and create an atmosphere of mystery and suspense as to what is inside. "I have some things in this basket; please reach in and feel one. Whisper in my ear what you think it is." The teacher then gives the basket to the child and the child in turn holds it for another child to try his luck.
B. GROWTH THROUGH LANGUAGE EXPERIENCES AND ACTIVITIES:

Throughout the day children are learning language in many ways and through varied activities.

1. STORYTELLING:

a. The Meaning of This Activity

The aide will have many opportunities to read stories, to tell tales, and to talk with children. He or she will want to know what stories are of most interest and value to the children. Based upon observation and what has been learned about characteristics of children, the aide already will know:

- Children like short, fast-moving stories.
- They like familiar subjects—such as animal stories from their experience.
- They enjoy large pictures of real things.
- They enjoy stories with words that rhyme.

b. Resources to Develop This Activity

For a successful story with children:

- See that the children are comfortable. Can everyone see the pictures? A semi-circle formation around the teacher is suggested.
- Look directly at the children and have their attention as you begin the story.
- Be familiar with the story, or, if you are telling a story, be sure you know it thoroughly.
- Use a quiet, interesting voice that rises and flows with inflection and spontaneity.

Here is what some teacher-aides did with a favorite old story before presenting it to the children:

- They read it through for enjoyment.
- They read it through to be sure it was good for their children.
- They learned what happened first, next, and last.
- They practiced telling it out loud to themselves.
- They practiced telling the story to their friends until they knew it well.

c. Guides for Success

When the teacher-aides knew the story well, they were able to do the following activities, using the same story.

- The story was told to the group several times.
- The story was dramatized in a simple manner with the children.
- The children made many pictures of the story (some were cut out and used for a bulletin board of the story).
- The story was made to use on a flannel board (see appendix for directions).
• A mural was made by the children. They painted the story on a long strip of butcher paper which they displayed in the classroom.
• Rhythms were used to improvise free movements for acting out the story.
• A record which presented the story was purchased and the children listened to another way the story was told.
• Simple puppets were used to dramatize the story.

That was the way “The Billy Goats Gruff” was used with one group of children. Use a good story told to you by your grandparents or parents, if you feel that it would be suitable for the children with whom you are working.

Story telling is fun for the children and for the story-teller. Remember that story telling is part of your cultural heritage. Everyone can be a successful story-teller if he selects a fine story and takes time to master it.

Find three stories that you like and enjoy telling to your children. How many different ways are you able to enjoy these stories with your children?

Don't forget nursery rhymes! They contain all the elements of a story in a readily understandable form. A good one is “Baa Baa Black Sheep” with either stick puppets or flannelboard cutouts to vary the presentation.

Assignment for You:

Select your favorite story or rhyme, and be prepared to present it to your children when you are given the opportunity. Check with your teacher as to your selection and the most appropriate time to present the story. Find someone to listen to it before you present it to the children.

Another way to present a story is with the aid of a flip-chart. Select three or four key happenings from a story—such as beginning, middle, and end events. Illustrate these happenings on a large paper or tag board. Punch holes in the top and insert rings, yarn, or ribbon to make a binding. As you tell the story you “flip” to each event illustrated.

2. DRAMATIZATION

a. The Meaning of This Activity

The children learn about themselves and the world through dramatic play. Creative dramatics is playmaking. Children dramatize as they play in the doll corner, use blocks, sand, slides, swings, and in many other ways. It is happy, spontaneous play with little or no adult direction. It is not intended to be written down or memorized. Children dramatize as they informally play out situations from life that are familiar to them. Gradually they will dramatize poems, rhymes, and stories which they know. The aide will have opportunities to help children dramatize experiences from their own lives. Through these activities good growth in language is promoted.

b. Resources to Develop This Activity

• The doll corner with its housekeeping types of equipment.
• All types of blocks for block play.
• Dress up clothes.
Through dramatic play, such as “dressing up” and “washing clothes,” the children learn about themselves and the world.
• Transportation and wheel toys.
• Puppets of all kinds used informally.
• Sand and most anything a child values in his playing—he will talk as he plays.

c. Guides for Success

A place where children are free to express how they feel—whether sad, glad, or bad. A place to jump, run, and skip. Be aware of what accessory or extra materials the children use or need to have successful experiences in dramatic play.

Dramatic Play:

The poem story “The Three Little Kittens” is one children enjoy. When the children are familiar with the poem the teacher may read it as the children pantomime the action. The children “are” the little kittens, the mother, the posts .. the clothes line, the pie, or the flowers in the garden watching the kittens.

THE THREE LITTLE KITTENS

Three little kittens lost their mittens;
And they began to cry
“Oh, mother, dear,
We very much fear
That we have lost our mittens.”
“Lost your mittens!
You naughty kittens!
Then you shall have no pie.”
“No, you shall have no pie.”

The three little kittens found their mittens;
And they began to cry,
“Oh, mother, dear,
See, we have found our mittens!”
“Put on your mittens,
You silly kittens,
And you may have some pie!
Purr-r, purr-r, purr-r.”

The three little kittens put on their mittens,
And soon ate up the pie;
“Oh, mother, dear,
We greatly fear
That we have soiled our mittens!”
“Soiled your mittens!
You naughty kittens!”
Then they began to sigh,
“Mee-ow, mee-ow, mee-ow.”

The three little kittens washed their mittens,
And hung them out to dry;
“Oh, mother, dear,”
Do not you hear
That we have washed our mittens?”
“Washed your mittens!
Oh, you’re good kittens!
But I smell a rat close by,
Hush, hush! Mee-ow, mee-ow.”
“We smell a rat close by,
Mee-ow, mee-ow, mee-ow.”

Eliza Lee Follen
The Golden Flute

3. Listening to Records:

Records are invaluable for listening, dancing, resting, and enjoying in the kindergarten day, but they should be selected with care. The voice on the record should be pleasant and clear. The content of the record should be within the child’s understanding. It will be difficult for five-year-olds to sit for long periods without moving about. So periods of body activity will be needed as a change of pace.

Children enjoy listening to folk songs and Mother Goose rhymes. See Resources for Learning section for record suggestions.

4. FINGER PLAYS

a. The Meaning of This Activity

Children's hands are important in their learning. As they "play out" a rhyme or poem with their hands and fingers they are able to conceptualize because they are participating with a part of their bodies that will obey their commands. They also are forgetting to be shy and self-conscious as they become involved with the exciting new words and actions of the rhyme. They forget who they are as they pretend the action, with their fingers becoming rabbits, kittens, or ducks. These little rhymes and quick stories produce sheer enjoyment for children, and they help children learn the parts of their bodies and aid in the development of muscular control. These rhymes may be used in all parts of the curriculum—science, art, numbers, music, and the social studies. Write them on index cards for ready use. The youngsters will help create new ones as they are able to understand and express themselves in language.

b. Resources to Develop This Activity

When teaching finger plays to children, present the complete rhyme with the actions once; then ask the children to try it with you, and go through it again. They will make their fingers play the rhyme. The third time they will say some of the words and do the actions with you. The next day try the rhyme again and they will learn it readily.

For variety add a puppet to each finger, such as a small pumpkin or fish made of paper with a ring around the back to fit your finger. Then proceed with the rhyme. Puppets on small sticks may appear as you say the rhyme another day another way. Don't forget the children—they can "become" the characters in the rhyme by hiding in the corner of the room or behind the skirts of the aide and popping out at the appropriate time to fit the rhyme, as in "Tommy Thumb" (in following section).

c. Guides for Success

Let's try one together—

"Today our fingers are going to be pets. I will say the rhyme first while you listen."

My little fish
  (Hold hand and arm straight—fingers together)
Lives in a dish
  (Hold hands together to form cup)
And here he swims all day
  (Move hands with swinging movement back and forth)
He swims to the right
  (Move hands to right)
And swims to the left
  (Move hands to left)
Then up and down and every which way!
  (Follow verbal directions)

Bonnie Boxelman

"This time you try to be my pet fish with me."

Repeat above several times.
"Or try this one —"  

**TOMMY THUMB**

Tommy Thumb, Tommy Thumb  
Where are you?  
Here I am, Here I am  
How do you do?  
Peter Pointer, Peter Pointer  
Where are you?  
Here I am, Here I am  
How do you do?  
Toby Tall, Toby Tall  
Where are you?  
Here I am, Here I am  
How do you do?  
Ruby Ring, Ruby Ring  
Where are you?  
Here I am, Here I am  
How do you do?  
Baby Finger, Baby Finger  
Where are you?  
Here I am, Here I am  
How do you do?  
Fingers all, Fingers all  
How do you do?  

Traditional3

"Here is another—"

**FIVE LITTLE SQUIRRELS**

Five little squirrels sat up in a tree.  
(Hold up five fingers)  
This little squirrel said, “What do I see?”  
(Point to thumb)  
This little squirrel said, “I smell a gun.”  
(Point to pointer finger)  
This little squirrel said, “Oh, let’s run.”  
(Point to middle finger)  
This little squirrel said, “Let's hide in the shade.”  
(Point to ring finger)  
This little squirrel said, “I’m not afraid.”  
(Point to little finger)  
Then BANG!! went the gun!!  
(Clap hands)  
And away the little squirrels ran, every one.  
(Make running motions with fingers)  

Traditional4

3, 4 Scott & Thompson, Rhymes for Fingers and Flannel Boards,  
Webster Publishing Co., Pasadena, Calif., 1960

As rhyme is said each finger comes from behind back and bows to corresponding finger on the other hand. For variation play it with a child representing each finger.

"Here is one more—"

**FOURTH OF JULY PLAY**

Here's a rocket on the Fourth of July.  
See it flying to the sky,  
Popping red, yellow, blue, and green.  
Prettiest lights I've ever seen.  

Betty Meador

Children may be the rockets and follow the action in the rhyme.
The aide will want to know other ways in which the teacher may be planning for children's activities which will further growth and development of vocabulary.

5. **USE OF LIBRARY BOOKS**

   a. *Meaning of This Activity*

   Literature and books help children develop a curiosity concerning the world about them. They enjoy hearing about people and animals who get things done and have exciting things happen to them. They love stories with action; and, through hearing good stories, young children begin to develop an appreciation for stories and the foundation for good literature. The aide should have many opportunities to read or tell stories to small groups of children at special moments or to the larger group at “storytime.”

   Five-year-olds like to hear poems. They love the lilting words and phrases. Poetry brightens and heightens the happenings in the day. Enjoy poetry with the children and begin to acquire a collection of poems ready for use at all times.

   b. *Resources to Develop This Activity*

   You may plan a library center in a quiet corner, using a small table and chairs where children may look freely through colorful books. Display the books in an inviting manner. Books with many pictures will open new understandings for children.

   c. *Guides for Success*

   Following is a list of books with good stories for children:

   Association for Childhood Education, International: *Told Under the Blue Umbrella, Told Under the Green Umbrella,* and *Told Under the Magic Umbrella.*

   Child Study Association of America: *Holiday Storybook, Read Me Another Story, Read Me More Stories,* and *Read-to-Me-Storybook.*

   Clinton: *The Treasure Book of Best Stories.*

   Mitchell: *Here and Now Story Book.*

   Rojankovsky: *Book of Nursery Tales.*

   If books are not available have the children help you cut pictures from magazines and make them into their own books. Later, as their language grows, they will tell you what to write under the pictures to make the story content their own.

C. **GROWTH THROUGH USE OF NUMBERS**

1. **The Meaning of This Activity**

   Children learn numbers and the meaning of numbers in many ways and through many incidental experiences. Aides should be alert to the many ways in which they may answer questions and stimulate curiosity. Through games and play, children develop their skills in counting, such as, “as a child bounces the ball, he counts as he bounces.” Numerous nursery rhymes and finger plays are fun for children and helpful in developing rote learning. Some of these are:
2. Resources to Develop This Activity

a. This Old Man (Nick-Nack, Paddy Wack)

This old man, he played one
He played nick-nack on my thumb,
Nick-nack paddy wack,
Give the dog a bone
This old man came rolling home.

This old man, he played two
He played nick-nack on my shoe,
(Last three lines of verse 1)

This old man, he played three.
He played nick-nack on my knee,
(Last three lines of verse 1)

This old man, he played four,
He played nick-nack on my door,
(Last three lines of verse 1)

This old man, he played five,
He played nick-nack on my side,
(Last three lines of verse 1)

This old man, he played six,
He played nick-nack on my sticks,
(Last three lines of verse 1)

This old man, he played sev’n,
He played nick-nack up in heav’n,
(Last three lines of verse 1)

This old man, he played eight,
He played nick-nack on my gate,
(Last three lines of verse 1)

This old man, he played nine,
He played nick-nack on my spine,
(Last three lines of verse 1)

This old man, he played ten,
He played nick-nack on my hen,
(Last three lines of verse 1)

b. One, two, buckle my shoe! etc.

The aide may assist the kindergarten teacher in providing simple counting experiences, which should be varied so that a child realizes that counting is a part of many living situations. These vary from knowing “I am five years old,” to knowing how many brothers and sisters I have, to knowing there are five fingers on one hand, or how many wheels are on the wagon.

3. Guides to Success

Be alert to the many times when children can use numbers in their play. Games are an excellent source. Help your children to see the differences in
size and shape. "Johnny, please bring me two of the big paint brushes." As children put away and use blocks of different sizes and shapes, use such words as more, little, longer, shorter, bigger, smaller, etc. In this way ideas that help children know differences, meanings, and uses of numbers, their relationships, and the way they relate to one another are learned.

a. The Flannel Board

The flannel board with felt number cutouts offers an enjoyable way to teach numbers. Songs and rhymes may be made up to old tunes such as, "One Little, Two Little, Three Little Indians," with cutouts for the flannel or ring puppets for your fingers.

Or:

One little, two little, three little pumpkins,
Four little, five little, six little pumpkins,
Seven little, eight little, nine little pumpkins,
Ten little happy orange pumpkins.

D. GROWTH THROUGH HEALTH

1. The Meaning of This Activity

This is an area where the aide will be of great help, particularly when children first enter school. Work closely with the classroom teacher to provide a safe, healthful place for young children to live each day. Together you have the responsibility of being alert for symptoms of illness during the course of a day. A child can appear well in the morning and show signs of illness later in the day. It will be at such times that an aide may have the responsibility to care for the child who should not be with other children.

The following are suggestions for ways to help in providing for children's growth through areas of good health and safe practices in the environment:

a. Tell parents about the health services and program of the school. You should be trained in these understandings by competent persons.

b. The aide may be able to make home visits which will be invaluable in the area of furthering the community understanding about health for young children. Such visits may be helpful to the teacher in furthering her understanding of children's home conditions.

c. Help children develop good feelings and attitudes toward health service personnel, such as the nurse and doctor. Children discuss, explain, and "play out" situations that help them to understand the why and how of examinations and mysteries such as "shots."

d. Be trained and have some understanding of good first-aid procedures. It sometimes will be necessary for you to handle minor injuries or sudden illnesses.

e. Assist with recording health data such as the periodical measurement of children's height and weight.

f. Think about the many ways through which we may help children learn good health habits, such as (1) use of tissues when needed, (2) sneezing or coughing into handkerchief or tissue, (3) learning to dispose of soiled tissues, (4) washing hands with soap after toileting, (5) washing hands with soap before eating, (6) other common sense habits related to good health which may apply to the children with whom you are working.
2. **Resources to Develop This Activity**

   **a. How the environment helps:**

   If you look around the room, do you see ways in which the child's safety and good health practices are provided to insure good habits? Are there provisions for the following?

   - Is there ventilation and proper temperature?
   - Is the room arranged so that there is space to move about freely?
   - Is there sufficient lighting for children's eyes?
   - Do the children's feet rest comfortably on the floor when they are sitting in their chairs?
   - Are the table tops approximately 10 to 12 inches from the chair seat, so that the children sit comfortably to work at the table?
   - Is the equipment accessible and available to the children?
   - Are the toilets located so that children may freely use them, and are the toilets kept clean? Are they provided with soap and paper towels?
   - Is there a provision for children to have drinks of water when needed?

3. **Guides for Success**

   In helping children to be prepared for a doctor's examination, the aide may find some of the following ideas useful:

   **a. Role playing through use of dolls and doctor's kits and dramatic play may help to ease a child's fears. A "shot" doesn't hurt nearly so much as you thought it might, if you played with your friends and took turns being doctor before the event really happened. Then when the teacher pins a "Purple Heart" for bravery on a little shirt, the whole affair doesn't seem so grim.**

   **b. Cleanliness can be learned by giving a doll a bath, washing doll clothes with lots of suds, using colorful plastic buckets, learning good clean-up habits after work and play, learning how to brush your teeth in front of a big mirror, and, in general, building good health and healthful living into the daily program for children.**

   **c. Planning for ways through which new foods can be introduced to children can be achieved in many ways. Children can shop for food, can help to prepare food, and celebrate with a "tasting party." A discussion about good foods for breakfast may begin with considering the many kinds of food cereals. The discussion of these may lead to comparing the many shapes, sizes, colors, and tastes. You may wish to arrange a "tasting station" for the children. To plan your "tasting station" buy several kinds and shapes of dry packaged cereals such as Puffed Wheat, Cheerios, or Wheat Chex "pillows". Put the cereal in plastic bowls, with a spoon beside each one. Each child may serve himself in his hand and then taste. Talk about the shapes, the tastes and the wonderful crunch noises the breakfast cereal makes.**

   As cold weather begins you may be able to do the same thing with warm cereals. Children love to stir and may learn the numerous problems related to safety around the hot plate or stove. Sometimes raisins, dates, nuts, or other fruits may be added to the hot cereal.
Have you ever thought of having a carrot party? Or a celery or green-pepper party? Apple juice parties are fun. Children will be able to help scrape and clean the carrots. The teacher probably will want to cut them in strips, or it is good to eat the whole carrot once in awhile. What happens to an apple when you cook it, bake it, or squeeze it? What do you have to add to be able to eat it?

Give children a choice of green-pepper sticks, cucumber slices, or carrot sticks. Look at the texture, the color and form. Compare the sizes and color of the seed. Taste a seed. All these experiences help a child test new foods in a happy way with friends who are testing too.

Most children have a sweet tooth, and for a very special day here is a recipe for “Peanut Butter Candy.”

**PEANUT BUTTER CANDY**

- Boil 3 medium potatoes—cool—mash well
- Add 1 1/4 cup peanut butter
- 1 pound powdered sugar—gradually add until mixture is of workable consistency
- 1 square of waxed paper for each child
- Put their fingers in the powdered sugar, drop by spoonfuls on wax paper, sugar—work and mix—add more powdered sugar. Roll into round balls.

E. GROWTH THROUGH SAFETY

1. **THE MEANING OF THIS ACTIVITY**

   You always will need to be aware of dangers or hazards to children, whether on the playground, near the corner, in the bus, or in the room. You will need to think about the safe ways children may play with playground equipment or ways they should conduct themselves so that you can teach children the safe way. For instance, how should a child be taught to use a swing, the slide, the merry-go-round? What are the dangers here? Here are some things to consider:

   a. **In the Schoolroom:**

      Scissors should be used at the table and not carried about the room. (A scissors holder is a good place to store scissors.) Old egg cartons upside down have been used successfully to hold scissors.

      When passing scissors to another child, offer the friend the handle of the scissors. (Children learn this easily when they play the “scissors game” which is passing the scissors from one to another while sitting in a circle.)

      Sit on a chair with four chair legs on the floor.

      Use a drinking fountain safely. This can be demonstrated, by a teacher and a child. When the teacher turns the water on, the child is encouraged to place his lips into the water with care not to touch the metal. Each child should have a turn to show how he can do this.

   b. **On the Playground:**

      Discuss and demonstrate to children the safe way to use swings. This means remembering not to run into the path of a swing, sitting down on the swing seat, not jumping off from a swing in motion.
It is important for the teacher-aide to be aware of the safe use of playground equipment and to instruct the children about its use.
It is important again to demonstrate and discuss safe use of slides. Children must know to wait for turns and to go down the slide in a sitting position.

It is important that the aide is aware at all times of the safe use of all equipment, and to place himself or herself in a position that will make it possible to both see and supervise the children. Little children never should be left alone on the playground.

c. In the Bus:

This is the area of safety with which the teacher, the aide and the children often will be concerned. At the beginning of the school year, unless this area is well discussed and evaluated, with standards well defined, it will become a problem when the novelty begins to wear off after the first few months of school. This is what some aides did to help children learn safety on the school bus:

A bus was made in the classroom by using the children’s chairs and enclosing them with large, hollow blocks. All the rules of good behavior on the bus were involved in this dramatic play. The children loved singing the well known song.

A large bus was made on the bulletin board. Children drew pictures of themselves in each window of the bus. Many ways may be used to make the concept of safe travel on the bus a meaningful one to the children.

What are the ways which you think would work best in your situation to teach bus safety:

THE BUS — A PLAY SONG

The people on the bus go up and down,
Up and down, up and down,
The people on the bus go up and down,
All through the town.

The wheels on the bus go round and round,
Round and round, round and round,
The wheels on the bus go round and round,
All through the town.

The horn on the bus goes too, too, too,
Too - too - too, too - too - too,
The horn on the bus goes too, too, too,
All through the town.

The wiper on the glass goes swish, swish, swish,
Swish - swish - swish, swish - swish - swish.
The wiper on the glass goes swish, swish, swish,
All through the town.

The driver on the bus says, "Move on back,
Move on back, Move on back."
The driver on the bus says, "Move on back;"
All through the town.

Singing and Rhyming—Lilla Belle Pitts
The Bus — A Play Song
WHEN I GO TO THE BUS
(To the tune of "Here We Go Round the Mulberry Bush")

1. When I go to the bus I step right up,
   Step right up, step right up
   When I go to the bus I step right up
   So early in the morning.

2. When I step right up I walk on down,
   Walk on down, walk on down,
   When I step right up I walk on down,
   So early in the morning.

3. When I walk on through I sit right down . . . etc.

4. When I sit right down the bus starts up . . . etc.

5. When the bus starts up I go bumpy bump . . . etc.

6. When the big bus stops I stand right up . . . etc.

7. When I stand right up I walk on down . . . etc.

8. When I walk on through I step right down . . . etc.

9. When I step right down I go to school . . . etc.

by Ross Meador
Age 11

THE SCHOOL BUS
(To the tune of "Mary Had a Little Lamb")

The school bus takes us to school each day,
School each day, school each day,
The school bus takes us to school each day,
And we are very glad!

The school bus brings us home after school,
Home after school, home after school.
The school bus brings us home after school,
And we are very glad!

by Pam Meador
Age 10

F. GROWTH THROUGH ART EXPERIENCES

1. The Meaning of the Activity

The kindergarten teacher encourages the children to express their feelings through all types of art materials—clay, crayon, paint, paper, to name a few. However, the environment that is created is important because a child has to have something to express or say. He must have something to work with which is consistent with his abilities and the ability to manipulate or handle the art material in order to convey or express his reactions to the resources given him. For instance, it is difficult for young children to use scissors with skill. Here adults in the classroom will explain the way to hold and handle scissors and have patience while the child struggles and tries to gain understanding in their manipulation. After he is reasonably successful, an experience using scissors may be introduced such as cutting a picture out of a magazine or old catalog.
A young man tells a teacher-aide a story about his picture.

The teacher and the aide will support and appreciate the child’s efforts to discover new ways of expression.
The child approaches all experiences creatively if allowed to do so. He develops gradually as he learns about himself and what his body skill is able to do. He needs to be given abundant opportunity to work in different art media. Let the child express himself freely as he works through manipulating and experimenting with color, line, texture, design, and material.

A minimum amount of adult influence and control is necessary for children to want to try, to experiment, and to try again. The teacher and the aide will stimulate, support, suggest and appreciate the child's efforts to discover new ways of expression.

Art is the outpouring of a child's ideas and feelings and as such should express his uniqueness. Every child's creation will be different from that of every other child.

The adults in the classroom will need to enjoy what the children create—realizing their age, their purposes, and their abilities.

Art is a visual area, for looking, seeing, and enjoying. Encourage a child's comments about his picture, appreciate it and listen but refrain from saying, "What is it?" or "What did you make?" or "Is that a house?" When a child wants to talk about his art it is difficult to prevent him from doing so. He has experienced success and a trust in himself and wants to create again tomorrow. We are interested in the process he went through to complete his art experience.

2. RESOURCES TO DEVELOP THIS ACTIVITY

Following is a list of basic art materials that may be obtained through school supply sources. See section on Resources for Learning.

Crayons: Wax, eight to a box—flat or round, large size.

Paints: Tempera paint may be ordered in liquid or dry form. The dry may be made in larger amounts and stored in a covered plastic container. It is available in all colors. We suggest a shoe box as a holder for several cans of paint. Certainly prevents spills!! The floor is ideal for painting, or use a table—covering it with brown wrapping paper or newspapers—two children may share a shoe box of colors.

Brushes: The wide flat long-handled easel type.

Clay: Plastic clay may be purchased in sticks. Clay already mixed to the right consistency also is available.

Scissors: One for each child.

Paste and Paste container: Easy for children to open and refill.

Paper: Manila oak tag, 18x24 — butcher — finger-painting paper.

Assorted colors of colored paper in several sizes.

Newsprint — white and in colors — 36x36.

Sponges:

Colored chalk:

Materials for collages: Odd bits of material, ribbon, yarn, cotton, feathers, leaves, etc.

Twine: Large cone.

You add to this list with materials available to you.
3. GUIDES FOR SUCCESS

a. Experimenting With Crayons

Children enjoy using crayons. A sheet of paper should be used — 12x18 or larger. After a walk around the school or neighborhood they could draw something that interested them. Encourage children to make anything or do anything with their crayons on their paper. Explain, "you can use the sides of your crayon or the tip to make lines and shapes of anything you want to."

Let string fall in a design on a piece of paper, place another sheet on top and clip. Children will enjoy seeing the designs come through as they color the top paper with the sides of their crayons.

b. Paint:

Tempera: Mix paint rather thick in cans — children help stir and experiment with brushes — place cans of paint in shoe box, protect floor with paper, protect child with apron or a man's old shirt — cut off tails and sleeves — wear it backwards.

Clay: Manipulate clay — pound it, slap it, prick it, describe how it feels. Colored toothpicks, tongue depressors help the play along.

Pasting Experience: Children rip and tear colored paper into various sizes then paste the pieces on manila paper — they could be autumn leaves falling to the ground — rain — or a pumpkin collage or just anything they want it to be.

Cutting: Children may cut paper strips of all colors and then paste them into a chain or paste the strips on paper.

Sponges: Sponges may be cut in strips and each one clipped with a clip clothes pin. Thick paint is mixed in flat dishes. Sponges are dipped in paint and pressed or swirled on paper for a design.

G. GROWTH THROUGH MUSIC

1. THE MEANING OF THIS ACTIVITY

Children express their feelings in many ways. Among the most enjoyable are singing and bodily movement. Music can help a child by offering him an opportunity to listen, to create, to sing, to respond with rhythm. Through all of these experiences the child learns to express pleasure and joy; he develops the skill to listen; he gains in ability to use his body; he develops languages; he has fun with his friends. A child participates in many informal ways in the use of music and rhythm. As he piles his blocks, pulls a wagon, or swings back and forth, he may experiment with phrases which he chants over and over. He may invent a new word and chant it in rhythm, such as "Quiackty, Quackeity, Quack, Quark." He may beat a rhythm with two sticks of wood. Each of these is a way through which a child may be encouraged to develop a fuller and richer experience in sound, music, or bodily movement.

As an aide it is important to know how you feel and how you express your enthusiasm for experiences in music with children because much of the success of such activities will be dependent upon your own feelings about musical experiences. We are not concerned about the finished product, but we are concerned with how the child feels while he enjoys these activities. This means
that as an aide you will want to remember that it is skill in understanding children and how they feel that is important, and not skill in music techniques or dance rhythms. Though skill is important, it is not the basis upon which children's enjoyment is fostered.

2. RESOURCES TO DEVELOP THIS ACTIVITY

Movement is natural to children and comes before song. They stretch and bend, twist and twirl, flop and bounce all in a matter of seconds. Much of this body movement comes from the child's own sense of feeling and timing. Think of all the ways you can walk with children—slow—fast—high—low—bouncy—smooth—heavy—light—forward—backward—giant steps—baby steps—skip—run—or gallop. Try this activity as you play “Follow the Leader” on your next walk around the room or on the playground.

Children learn a song by hearing it sung by a happy adult. Do not worry about your voice; if you sing along spontaneously the children will sing along with you. Begin with the nursery rhymes you know. Practice them several times and then sing them to the children. Let the children hum along with you to get the feeling of the rhythm and the words.

Folk songs of your heritage and community will add to the enjoyment of the kindergarten day. Start with the simple melodic chants or songs sung around the homes, or those of dances or festivals. Think of a folk song to sing with the children tomorrow.

3. GUIDE FOR SUCCESS

The record “My Playful Scarf” lends itself to a delightful rhythmic activity. Crepe paper strips, scarves or squares of material will help the children turn into kings, queens, pirates, or clouds. Other records, “Nothing to Do,” “Creepy Crawly Caterpillar” and “My Playmate the Wind” suggest many things to do with our bodies. There are many excellent books on rhythms, and record albums by the score. We have suggested several in the section Resources for Learning.

The Columbia Record “Let’s Play a Musical Game,” HL 9522, has several excellent circle song action games that aides and children alike have enjoyed.

Some of the old song games are still favorites enjoyed by children. “Here We Go Round the Mulberry Bush,” “Ring Around the Rosy,” or “Looby Loo” are favorites.

LOOBY LOO

Here we dance looby loo
Here we dance looby light
Here we dance looby loo
All on a Saturday night.

I put my right hand in
I put my right hand out
I give myself a shake, shake, shake
And turn myself about

2nd I put my left hand in, etc.
3rd I put my right foot in, etc.
4th I put my left foot in, etc.
5th I put my little head in, etc.
6th I put my whole self in, etc.

“Singing Games for Children,” Hamlin & Guessford, Willis Music Co.
Make a circle, hold hands and slide around the circle singing the chorus. As
the participants sing the verse they face the center and play out the action of
the words in the verse.

More Simple circle song games may be found in “Singing Games for Chil-
dren” by Alice P. Hamlin and Margaret Guessford, Willis Music Co., Cincin-
nati Division.

Here are new words to go to the tune of “The Farmer in the Dell.”

THE FARMER IN THE DELL

(Adapted Words)
The squirrel in the woods
The squirrel in the woods
Hi, Ho, Oh, Merry, Oh
The squirrel in the woods
The squirrel takes a rabbit
The squirrel takes a rabbit
Hi, Ho, Oh, Merry, Oh
The squirrel takes a rabbit
The rabbit takes the deer, etc.
The deer takes the 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, Oh, Merry, Oh
The fox stands alone
They all clap and sing
They all clap and sing
Hi, Ho, Oh, Merry, Oh
They all clap and sing.

The fox becomes the next squirrel and the game continues until all the
children have had a turn.

The aide can be of invaluable help in playing circle games. He or she takes
a child’s hand and begins to form the circle and assists the teacher in any
way possible to make the game a success.

H. GROWTH THROUGH THE SCIENCES

1. THE MEANING OF THIS Activity

Children enjoy anything that is alive. Children learn best by first-hand
experience — by holding a toad, or by feeling the tickle of a caterpillar as it
wiggles around their hands. They are interested in the origin of familiar things.
The role of the aide in science teaching is to help children “find out,” to dis-
cover and ask “why.” He or she will be able to provide opportunities as well
as encouragement. When a child brings a present of assorted leaves, acorns, nuts, rocks, or feathers, the aide may help him display the collection, realizing that they should be inspected, handled, and enjoyed. The aide does not have to present many scientific facts at this level, although they should be accurate if the need arises. He or she explains in a simple manner and helps a child with his discoveries. The adults in the room must appreciate and think about science. They should express curiosity and have the courage and feeling to find out with the children.

2. **Resources to Develop This Activity**

   The aide may have to look up information about "insects" and have on hand some special equipment and materials to house and feed the live gifts from her friends. Science learning enters into most kindergarten activities whether you are cooking or planting seeds.

   It is good to take cues from the interest and the spontaneous questions of the children as a basis for their science program.

   **Materials:**
   - Seeds of all kinds to plant; radishes grow quickly
   - Magnifying glasses
   - Magnets
   - Calendar
   - Thermometers
   - Containers and cages of all sizes
   - Goldfish
   - Several turtles with proper homes
   - Aquarium
   - Terrarium
   - Friendly animals — a turtle, duck, rabbit, bird, mouse — may be brought in for visits
   - Insects — in jars
   - A pulley
   - A tub of water for experiments
   - A measuring cup

3. **Guides for Success**

   A science walk around the school helps the child see the science in his environment. As the aide walks with the child he or she talks and asks questions about what they are seeing on their walk and helps the child see the different rocks, bushes, trees, and birds. They can look at the sky and discuss and predict the weather. "Do you think it will rain tomorrow? What makes you think it will rain?"

   A garden may be planted either indoors or outdoors. Carrot tops placed in water will grow green foliage; beans will sprout if placed on a wet sponge; milk cans of all sizes make individual flower gardens — all ideas for indoors. Outdoor gardens in the spring with radishes, onions, and leaf lettuce furnish ingredients for a salad for lunch or a snack with bread and butter. Maybe a toad or earthworm will move in and children can see the relationship between plant and animal life.

   The aide may help the children take care of the pets in the room. Together they will keep the cages clean, give the animals food and water, and give love and affection to their visitors.
A good place to play is safe and properly equipped.

Digging in sand or dirt, alone or with a friend, is an experience which belongs to early childhood.

Block play is important. Children struggle, lift, explore, invent, socialize and verbalize as they build together.
I. GROWTH THROUGH PLAY

1. THE VALUE OF PLAY FOR THE GROWTH OF YOUNG CHILDREN

Play is the life of the young child. There seems nothing more natural than play. A child plays because he has to; it is his life work and basic to his existence. Play is the beautiful central fact of childhood.

Through play a child is developing his thinking tools. He is trying and testing himself as he manipulates the blocks, the swing, the hammer, and the saw. He reaches out to everything in his world, tries it, probably pulls it apart but gradually learns to put it back together. His learning accrues in direct proportion as he is given the opportunity to explore, to manipulate, to invent, to verbalize, to socialize, and to be himself.

It is important for the adult to understand the meaning of play to the child. This understanding will be a determining factor in utilizing constructive play for learning experiences. Play is to children what brainstorming is to adults. All creative adults play, and lucky is the adult who thinks of work as play.

2. PREREQUISITES IN PLANNING FOR PLAY

Time to Play

A pressing problem is the need for time to play. Play time is “important time” in a child’s development. He needs time to discover himself and to gain a good feeling about himself. This infers that the teacher’s focus will be more on the children than on the clock. It takes time to grow!

A Place to Play

Children need a place to romp freely without worrying about hurting themselves. It should be a place for freedom, with materials arranged so that children are encouraged in spontaneous play.

Something to Play With Is Something to Learn With

The right play materials provided in the right environment, in the right way, and at the right time freely contribute to the development of well-developed human beings. As a child plays he is expressing and experiencing life in his own culture at his own time and pace. Adults need to be aware of the age and play interests of children and to help in providing activities and materials that will meet these needs. Size, form, durability, indoor-outdoor possibilities, and sheer fun are factors to be considered when selecting play materials for children. Some equipment should be selected for a child’s solitary reflective play.

Somebody to Play With

Play is truly the pleasure of doing things together. Friendship groups are play groups.

Safety in Play

We must give the child the opportunity for testing and trying with many new experiences. As adults watch children in their play it is important to employ wise supervision with a minimum of interference. However, safeguards are a must. All equipment should be checked for splinters, sharp edges, points and non-poisonous paints. Safety education on the use of play equipment is continuous and never ending. The play area is important and should be checked daily for hazards that might harm children’s play.
3. TYPES OF PLAY

Dramatic Play

Through play a child is able to create an imaginative world where he can act out and rehearse social living experiences. He acts out what he is unable to do in reality. He interprets his feelings. The play house — with dress-up clothes — will direct the child to play activities centering on family living. Picnicking — a little box makes a wonderful picnic basket. Plastic cups, tea party dishes, plastic water jug and picnic items for children. The corner of your room or the playground will serve as sites.

A dramatic play box is almost a must. . . . The things in it may change with the seasons or type of play. In the fall we fill it with crepe paper ribbons or strips. Children run with them and experiment with air and wind. Another day it may have colored headbands of various sizes with real feathers, that the children have found, to tuck in for Indian play. A purse or two, maybe a scarf, would enable the girls to continue their housekeeping play outside. An open air theater — children, with encouragement, stage their spontaneous dramatic activities outside, on the porch or lawn.

Number Play

A boat or house made of blocks is fun to measure with yardstick, ruler, carpenter’s rule, and tape measures of all kinds — they have depth, breadth, and length.

Large numbers may be painted on the floor in 12” squares with bright colors of powder paint. (See room diagram.)

Finger plays and flannel board activities can be fun, with felt or paper cutouts backed with masking tape.

Learning About the World Through Play

Play teaches a child what the world is. He creates the world for himself, every day with every moment. From this he takes what he needs to weave the pattern of his life.

Science

A science area where experiments may be tried — such as with magnets — will help open the child’s eyes to the world around him.

Listening to and admiring shells adds to the happiness of a child’s day.

A pulley for use in sand play affords many hours of fun.

A rope ladder or a climbing rope with floats tied every so often to test weightlessness is an excellent addition to outdoor equipment.

Music and Rhythms

A small record player in the doll house gives children time to dance with their dolls.

Block Play

This is important play for any age and may be used to extend any type of play. Large blocks may be made into buses, airports, towers, porches, fire engines, trucks, trains, etc. — to list a few. Accessories of all kinds may complement this play, such as fire hats and rope hoses.
**Water Play**

Colorful plastic tubs and buckets of all sizes are needed. They are inexpensive and usually easily lifted and carried by the children. Floating toys of all sizes and shapes are excellent—little cork boats are fun to make. Sponges are fascinating. Plastic cups and containers should be available for measuring and dipping. Weather permitting, little girls enjoy washing doll clothes. There is joy in working with soap suds. We suggest the use of two plastic tubs, one for soaping and one for rinsing. A clothesline that may be strung in a safe place and boys to help carry the water and to help put up the line are nice. A truck tire inner tube cut in half is fine for water play.

**Outdoor Play**

Here children are experimenting with their bodies and rubbing the rough edges off their awkwardness. The usual slides, swings, and outdoor equipment afford hours of excellent play.

Sand Play: A pulley to weigh and measure sand. A large truck inner tube, inflated, may be used as a small sand box—may be rolled around the yard, etc. Boys will think of many ways to enjoy it.

Woodworking and paint shop: Provide saws, hammers, lath and nails for older fives. Safety education and supervision is imperative during this play. Provide large paint brushes, a plastic bucket with water for paint, a paint hat—and little fellows will paint the whole school for you. We suggest a box or a fence, too!

Rock Toss: This idea has been used to help teachers redirect random and dangerous rock throwing. The best way to explain our idea to you is to say it is the principle of the basketball hoop. You will need a large size (No. 10) can of the type used in the cafeteria, with both ends cut out. It can be mounted on a fence or on a pole or broom stick if a backboard is not available, and this should be placed away from the excitement and movement of the playground. Safety factors are involved, but with explanation and direction we think children can enjoy this with safety. They will like the sound when they make direct hits. This may be adapted for a ball toss.

A Fix-It Shop: Get a bicycle pump and a bicycle inner tube. The children will have more suggestions.

**Testing Our Senses Through Play**

Listening in Play: A library center where books are displayed attractively—perhaps with animal chair back covers made of shopping bags. These could pertain to a story that is a particular favorite and be changed from time to time.

A Touching and Feeling Board: Collect many different types of materials—velvet, fur, net, etc. and attach them to a wall or flannel board for children to touch.

A Tasting Station: Where children may test various types of foods—breakfast cereals, cheese, vegetables, and fruits.

A Perfume Tree: Drop perfume on pieces of cotton and place them on a twig or branch for children to “whiff.”
Supplies and “Made Do” Materials

Stockings for puppets: Stuff men’s socks — creating the features with something fancy like rickrack, buttons, yarn, and turn them into horses (tie on the top of a stick), snakes, caterpillars.

A saw horse or two: Several climbing planks. Buttons, yarn, and all types of collage material. Used parts of automobiles: steering wheel, hub caps, tire pump, tires, gears, springs, and handles. An old suitcase. A giant spool, such as telephone wire comes on. An old clock. Cork, string, spools. You’ll be surprised at the many uses children make of these materials.

J. GROWTH IN WIDENING THE SOCIAL STUDIES, DEVELOPED BY CENTERS OF INTEREST IN THE CLASSROOM

1. THE MEANING OF THIS ACTIVITY

The social studies are fundamentally concerned with the children’s understanding of human values. Through these studies the child’s world is broadened at an early age to include an interest beyond his own community. They deal with the growing understanding a child has of the social values in his life as he relates to family, friends, school groups, and neighbors. They blend the world into real life situations and help the children to discover the who, what, when, where, why, and how of life.

The teacher and aide can provide many opportunities for the children to work together — each going about his own interests and duties without interfering with the needs of others. This may be done by setting up an “environmental or interest center,” where a child’s interest centers for a time. It may be a fleeting interest and spontaneous, last for an hour, or continue for several days. In this way social studies may be incorporated in the curriculum for the young child.

2. RESOURCES FOR DEVELOPING THIS ACTIVITY

Through “centers of interest” a child may select the activity of his choice and play alone or side by side with a friend. The starting point for planning a center of interest is “wherever the child is.” Children are interested in homes, families, dolls, water, sand, and pets. They are interested in food, the weather, and animals. Any of these things may make a productive center of interest if you understand the ability and interest of the child or group of children. They will have many interests and probably several at the same time.

I. Ideas for Centers of Interest in the Room

a. Creative activity center:

An area of the room devoted to art media and materials—a handy place with shelves and tables where children can reach their needed art materials and enjoy creating.

b. Manipulative materials center:

An area of the room where children may work puzzles, string beads, enjoy peg boards, etc.

c. Library center:

A quiet corner where children may enjoy books.
Working together, the teacher-aide and the children enjoy planning the library center.
d. A **housekeeping center or doll house**:

The activity relates to the home and family. Cupboards and furniture made from boxes or crates will serve nicely. Some dress-up clothes and a doll or two and you are ready for some absorbing play.

e. **Sound center**:

This may include drums, sandpaper, blocks, bells, rubber bands, several sticks, shakers (cans with several rocks, beans, or seeds inside)—anything that might help a child experiment with sound.

f. **Science center**:

A table or shelf where children may show their ever-changing collections of rocks, leaves, insects, or pine cones. A place where experiments may be left for children to watch on their own private time. Pictures and books which explain things may be displayed.

g. **Birthday center**:

A birthday hat, crown, or badge may have a favored spot in the room. A cardboard cake or a special chair helps to make birthdays very special and remembered for a long time.

h. **Block and building center**:

Blocks are essential in a room for young children and, hopefully, they will be early on your list of purchases. Unit building blocks of assorted shapes, building boards, large hollow blocks, play animals, play people, all the transportations toys—trains, airplanes, boats, cars, trucks should be chosen with care and durability in mind. They will be expensive but they will last and last. We suggest that you look in the chapter “Resources for Learning” for further information. The companies listed will send toy catalogues upon request.

i. **Using the senses in centers of interest**:

- A listening center: A phonograph with a head set where a child may listen to records.
- A tasting station: Described in the section on health.
- A touching and feeling game: Described in the section on play.
- A seeing game: Place several objects in a box and cut a hole in the end and cover it with clear plastic for the children to peek through.
- A smelling game: Have several plastic bottles with a drop of vinegar, vanilla, perfume, etc. in each for children to test their sense of smell.

j. **Add centers developed during the year as outgrowths of the children’s experiences**.
VI. RELATING TO THE YOUNG CHILD, TEACHER, PARENT, AND TEACHING PROFESSION

We frequently have referred to the importance of the relationship of the adults as a basis upon which successful programs for children are built. We believe the key to this understanding is the mutual respect held by each person for the personality and beliefs of the people who daily work together. A group of aides, after some work with children in a classroom, listed the following as useful guides in working toward good human relations:

A. HOW AN AIDE MAY ASSIST IN THE CLASSROOM

1. Preparation of the Room Before School:
   a. see that the tables and chairs are in place
   b. see that ventilation and lighting are healthful
   c. see that cupboards are in order and that materials and toys are ready to use
   d. see that large block and wheel toys are in place
   e. see that centers of interest are neat, attractive, and ready for the day
   f. see that toilet facilities with soap and towels are ready for children
   g. see that pets are fed and cared for
   h. (you add to this list jobs that fit your situation)

2. Preparation of Materials Needed for Classroom Instruction:
   a. talk with the teacher and know what special materials she will need for the day's projects
   b. daily, check the supply of art paper, crayons, paste, scissors
   c. check to see that paints are ready for daily use
   d. 
   e. 

3. Preparation of Room After Classroom Instruction:
   a. toys not returned by the children must be put in their proper places
   b. wash up paint spills
   c. clean paint brushes
   d. wash table tops
   e. assist the classroom teacher in any way that helps to prepare the room for the next day
   f. take a last look at the room. Is everything ready that the children will use and need for a good day tomorrow?
Aides assisting on the playground and in the classroom.
B. HOW AN AIDE MAY ASSIST ON THE PLAYGROUND

1. Check all equipment for safe use by the children.
2. Build a good relationship with individual children as you help them on the playground.
3. Assist children in sharing, in participating, and in finding constructive activities together.
4. Be alert to the ways through which you can help children to learn the proper use and care of the equipment. For instance, “Sit down while you swing.” “Sit down when you go down the slide.”

C. HOW AN AIDE MAY HELP CHILDREN IN THE CLASSROOM:

1. Teach the children how to use the bathroom facilities.
2. Help children who need special assistance in learning to use crayons, paste, scissors, paints.
3. Help show children how to clean up and put away materials.
4. Help children to know the pleasure of trying new things, such as a new food for lunch.
5. Help children to be tolerant, patient, and understanding of others.
6. Help children to know proper behavior at the table; for instance, how to pass foods, how to help themselves.
7. Put up children's art work and pictures in the room for them to view. Print each child’s name on his picture.

D. HOW AN AIDE MAY HELP THE TEACHER IN THE CLASSROOM:

These duties will, of course, be dependent upon the many individual ways in which different teachers function in their classrooms. However, in general, the following have been ways in which aides have worked in different classrooms:

1. Prepared special activities to work with small groups, such as a story, finger plays, records, rhymes, flannel board stories.
2. Prepared special art materials.
3. Helped the teacher plan and conduct a trip with children.
4. Assisted the teacher when children are taken on nature walks.
5. Recognized that the aide is the teacher's right hand to assist and support the kindergarten program.
6. Recognized that she may assist in maintaining good records, i.e., health and attendance, and in keeping observation and anecdotal notes on each child.
E. HOW AN AIDE WORKS WITH THE PARENTS:

1. She helps to interpret and explain the educational program to individuals or at group meetings.

2. She may visit in the homes and often is called upon as an interpreter.

3. She may assist in the enrollment of children in the program by bringing to the school her understanding of the community and its families.

4. She is aware of the parent who does not understand the school's program for the child, and, with patience and skill, she listens and tries to help the parent see the school through the child's eyes.

F. HOW THE AIDE WORKS WITH HER PROFESSIONAL RESPONSIBILITIES:

1. If we are to respect children as people, it will be important to remember not to talk about children in front of them. This is often a temptation.

2. As an aide you will be learning a great deal about children and much about individual children. It will be important not to discuss, outside of school, the group of children with whom you work. Confidences are not to be shared.

3. The aide's job should be a busy one. She should not have time to sit, or to stand aside and chat with a friend. A successful aide will be busy at all times, with her eyes on the children.

4. The aide will be interested in spending some time in learning more about characteristics and needs of children and in improving her ways of working with individual children. This will mean some time to read, to observe, and to visit other programs.

VII. RESOURCES FOR LEARNING

Bibliography for Teachers of Young Children

A. CHILD DEVELOPMENT AND CURRICULUM.

1. Association for Childhood Education International, Play—Children's Business, Margaret Rasmussen, Editor, 1962-63.


B. THE KINDERGARTEN


C. CREATIVE ACTIVITIES — BOOKS


D. CREATIVE ACTIVITIES — PAMPHLETS


E. SUPPLIES FOR A GROUP OF 4- AND 5-YEAR-OLD CHILDREN

- Sandbox and sandbox toys: pails, scoops, large spoons, shovels, sifters
- Swing — canvas bucket seat
- Climbing apparatus
- Balls — rubber, various sizes
- Softwood (lath) for construction
- Saws
- Hammers
- Nails
- Old table or work bench
- Small ladder
- Floor blocks of varying sizes
- Hollow blocks — purchased from educational companies
  - 6” x 6” x 12”, 6” x 12” x 12”, 6” x 12” x 24”
- Wooden sawhorse
- Old tire
- Large truck tire
- Water toys
- Wheel toys
- Storage unit for outdoor equipment
- Manufactured toys designed for block play: train, truck, boat, airplanes, automobiles, farm sets, steering wheel
- Telephones — two
- Playhouse and playhouse furnishings. May be made from boxes, kegs, and crates
  - Dress-up clothing, dolls, dishes
- Accessory toys: animals, people, fences, etc.
- Flannel board
- Rhythm instruments
- Projection equipment
- Sound equipment: record player and tape recorder
- Magazines
- Books for young children
- Paint, paper, brushes, sponges, crayons
Paint and paper for finger painting
Clay
Paste
Scissors — order several for the left-handed child
Puzzles, bean bags, beads to string
Science equipment: terrarium, aquarium, cages, magnets, measuring materials

F. EQUIPMENT LIST

Paint or work aprons — made from worn men’s shirts — children wear them backward
Egg beater
Fly swatter and toothbrush for spatter painting
Pipe cleaners
Toothpicks
Raw macaroni — for stringing, for collages
Straws — cut in pieces and strung
Colored tissue paper
Paper plates, paper bags
Shoe boxes — for cages — for paint cans
Egg cartons — sections make animals, doll furniture; carton makes a scissors holder
Oatmeal boxes
Juice and food cans for paint containers
Paper and cardboard boxes
Soap and soap flakes
Shoe laces for stringing
Matching games — picture lotto of all types
Dominoes — number sets — picture sets — some felt backed for flannel board use
Counting frame — abacus
Small building blocks
Magic markers — all colors
Disposable Tissue
A flannel board — or cover heavy cardboard or masonite with flannel; cut figures from paper or other material and paste flannel on back

RHYTHM RECORDS — Bomar Records, Inc.:
Rhythm Time
Rhythm Time No. 2
Holiday Rhythms

ACTIVITY RECORDS — Children’s Record Guild:
My Playful Scarf — 1019
Nothing to Do — 1012
Creepy Crawly Caterpillar — 5019
My Playmate the Wind — 4501
Golden Records: Children’s Marching Song — 545
Columbia Records: Let’s Play a Musical Game — HL 9522

LISTENING RECORDS — RCA — Camden (Cal 1012):
“Bambi,” narrated by Shirley Temple — Walt Disney
Columbia Records: HL 9526 — Hans Christian Anderson in Song and Story
The Ugly Duckling
Peanut Butter Candy
Boil 3 medium potatoes. Cool. Mash
1 1/2 cups peanut butter
1 pound powdered sugar, gradually add until mixture is workable consistency.
Drop by spoonfuls on squares of wax paper. Children may dip their hands in powdered sugar and then roll the globs into round balls.

Clay Dough
1 cup flour
1/2 cup salt
1/2 cup water
1 tablespoon alum (to keep from becoming sour)
2 tablespoons of salad oil (to keep from sticking)

Salty Dough
1/3 cup flour
2/3 cup salt
1/3 cup water

Store in cool place in covered container or plastic bags. Individual plastic bags are excellent and labeled for each child to re-use from day to day.

Finger Paint
1/2 box laundry starch (1 1/2 cups)
1 quart boiling water

Mix the starch with enough cold water to make a paste, add the boiling water, stirring until clear and glossy. Add talcum. Cool mixture and add soap flakes, stirring until smooth. This will be thick. Pour into jars and keep covered. Keep in cool place.

Homemade Paste
1 cup sugar
1 cup flour

Mix dry ingredients, add water, cook until thick, stirring constantly. Cool, add several drops of oil of cloves. Store in covered jars.

Sources for Supplies
Teaching Tools Co.
3401 East Thomas Road
Phoenix, Arizona 85018

Provides a wide source of supplies and materials concerning early childhood education — order blanks and bulletins upon request.
PROFESSIONAL ORGANIZATIONS PUBLISHING PAMPHLETS AND BULLETINS

Association for Childhood Education International, 3615 Wisconsin Avenue, N. W., Washington, D. C. 20016. List of publications sent upon request.


BIBLIOGRAPHY

"ANIMALS OF THE FARM"
10 min., Teaching Film - 1947

The physical appearance and habits of the common animals of the farm are presented in a realistic treatment that will delight the young child. This well-organized film not only offers an excellent visual experience for the primary grade child but will serve as a reading exercise by which a farm will become infinitely more meaningful to him.

"BUS DRIVER, THE"
11 min., EBF - 1946

How a bus driver meets driving hazards, serves his passengers, and keeps his bus in operation. Activities of a bus terminal and service garage also are included.

"FARMYARD BABIES"
11 min., Coronet - 1952

Follows Daisy, the farm dog, on her morning rounds to see a variety of "babies" of the farmyard - lambs, calves, colts, chicks, and others. Designed as a background for reading and language expression.

"FIDDLE DEE DEE"
4 min., Int. Film Bureau - 1948 - Color

To the tune of "Listen to the Mocking Bird" the artist painting on the film has interpreted in color the nuances of the violin. The animation suggests the rapid unrolling of a fantastic textile. Thousands of color combinations flow across the screen, often with brief flicks of free color dancing across the main flow like sharp notes across the rich harmony of the tune.

"FRISKY, THE CALF"
10 min., Coronet - 1950

Companion film to "Sparky the Colt." The story of a lovable little calf, taking children into the barnyard where they see how the animal is handled. Designed to stimulate youth interest in the world about them and to provide a background for reading and discussion.
"FRUSTRATING FOURS AND FASCINATING FIVES"
22 min., McGraw Hill - 1952

At home at age of four we see a boy's behavior deviate from childish helplessness to vigorous self-assertion, and at kindergarten, from imaginative craftsmanship to inconsistent destructiveness. Although the change is gradual, at five Roddy appears more independent of adult support with an insatiable curiosity about everything around him.

"HOW BILLY KEEPS CLEAN"
11 min., Coronet - 1951

How Billy can play hard yet keep himself clean and healthy is explained through demonstrations that appeal to primary grade youngsters.

"LITTLE WORLD"
20 min., Day Care Council of N. Y.
N. Y. U. Film Library - Color

This film presents a day in a day care center under the guidance of an experienced, qualified school teacher. The arrangement of the room, use of equipment, interest centers, role of the teacher, the aide or assistant, parent and the social worker, are all presented. Sequences shown include an excellent series on block building, dramatic play, outdoor block building, water play, field trip, and music enjoyment.

"PLAYGROUND SAFETY"
10 min., Coronet - 1949

(1) Be sure the play is safe; (2) keep out of the way of other players; (3) learn how to play more skillfully. These are the three rules so effectively dramatized in "Playground Safety." The story tells how Jack, who had broken his arm in a playground accident, taught the other students these safety rules. Soon everyone was having more fun, for there were no more accidents to spoil good times on the playground.

"SAFETY ON OUR SCHOOL BUS"
11 min., EBF - 1957 - Color

For all students who ride school buses, this film clearly explains and illustrates important safety practices — the proper procedure for getting on and off, and six common sense rules for safe conduct while riding.

"SAFETY ON THE WAY TO SCHOOL"
10 min., Coronet - 1952

A lesson in safety, including map making for the safest route, discussion of the many skills needed to walk safely to school, how to ride safely in the bus or in a car — and other class activities centering around how to go to and from school safely.
I. EXAMINING OBJECTIVES
   A. Objectives of the teacher-aide as he or she works with the child
   B. Objectives of the individual aide in becoming acquainted with the job

II. UNDERSTANDING THE YOUNG CHILD
   A. Characteristics of young children
      1. Information on ages and stages
         a. the three-year-old
         b. the four-year-old
         c. the five-year-old
      2. Basic needs of children
         a. self-confidence
         b. belonging to the group
         c. achievement
         d. freedom from fear
         e. freedom from guilt
         f. a variety of experiences
         g. love
   B. Guidelines in the study of the young child
   C. Assignments in observation

III. GUIDING THE YOUNG CHILD
   A. Knowledge and awareness of differences in children
   B. Reasons behind specific behavior
   C. Teaching techniques in guiding the young child
   D. Assignments

IV. INFLUENCING THE LEARNING OF THE YOUNG CHILD
   A. Environmental influences
      1. Environment and feeling in the room
      2. Environment and feeling for learning
   B. Influence of school leaders and administrators
   C. Influence of the teacher
   D. Influence of time

V. PLANNING THE PROGRAM FOR THE YOUNG CHILD
   A. Growth through routine
      1. Suggested daily schedule
      2. Beginning the day
      3. Sharing time
   B. Growth through language, experiences and activities
      1. Storytelling
      2. Dramatization
      3. Listening to records

   4. Finger plays
   5. Use of library books

   C. Growth through use of numbers
   D. Growth through health
   E. Growth through safety
   F. Growth through art
   G. Growth through music
   H. Growth through the sciences
   I. Growth through play
      1. Value of play
      2. Planning for play
      3. Types of play
   J. Growth in widening understanding of the child's world through the social studies; growth in social studies through centers of interest
      1. Creative activity center
      2. Manipulative materials
      3. Library
      4. Music and rhythms
      5. Science
      6. Birthday
      7. Block and building materials
      8. Dolls and housekeeping
      9. Using the senses in centers of interest
         a. a listening center
         b. a tasting station
         c. a touching and feeling game
         d. a seeing game
         e. a smelling game
   10. Add centers developed during the year as a growth of the child's experiences

VI. RELATING TO THE YOUNG CHILD, TEACHER, PARENTS, AND THE TEACHING PROGRAM
   A. How an aide may assist in the classroom
   B. How an aide may assist on the playground
   C. How an aide may help children in the classroom
   D. How an aide may help the teacher in the classroom
   E. How an aide works with the parents
   F. How the aide works with her professional responsibilities

VII. RESOURCES FOR LEARNING
   A. Bibliography for teaching young children
   B. Supplies for a kindergarten
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SECTION II

INDIAN CULTURE

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Formal presentation of cultural factors.

BY PATRICIA AND ALBERT KUKULSKI

Indian Community Action Center  O.E.O. Juvenile Delinquency Study, Pima Reservation
Arizona State University
OBJECTIVES

OVERALL OBJECTIVES:
1. Every group has a cultural pattern.
2. This pattern has developed to meet the needs experienced by the group.
3. Needs of a group will change, and new patterns will emerge out of necessity.
4. Cultural patterns are the greatest heritage of any group and should be regarded with pride.
5. As groups come in contact, an exchange of cultures will occur.
6. Culture substitution or rejection can be disastrous if not based on a very careful pattern of selection.
7. A good selective process should not introduce cultural conflicts.

SPECIFIC OBJECTIVES:
1. An awareness of various cultural factors.
   A. Language
   B. Political systems
   C. Education
   D. Social organization
   E. Religion
   F. Values
   G. Housing
   H. Clothing
   I. Food
   J. Crafts
   K. Sources of income
   L. Willingness to accept change
   M. Understanding other cultures

2. An understanding of the meaning of each factor of one's own culture.

3. Methods of helping others understand one's own culture and the culture of other groups.
INDIAN CULTURES

Culture can be described in many ways. For all general purposes let's think of it as a dress—a garment that protects a person and makes the wearer more distinctive and attractive. Generally, a dress is made of many different items. There is material—thread, buttons, and/or zipper. But when all these are put together skillfully, one gains an end product, a unique possession worth much more than any one of the single items.

Again, as we hear of new materials for dresses and as they become available, we use them as they fit our needs. An example of this is using a no-iron cotton instead of the cotton that requires much ironing. Cotton still is present, but other products have been blended with it to enrich its original value.

Such is a culture, which also is made of many parts. Some of these are language, religion, political systems, crafts, education, and foods. And, when the separate aspects are put together skillfully, the sum total is a culture. At times all groups of Indians have added needed items and parts to their cultures. As these things have proved to be needed and wanted, cultures have changed. Just as in a dress material, the old is present but the new material usually has been blended with it.

As a teacher-aide, let's examine some parts of culture more carefully.
LANGUAGE:

VALUE:

The most valuable and uniquely individual possession of a person is his language. Each of us clings to and enjoys his language. It is not only a tool by which he communicates, but it is in reality an intricate part of his personality through which he is able to convey his innermost self to other persons.

The areas most sacred to us—such as our home life, marriages, ceremonials, religion, names for loved ones, social contacts, business matters, courtships, births, deaths—all are understood by using our native tongue.

Children have been told upon entering school that they no longer may speak their own language. In many schools a rule has been passed saying only English may be spoken. Educators have said to the pre-first child through such a rule, “We disapprove of your parents, your people, and everything you have been able to do with your language. We’re going to teach you another language that from now on you must use.” However, many educators now share the writers’ opinion that by forcing a child never to use his own language one does the child much more harm than good.

IMPORTANCE OF ENGLISH:

We all know that most textbooks in the United States are written in English. We also know that the child will, in due time, learn to read and speak in English. However, the experiences this child will have in English will not be as successful and happy as will experiences within his culture, such as family life, ceremonies, and social gatherings. He rarely is as successful in school as his English-speaking counterpart.

In most cases, the status he possesses among his own people is never enjoyed in any experience involving English. The father may be a tribal leader in his culture, yet in the English-speaking culture his prestige is lessened. If the mother shops in English, it often is a painful experience as she searches for the names of foods desired. Complete acceptance never is felt when such experiences as these continue to exist in English. Many bi-linguals say, even in later years, that they think in their native tongue. Is it a wonder that a pre-first child feels much more comfortable in using his native tongue? Success has been felt in his language, while in English lack of success often has been keenly experienced.

So language is more than just words; it becomes associated with a certain way of life. And the Indian child associates the English language with a non-Indian way of life.

IMPORTANCE TO THE CHILD:

As we all know, a child must learn the English language because most education in the United States is offered in English. Consequently, the English language is of the utmost importance in the life of each student in this country. But never should the goal of teaching English to any pre-first child become more important than the feeling the child develops toward the language he is learning.

Pleasant experiences must be associated with English. Understanding must be shown by the teacher-aide and by the teacher toward the child as English is introduced. Often a pat on the back or a smile tells of such understanding long before English ever is undertaken. Nowhere is the quality of warmth more needed than in a teacher-aide or teacher of such a pre-first child. A sincere attitude is
vital; an insincere one cannot be hidden. Language does not tell this story. A child \textit{senses} the attitude immediately.

METHODS:

A pre-first child will learn his new language best by experience. The things one does, one remembers best. So all the first-hand experience a child can be given will be the best and first method to be used.

Charts, movies, stories play dolls, toys, television, puppets, English via tape machines, and pictures of newly experienced words are among the most commonly used methods at this level.

Examples of some methods of teaching English to the Indian child:

Pictures of commonly recognized objects are used to help teach English words.

The pre-first Indian child's interest is held by a popular fairy story while he attempts new words in English.
POLITICAL SYSTEMS

SYSTEMS IN GENERAL

One cannot live in any culture entirely as one would like. Controls must be made from within the culture or it soon will crumble. Many good and bad controls have been tried during the past, which proved their worth (or lack of it) by how well they met the needs of their people. These systems have had to change as the needs of each particular cultural group changed. Success of our American government has been because it continually has responded to the wants and needs of the American people.

The American Indian has had various political systems, although most now have tribal councils. These councils strive to meet the needs of their people, and they have been instrumental in initiating many vital programs on reservations. Often the enemy that plagues this political system, however, is difficulty in communications where many miles lie between the council members and the people they must represent.

Non-Indians often have trouble understanding, and even more trouble accepting, the structures set up in Indian political systems. For instance, we in our American democracy allow a majority to elect our leaders. Complete unanimity, however, is the rule followed in many tribes. Often Indian groups must have everyone in a community in complete agreement before a person is elected to an office. To a modern non-Indian in the normal rush of events, this is much too time consuming and a completely foreign way of doing things. A teacher-aide must explain this type of system to the teacher unfamiliar with it. In many Indian cultures majority rule is now being accepted, at least in part.

Non-Indians often do not understand that being a leader among one's own people is most difficult. One value most Indians in the Southwest have held a long time is that it is better to be much like everyone else and not to excel by being outstanding in any way. Therefore, leaders are not easily found.

WORKING WITH INDIAN LEADERS

We remember a councilman from Rock Point, Arizona, by the name of Tutcheenie Nez. He spoke no English and had great difficulty bringing home an account of all the happenings of the Navajo Tribal Council meetings. He found difficulty being one of the early leaders of that community. He had to speak through an interpreter to those who worked with his people and their children at the government school. Yet, the hours spent in tedious details and explanations with this man were well worth the effort. It was through him that the people learned of our ideas and educational hopes for their children, and he in turn helped us understand what the people wanted and needed. Tutcheenie Nez had never gone to school and yet he was able to be an early leader in the political system of the Navajos and to help his people and the personnel of the government school work together successfully in their political system. A teacher-aide must understand the political system of his or her own tribe, and the aide must explain this system to the teacher. Together they must be able to accept it and to work well within its structure.
FIELD TRIPS ARE TAKEN TO OBSERVE TRIBAL POLITICAL SYSTEMS FIRST HAND

Teacher-aides boarding the bus to visit Gila River tribal offices.

Gila River Tribal Council chambers.
EDUCATION

PAST

Education for Indian people has developed through many trials. In early days, Indian children suddenly were picked up and put on vehicles and physically removed from all they knew as home and family, and they were taken away to be educated. School proved to be a thing Indians dreaded, of course. Then schools were built on reservations and children were kept nearer their homes, but they still were in boarding schools. Day schools also were tried, and both types of schools still exist. Indian students also have been taken to towns near their immediate reservations and sent to local public schools while being housed in government dormitories.

Until the second World War, many Indian groups left the decision regarding an education to the child himself. Some children chose to remain at home and never go to school. Some parents felt they needed a child to care for younger children. On the Navajo reservation one child from each family often was kept to herd sheep. Some families gave this task to the same child each year, while other families let one child do it one year and another child the next year. These parents put little value on obtaining a formal education, and we have recruited until after Christmas trying to fill our school because the parents had hidden their children. The people loaded our vehicle with pumpkins, corn, and other foods—rather than with children.

PRESENT

In recent years, however, the attitude toward education has changed. Since World War II, most Indian groups not only accept education of their young children, but greatly desire it.

THE ROLE OF THE TEACHER-AIDE IN COMMUNITY RELATIONSHIPS TO THE EDUCATIONAL PROGRAM.

The teacher-aide has a golden opportunity now. He or she should make many home visits, know the educational needs of each family, and include each family as much as possible in the activities of the school. In addition, the teacher-aide should explain the importance of a pre-school program to the parents.

Many Indian people ask why their young children seem to play so much in the pre-first program and are not writing, reading, and doing arithmetic immediately. The aide should be able to explain the importance of play at this stage of a child's development and how all the readiness activities lead to better reading when the child reaches the right mental age for reading. The aide can explain to the people in his or her culture how this good beginning will keep the child interested in school longer because he will be more successful.

Most aides can get this point over better by explaining early education this way: It's like a house. If a house has a good foundation, it will stand longer and better. If it has a weak foundation, it crumbles. So, if a child understands and does well with the readiness program that precedes reading, the child will be a better reader and he will want to stay in school because he will understand and enjoy school. Thus, many "drop-outs" can be avoided.

The pre-first program long has been needed by Indian groups, especially in the cultures where another language is used. Indian people are very aware of this, and in every tribe they are asking for such a program to educate their young and to give them a better "foundation" for their schooling.
FAMILY

INDIAN FAMILY RELATIONSHIPS

Non-Indian teachers often do not understand the way some Indian groups trace their relatives only through the mother's side of the family. This is a matrilineal society, and the Apache and Navajo tribes are examples. On the other hand, some Indian groups trace their descent through the father's side of the family. The Pima and Papago tribe are such a group.

If a teacher-aide belongs to a tribe where descent is traced through the mother's side of the family, he or she should explain such a system to the teacher. This means many ideas of family life are different from those to which the teacher has been accustomed.

THE EXTENDED FAMILY AND HOW IT AFFECTS THE CHILD

As a very young teacher, the writer can remember well her surprise when she asked how many brothers a little child had and the child counted to an unheard-of figure. He was counting brothers, cousins, and a few clan relatives.
A teacher-aide should explain that the mother's oldest brother often is the one who assumes such duties as a father might in a non-Indian society. The brother often is the one who controls the "purse strings" in his sister's family and corrects his nieces and nephews. The father plays the role of being someone the children can enjoy and be a friend to. The teacher should understand that this same father may be the oldest brother of a sister who has a family, and that he does for that family what his wife's brother does for his family. Thus, when a divorce occurs within this type of Indian family, the effect of losing a father who has been only a friend is not so dynamic as that felt in a non-Indian family. Life continues much as it always has.

If a teacher-aide belongs to a tribe that has a clan system, this should be explained to the teacher. Perhaps a bulletin board or clan-tree could be made, showing the children who in the classroom is related to whom by clan. This is one way the parents and older members of a community could help and would be very pleased to do so. This also would tell the community that the teacher-aide and teacher do not intend to leave the ways of the people's culture out of the educational program.

In many Indian tribes an "extended family" is enjoyed. The reason we use the word enjoyed is that in such a system, a young child receives more love and affection than his counterpart would receive in a non-Indian society. There always are many relatives with whom a child can spend his waking hours. All Indian cultures value children very highly and welcome them one and all. Consequently, a teacher-aide can help the pre-first child greatly in this difficult adjustment.

In starting to school, the Indian child, for the first time, is taken away from not only his immediate family but from his extended family and put in a situation which is strange to him; and, to complicate the matter, another language often is spoken by the stranger around him. Is it, then, any wonder that the "emotional" impact on this small child becomes almost unbearable? If, as a teacher-aide, you can think of how frightened you were, and if, in your own language, you could have told someone of your fears and problems, you can begin to see how you can help the small pre-first child in the beginning of school.

THE TEACHER-AIDE AND THE SOCIAL ORGANIZATION

The secure feeling that has been given to the Indian pre-first child is one of the wonderful things his parents' family has offered and he will need this security more and more as he progresses through school. Don't take it from him! As a teacher-aide, add to it. Encourage him to try new things, and compliment him on his good work.

A child who is trying hard to be a member of two cultures needs far more help and encouragement than a child who has only one culture to learn. As a teacher, the writer tried each day to compliment each of her students on one part of the day's work. This was a sincere effort and not a pretense. A child would not respond to a false compliment. As an aide, you can be on a continual search for progress and for new good things the child is doing.
Children are encouraged to discuss family life as they know it.

The pre-first Indian child has received much love by his extended family and immediate family previous to attending school.

**RELIGION**

In every culture ever known to man some sort of religion has existed. Among Indians in the United States some of the religion of the "early days" has been retained. This varies among the tribes. Some tribes have resisted Christianity to the utmost degree possible and have retained their own religions. Some tribes, for the most part, have become Christians. Many tribes have combined their religion with Christianity and have taken a little of each.

**INTERPRETING THE RELIGION**

It is of the utmost importance that a teacher-aide not only be familiar with the religion of his or her people but that he or she help the teacher understand it to the degree it affects the student. For instance, if a ceremonial were being held within a family group, the teacher-aide should explain the absence of the
A teacher-aide and teacher should attend ceremonies, if possible, to learn the religion of the tribe.

pre-first child to the teacher. The teacher then would not make the mistake of reprimanding the child or family for poor attendance. Also, if a child appears in school with tar, soot, or other such material on his body, the teacher-aide should explain to the teacher the necessity for not washing the child until permission has been obtained from the family.

Most teachers discover that if respect is shown for the Indian people and their religion they, in turn, will respect the teacher and the school much more.

The teacher-aide can help in this area where perhaps no one else can help. The aide can offer to take the teacher to ceremonials and to let the teacher observe at first-hand the Indian people and their religion. However, if the teacher is not welcome at such gatherings, the aide can explain this, too. The teacher must remain very flexible and open-minded in this respect.

The writer remembers taking a pre-first group for a school hike in her early years of teaching. Because she needed to keep a close watch on small children she asked them to stay in line. Much to her dismay, the line kept bending, and she could not understand the necessity for it. She finally discovered that the children knew where all the graves of that area were located, and the “evil spirits” were felt to be near them. An aide would have saved her much time and effort and helped her understand her school children more quickly. Never during the years that she taught Navajo children did she feel that their religious ceremonies interfered in any way with schooling. The parents appreciated the fact that she understood, and they cooperated in every way with the school. A good rule for an aide or teacher to follow is: If this were my child, how would I want the school to act?
Museums and other historical organizations many times have educational exhibits and materials, and teacher-aides can use them profitably to learn about their own people.

VALUES

ATTITUDES TOWARD VALUES

All societies have values—ideas about what is good and what is bad, what is right and what is wrong. But different societies have very different ideas. For example, in one country it is good and right to have many wives; in another this is held to be wrong. In one group it is a man’s obligation to work hard so that his family can have the material things in life; in another group material things are held to be somehow evil, and a man who seeks them for himself and his family is a sinner.

Many people—philosophers, anthropologists, educators, politicians—have looked at this undeniable fact (that different societies have different ideas about good and bad), and they have come up with two very different attitudes. Some people believe that there is only one set of natural laws by which all men should live, such as the Ten Commandments. They believe that all who fail to live by these moral laws are bad people who must be made to see the evil of their ways.

Other persons feel that the moral beliefs of a society fit the living conditions and way of life of that group and that one set of values may be as good as another set of values. Differences can be explained by examining the whole context in which the values were developed. One example: Anthropologists once came across a tribe in Africa where people who reached their sixtieth birthday were buried alive. The explorers were horrified by this action—this murder. Then they learned that the tribe always had had a very limited food supply, that this burial ceremony was one way of distributing the meager resources and keeping what food
there was for young people; and the explorers found that the elderly believed that being buried alive was an honor and was something to look forward to.

When working with people who hold different beliefs about good and bad, the teacher-aide must try to understand what the moral beliefs are and why the people hold these beliefs. Frequently a rule hard to understand, such as burying people alive at 60, becomes at least understandable when it is seen to have similarities to a highly moral rule: “If food or water or space on a lifeboat is limited, the young have priority over the old.”

Indian Values as Opposed to Non-Indian Values

Teacher-aides must understand the conflict in values that the Indian pre-first child faces. Usually the child will not be aware of these values as such, yet the problems are with him constantly. An aide can help by explaining how he or she was able to adjust to such conflicts.

A few of the general values in the many Indian cultures that differ from non-Indian cultures are worth comparing. The aide should refer to this list often and try to apply it when needed.

Indian Cultures

Time Is Unimportant

Time is a very relative thing. Clocks are not watched. One does things as they are needed to be done. Often the family gets up as the sun rises and retires soon after the sun sets. “Indian time” means when everyone gets there. A community meeting can be set for 1 p.m. and people will come as near that time as they wish. So the meeting actually may begin an hour or two later, and this bothers no one.

Today Concept

Indian people generally live each day as it comes. Plans for tomorrow often are left until the future becomes the present.

Patience

To have much patience and to wait is considered to be a good quality.

Non-Indian Cultures

Time Is Important

Time is of the utmost importance. When a person says he will be somewhere at 10 a.m. he must be there at 10. Otherwise, he is felt to be a person who “steals” another man’s time. More and more, non-Indians rush. It is felt among this culture to be good to use “time” to its fullest extent.

Tomorrow Concept

Non-Indians constantly are looking to tomorrow. Such items as insurance, savings for college, plans for vacation, etc. suggest to what extent non-Indians hold this value.

Action

The man who is admired is the one who is quick to act. He gets things done rapidly and moves on to the next thing. To sit idly and let one’s competitor pass him by acting more quickly is considered bad business.
Shame

The Indian groups often shame an individual, but once this is over no guilty feeling is held by the individual.

Extended Family

Aunts often are considered to be mothers. Uncles are called “fathers,” and cousins are brothers and sisters of the immediate family. Even clan members are considered relatives; so Indian cultures consider many more individuals to be relatives than do non-Indians.

Age

Respect is for the elders. Experience is felt to bring knowledge. So the older one is, the more knowledgeable he is. No effort is made to conceal white hair or other signs of age.

Few Material Things

Members of the tribe often are suspicious of individuals who collect many material possessions. Some tribes even hold celebrations and give away most of their possessions to others as “love gifts.” The Sioux enjoy such a practice.

Giving

The respected member of many Indian cultures is the one who shares and gives all his wealth to others.

Guilt

After an act is committed that a non-Indian feels to be wrong, he carries inside him the knowledge of having done something wrong. This terrible feeling may make one ill mentally and physically.

Family

Biological family is of utmost importance, and relationships are limited within this group.

Youth

Thousands of dollars are spent yearly for hair dyes, make-up, and other items that make older people look younger. Even whole towns have sprung up in the United States which advertise youthful living and that they are designed for “senior citizens.”

Owning of Many Material Things

More and more, non-Indian cultures have measured wealth in terms of material things. Many such possessions often constitute “status symbols” and are considered highly desirable.

Saving

An individual with the quality of “thrift” is felt to have acquired a value worth much.

Man Lives in Perfect Balance With Nature

The earth is here to enjoy. If man accepts this world as it is and lives as he should with it, there will not be sickness or lack of food.

Man Controls Nature

Constantly this culture searches for new ways for control and mastery of the elements around him. Artificial lakes are made; natural waters are controlled; electricity is generated and controlled. Such accomplishments are looked upon with pride.
DIVISIONS OF INDIAN CULTURE

Indian cultures have groups within each culture, just as do most cultures.

Values of the individual Indian person determine which group he joins. Generally three groups are present. These are Traditionalists, Moderates, and Progressives. An aide can be alert to the types of individuals in each group and thus decide how best to work with them. The Traditionalist is a person who accepts only the values held in “the old way.” He resents the coming of the non-Indian and thinks the latter caused the problems that exist today. Anything new is in direct opposition to this type of individual.

The Progressive is one who is the opposite of the Traditionalist. He wants to do away completely with the values held in Indian cultures and to replace them completely with non-Indian values. Often this person is ashamed of his heritage.

Between these two extremes is the person who can accept values from both cultures and use them in his life. He is proud of his heritage but is willing to change and accept values that will add to his rich background. This person is called a Moderate.

The teacher-aide and the teacher can learn to work with each of these groups, all of which have much to offer. Several tribes, such as the Acoma, Navajo, and Pima, have brought into schools traditional members of their tribes to tell stories, teach songs, and impart the rich history of the tribes to their pre-first children.

Many teacher-aides have made chart stories and felt board stories of myths to take to their respective pre-first programs. We agree most enthusiastically with this technique.

The important thing to remember is that the school belongs to the people and their children. In every way possible the people must be included and made to feel their importance in educating their children. Values must be understood, accepted, and appreciated.

Teachers often, even if unconsciously, have a mental picture of changing the Indian children into the children they have known from totally different cultures. In other words, the values held dear to the teachers are the values they assume must be superimposed on the Indian child. The child then becomes confused and “caught” between the cultures.

Indian children must be taught to have much pride in their own culture, just as a non-Indian must be proud of his background. Only then can the individual form a good image of himself and hold his head high.

HOUSING

An aide can help educational personnel in many ways with the understanding of the “why” of housing among his or her people. For instance, the hogan of the Navajo has been a very practical type of home for this group. Native materials are used and thus little or no expense is incurred. It is simple in design and yet warm during the cold months. One family can have several hogans, and when the sheep have grazed to the limit in one area, the family can move to the mountainous or more fertile areas.

The teacher should make many home visits. Her aide can help in understanding the housing of her children and its limitations and advantages. For example, the absence of running water, electric lights, beds, and other physical facilities should be noted and additional understanding and help given the child by the school.
TEACHER-AIDES DISPLAY STORIES AND TEACHING MATERIALS MADE BY THEM DURING THE TRAINING SESSION TO TAKE BACK TO THE RESERVATION.

Silver work, dolls, and other crafts are displayed (above). Teacher-aides can help children learn of various kinds of housing that their own tribe has used through the years (below).
CLOTHING

Many pre-first children will come to school in clothes different from those of other students, and those of the teacher and teacher-aide. In these cases the aide should do all possible to help the child to be accepted, in spite of clothing differences.

If clothing is torn or dirty the aide can talk with the family and see if something can be done to make the clothing look better. The writer often has mended clothing so that a child would not be ill at ease in school.

Such a small effort often means the difference between a "dropout" student and one who finished his education.

If a problem exists such as improper or insufficient clothing, and if the aide knows this, the teacher should be informed. Of course, such information must be kept confidential. Often a teacher has sources for obtaining clothing for such a child. A teacher-aide can serve tremendously because he or she will know much more about the background of each child and family than will the teacher. The picture a child forms of himself includes his clothing. Each year this picture becomes stronger. As a nation, everyone is becoming more conscious of clothing, and aides and teachers must give additional help to Indian children regarding this problem. Of course, an example is worth millions of words; and, although aides and teachers do not need expensive clothing, they should be neat and clean.

Often we have seen teachers come to reservations and think all previous practices in cleanliness and good grooming can be forgotten. This is a mistake. For many Indian children and people the main examples of how to dress are the school personnel. The teacher-aide and teacher will be looked to and remembered for years to come. These first examples can create a pattern that the pre-first child and his family will continue to follow throughout life.
FOOD

The diet of an Indian pre-first child may not have included all the foods that he will encounter upon entering school. An aide can help by encouraging the child at least to taste new foods, and the aide can explain why some of the foods are very good to eat.

If the child does not speak English, names of these new foods must be taught. Tasting parties are fun, too. A teacher and aide can promote much good will and acceptance by having mothers prepare native Indian dishes for dinners. The teachers who learn to eat and enjoy Indian food are more quickly accepted by the community. Food can be a means of favorable communication, with no interpreter needed. The flavor of good food can be enjoyed by all. Thus, another bond between community and school can be established.

CRAFTS

Almost every tribe of Indian people has some craft in which it specializes. It is with pride that they have developed skills through the years, and respect for those skills can be taught to small children. Very simple beginnings in the crafts can be taught. An aide will know experts in each community and should work with the teacher; together they can develop a program in their school. An example of this was shown recently by older people who wanted to do some of their craft work for pre-first classes.

Most Indian children excel in art and craft work. Success is felt in this area, and success is necessary to develop pride in one's self. So the teacher-aide and teacher should pay especially close attention in this respect and praise each child for his work.
SOURCES OF INCOME

The teacher-aide will need to know exactly what kinds of work the children's people do. If it is seasonal work, much time and effort should be spent in planning the school program around the times when most children can be present.

Also, the aide can and must alert the teacher to the times when children may need help for lunches and additional snacks. If the mother or father is not working, it may be necessary for the child to do without breakfast; so the school should serve additional food during mid-morning snacks.

At times parents use even pre-first children to help at home while seasonal work is being done. The teacher-aide can do much to help the pre-first child and his family by explaining this part of the culture to school personnel.

WILLINGNESS TO ACCEPT CHANGE

Some tribes, through the years, have shown their willingness to make changes more easily and rapidly than have other tribes. In this respect, each aide should familiarize himself or herself with the history of the tribe and should assume much responsibility in becoming acquainted with the background of its people. Otherwise, the aide might be as effective as a woodpecker above timberline.

It seems that most Southwestern Indians have held certain facets of their religious and family lives sacred to them, and they have changed very little in these areas. However, material changes have crept in slowly and have been accepted much more readily.

The biggest and quickest changes in education have taken place since the second World War. Especially have the Indian people seen the necessity for education for their young. In general, they have pressed for and have worked with educators throughout their reservations. The pre-school idea, on most reservations, is the newest indication of this willingness to accept change in the educational pattern. In each instance, the people themselves have asked for this new program, and the teacher-aide is evidence of change rong most Indian cultures. The writers are sure that, in years to come, pre-school aides will look back on these new experiences as being most rewarding.

ATTITUDES TOWARD OTHER CULTURES

The teacher-aide must be a helper to her people and to their children in interpreting cultures of others, especially in the ways that other cultures overlap the one known to the immediate Indian tribe.

A good reference is the list in this section under "Values," showing how Indian and non-Indian ways of life conflict. When an Indian child is exposed to a non-Indian culture and is expected to live in both from time to time, he soon learns how to act in each given situation. He must learn this to be accepted by both groups of people. Good attitudes toward the dominant culture and other cultures are essential to the child's being able to do a good job of adjusting to a bi-cultural situation. The teacher-aide, representing the culture of the child, can help the child do this better than can a teacher from the dominant culture. The pre-school Indian child generally will identify with the aide and will realize that the aide has traveled the same road.
FILMS FOR INDIAN CULTURE

"APACHE INDIAN"
10 min., Coronet - 1953 - B & W - Color
The life ceremonies and industries of the Apache are depicted in this film. The scenic beauty of their native territory forms a setting for the tribal functions and ceremonies, including the Puberty ceremonial and Devil Dance.

"AMERICANS ALL"
16 min., MOT - 1945
A study of the vital problems with which many U.S. communities are concerned today: how to prevent racial and religious intolerance. The film is an honest presentation of intolerance as a menace to American liberty. "Discrimination is graphically shown, but the emphasis is on the practical, constructive effort to prevent such discrimination as exemplified by the now famous Tolerance Plan of the Springfield, Massachusetts, Public Schools." — Education Screen.

"BROTHERHOOD OF MAN"
10 min., Contemporary Films - 1946 - Color
An animated color cartoon that deals with a currently vital issue. Portrays that differences between the human races are superficial, accidental, and environmental, and explains that the different skins of the races of mankind mean nothing — how, through the driftings of the first people of the earth, there developed the three separate races of mankind. Further points out that there are four distinct types of blood, but all are found in all races and therefore its differentiation has no racial relevance.

"COLOR OF MAN"
10 min., U. of California - 1955 - Color
Discusses the latest theories and findings on differences in skin color from one race to another. Reviews conditions which caused the development of color differences among the primitive men. Then shows that many people still inhabit the same areas where their peculiar skin colors developed; and that, between the extremes shown, there are infinite degrees of shading. Concludes by demonstrating that the forces which brought about color differences nearly have been overcome by modern science and transportation.

"DEFINING DEMOCRACY"
17 min., JEBF - 1953
This film has been made by combining two former films, "Democracy" and "Despotism." The accompanying narration and dialogue have been rewritten completely with a new sound track. It clarifies the meaning of democracy by considering two conditions favoring its development, economic balance and enlightenment. It also considers two conditions which aid in the development of despotism, slanted economic distribution and controlled information.

"DESERT PEOPLE"
25 min., U. S. Indian Service - 1941 - Color
This is the story of the Papago Indians who have lived on the desert for centuries. They find uses for nearly every growing thing. Even in this extremely dry region, they manage to farm a little and raise cattle.

"DISCUSSION PROBLEMS: THE GOSSIP"
13 min., Young America - 1955
The intriguing dramatization of a high school situation in which gossip, rumors, and failure to check facts lead to distressing misunderstandings among friends. Designed to stimulate thought and discussion on these general problems.

"DISCUSSION PROBLEMS: THE GRIPER"
10 min., Young America - 1955
A film designed to stimulate discussion on the problem of the individual who always sees the pessimistic side of everything.

"HEREDITY AND ENVIRONMENT"
10 min., Coronet - 1951
Visual examples are shown of heredity and environment at work. An overview is given of cultural inheritances, genetics, environmental influences, and their relationships.
"HOW FRIENDLY ARE YOU?"
10 min., Coronet - 1951
Presents some of the values of being friendly and encourages broadening one's range of friends. Friendliness is shown to be a two-way proposition involving many things.

"IMPROVE YOUR PERSONALITY"
10 min., Coronet - 1951
Emphasizes that personality is not a vague, glamorous attribute of the fortunate few, but a part of each individual character. Shows how personalities can be developed, adapted and controlled.

"LEARNING TO UNDERSTAND CHILDREN" - PART 1 - A DIAGNOSTIC APPROACH
21 min., McGraw Hill - 1947
Presents a case study of Ada Adams, an emotionally and socially maladjusted girl or 15. It records the efforts of her English teacher to study her case sympathetically, to understand her, and to plan remedial procedures to help her.

"LEARNING TO UNDERSTAND CHILDREN" - PART II - A REMEDIAL PROGRAM
23 min., McGraw Hill - 1947
A continuation of the case of Ada Adams. Her teacher develops a plan for remedial action. Shows how a child's interest in "art" can be used to improve her self-confidence.

"PAINTING WITH SAND: A NAVAJO CEREMONY"
11 min., EBF - 1950 - Color
Portrays the traditional sand painting healing rites as performed by a Navajo medicine man for his ailing son. Reveals the beauty of an unique art form, and stresses its significance in the tribal life of the Navajos. Actual sand painting in full detail is shown.
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# BY JOSEPH W. STEERE
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The audiovisual and communication section of this handbook has been developed as an outgrowth of the Indian Teacher-Aide Training Program carried out at Arizona State University as an Office of Economic Opportunity sponsored project during the summer of 1965.

It is not intended that it be a syllabus for a course in audiovisual education, but, rather, it is a compilation of ideas, tasks, and processes related to audiovisual education and communication in the classroom. It is hoped that it will help the teacher-aide become more efficient in his or her work.

At the beginning of the program a number of specific objectives were prepared in the area of audiovisual and communication techniques. They were related directly to classroom activities and were specific in their relationship to the teacher-aide’s role in the education of young children. We were happy to find that the Indian teacher-aides trained during this program were able to reach these objectives at a high rate of efficiency. Some changes were made in the objectives as the program progressed, but in most cases these were simply objectives added as the competence and ability of the aides were revealed.

These objectives are listed as an outline of the material in this section.
OBJECTIVES

To be aware of the ways in which visual and audio aids increase communication in the classroom and among people and thus lead to greater learning.

To be aware of the importance of visual and audio aids in the classroom.

To develop a feeling of the importance of education in the modern world.

To develop an awareness of the personal satisfaction that can be gained by helping others learn.

To develop a feeling of the important role that the aide will be playing in helping the teacher and children, as well as his or her people.

To develop a feeling, so necessary in the field of education, of the importance of hard work and dedication to the job.

To develop an awareness of the importance of the Indian teacher-aide as a communications link between the home, the community, and the school.

To understand that as an Indian teacher-aide he or she will be able to bring the culture of the people into the classroom and take back to the community the culture of the world.

To learn manuscript writing as done in the primary grades.

To construct folders for instructional materials from large sheets of tagboard, butcher paper, or other construction material — to letter name and to create an interesting design on the outside, and to identify clearly material kept in the folder.

To become aware of the importance of bulletin boards, chalkboards, feltboards, peg boards, and other display boards in the classroom.
To learn the essentials of any good teaching display board.

To become familiar with display board design and layout by making a construction paper design layout for a bulletin board.

To plan and create, as a member of a committee, an attractive and effective bulletin board.

To become aware of the importance of flat pictures used in the classroom; to learn how they can be used effectively and how they should be selected.

To become aware of the importance of properly mounted pictures for use in the classroom.

To learn the basic mounting principles for horizontal, vertical, and square pictures.

To be able to use a paper cutter effectively.

To learn how to make images larger or smaller by using the grid method.

To learn how to make a pattern for constructing an easel to use when showing pictures in the classroom, and to make an easel for this purpose.

To mount pictures of all sizes and shapes on appropriate background material for interesting viewing or projecting, using the following methods:

- Dry-mount tissue with the dry-mount press
- Dry-mount tissue with the common flat iron
- Sealamin mounting with the dry-mount press
- Sealamin mounting with the common flat iron
- Sealamin laminating
- Rubber cement, temporary mount
- Rubber cement, permanent mount
- Spray adhesive — irregular shapes
- Masking tape — rolled — temporary

To become aware of the importance of and utilization of feltboards.

To plan and prepare materials for an interesting feltboard or other display board story.

To become aware of the utilization and care of the chalkboard by watching and discussing an educational film on this subject.

To become aware of the many lettering devices and materials available for school use.

To learn to cut paper letters, using the fold and cut pattern method.

To letter instructional materials appropriately and attractively.

To become aware of the following basic art principles by viewing films, discussing them, and then practicing the particular art principles in various projects:

- Color
- Texture
- Line
- Perspective
- Design
To acquire an understanding of color by preparing a color wheel containing the primary and secondary colors in their proper relationships.

To evaluate instructional films, using a form listing specific criteria.

To acquire an understanding of color by preparing a transparent color chart using color adhesive acetate, thereby overlapping primary colors to form secondary colors.

To enlarge small objects by tracing a projected image with the following projectors:

- Opaque projector
- Overhead projector
- 35 mm slide and filmstrip projectors

To have an understanding of the most important advantages of overhead projection and an awareness of the tremendous power of the projected image.

To prepare single or overlay transparencies for projection on a 10" x 10" overhead projector by the following methods:

- Handmade — temporary and permanent, using the following materials: clear acetate, grease pencils, felt tip pens, colored acetate, adhesive colored acetate, India ink, tapes, etc.
- Thermofax dry copier. Have an understanding of the various materials available.
- Thermofax photo copier
- Diazo process
- Combination of methods

To be able to operate the Thermofax dry copier to make transparencies and paper copies.

To be able to operate the Thermofax photo copier to make transparencies and paper copies.

To be able to operate a diazo printer and to develop film in an ammonia developing jar.

To prepare a classroom for effective film showings.

To learn the values, characteristics, advantages, and uses of the following equipment and to be able to set up and operate each item:

- 16 mm projector, sound
- 35 mm slide projector
- 35 mm filmstrip projector
- Tape recorder
- Record player
- Opaque projector
- Overhead projector
- Dry mounting press

To set up and take down a tripod screen.

To understand that better learning and greater understanding between people — Indian, White; teacher, pupil; teacher, aide; teacher, parent; aide, parent; aide, student; etc. — can be attained through better communication.
SPECIFIC LEARNING TASKS

A check list of specific learning tasks in communication techniques was developed as the program progressed. These tasks were based on the objectives outlined on the previous pages, and specific tasks were checked off by the instructor as each task was completed or learned satisfactorily. The fifty-five Indian teacher-aides who were trained during this eight-week program were able to complete or learn the following tasks satisfactorily:

<table>
<thead>
<tr>
<th>TASK</th>
<th>TASK COMPLETED AND LEARNED SATISFACTORILY</th>
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<tbody>
<tr>
<td>To make a materials folder</td>
<td></td>
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<tr>
<td>To make a construction paper design layout for a bulletin board</td>
<td></td>
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<tr>
<td>To learn manuscript writing</td>
<td></td>
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<tr>
<td>To make a color wheel on paper, including primary and secondary colors</td>
<td></td>
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<tr>
<td>To evaluate an instructional film according to specific criteria</td>
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<tr>
<td>To use a paper cutter effectively</td>
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<tr>
<td>To prepare a classroom for film showings</td>
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<tr>
<td>To operate a dry-mount press</td>
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<tr>
<td>To set up and operate an overhead projector</td>
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<td>To set up and operate an opaque projector</td>
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<tr>
<td>To set up and operate a record player</td>
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<tr>
<td>To set up and operate a tape recorder</td>
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<tr>
<td>To set up and take down a tripod screen</td>
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<tr>
<td>To set up and operate a 35 mm filmstrip projector</td>
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<tr>
<td>To set up and operate a 16 mm projector</td>
<td></td>
</tr>
<tr>
<td>To plan and create, as a member of a committee, an attractive and effective teaching bulletin board</td>
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</tbody>
</table>
To mount pictures of all sizes and shapes on appropriate background material for interesting viewing or projecting — square, rectangular, and vertical pictures according to basic mount layout — using the following methods:

- Dry-mount tissue with dry-mount press
- Dry-mount tissue with flat iron
- Sealamin with dry-mount press
- Sealamin with flat iron
- Rubber cement, temporary
- Spray adhesive—irregular shapes
- Masking tape—rolled—temporary

To prepare single or overlay transparencies for projection on a 10" x 10" overhead projector by the following methods:

- Handmade — temporary
- Handmade — permanent
- Thermofax dry copier
- Photocopy method
- Diacof process

To mount transparencies effectively for projection on a 10" x 10" overhead projector

To prepare materials for an interesting felt board story

To letter instructional materials attractively

To operate the Kodak Carousel 35 mm automatic slide projector

To cut out a set of construction paper block letters, using the fold and cut method

To make the pattern and a cardboard easel for displaying pictures

To make a color wheel using adhesive colored paper
EDUCATION AND COMMUNICATION

Education has proved throughout history to be the greatest factor in elevating any people or culture to a higher level of efficiency, higher standard of living, greater feeling of accomplishment, and greater respect for the dignity and worth of the individual in that society. Today, as never before, the need for all people to become educated is obvious. People are brought closer and closer in contact with one another as technology improves transportation and communication. It is imperative that we be able to communicate one with another. As our world and our society become more complex, education is necessary just to stay abreast of the changes that are taking place. It is necessary if we are to be productive and responsible citizens in our communities and in the larger society. In brief, education today is necessary for survival.

Teacher-aides have a wonderful opportunity to share the responsibility of bringing education to the children and to the adults in the community. The aide also will share in the personal satisfaction that comes when one helps others to learn. There is perhaps no greater thrill than to know that one has made a contribution to the process of learning.

The aide will know and understand as he or she goes about the tasks as a teacher-aide that hard work and dedication to the job are necessary parts of the overall assignment and that they are extremely important if education of the young is to be accomplished. Hard work and dedication always carry their own rewards, too.

The role of teacher-aide is an important one. The young man or woman will be helping the teacher in an invaluable way, the children in the classroom, and the people of the community. The aide's role is unique, or different, in that he or she will understand the community, its special problems, its language, and its cultural background. The aide will be the communication link between the community and the school — will bring the culture and ways of his or her people into the classroom and take back to the community the ideas and ways of the modern world. The aide will be able to relate to the people of the community the need for and the importance of education today.

Communication is one of the major keys to effective education, and communication techniques and devices have become a vital part of modern education. Audiovisual equipment and materials should be an integral part of all educational programs. Research has proven that children learn more, learn faster, and remember longer when audiovisual methods and techniques are used effectively. Audiovisual instruction stresses the concrete or non-verbal aspects of the learning process rather than the verbal or symbolic aspects. Audiovisual instruction is the effective use of communication equipment, techniques, and instructional materials. It includes the use of instructional films, filmstrips, slides, transparencies, recordings, tape recordings — all implemented by using particular pieces of audiovisual equipment: 16 mm. projectors, 8 mm. projectors, filmstrip projectors, slide projectors, overhead projectors, opaque projectors, record players, tape recorders. It includes the use of flat pictures, maps, charts, graphs, globes, models, mock-ups, displays, and real objects. It includes use of the bulletin board, the chalkboard, felt or flannel boards, peg boards, and magnetic boards. It includes effective use of radio, television, programmed instruction, dramatization, demonstration, and discussion. It includes the integration of community resources, study trips, and visits by resource people. It includes preparation and use of instructional materials, the application of photography to classroom instruction, and the improvement of classroom environment. In short, it includes all the materials and devices available for better communication in the classroom.
The teacher-aide’s help in this area of classroom activity can contribute much to the effectiveness of the educational process. While the teacher is busy with the children, the aide can set up the various pieces of equipment, can operate the projectors, can help prepare instructional materials, and can see that the materials and devices necessary for a given lesson are ready and available. He or she will be able to arrange displays, put up effective bulletin boards, help the teacher and the children display materials, mount pictures for more effective learning, put information on the chalkboard for the teacher, and help her plan study trips into the community. Because the use of audiovisual equipment, materials, and devices takes time, the aide will be able to save the teacher many hours that the latter can use with the children or in planning appropriate learning situations for them.

The material in this section has been written directly for the teacher-aide, so that he or she can learn the techniques of audiovisual education and thus make a real contribution to learning in the classroom.

Preparation of the alphabet (see page 106)

MANUSCRIPT WRITING

As a teacher-aide working in a primary classroom it is important to become proficient in understanding of and use of manuscript writing as done in the primary grades. This is the way children first learn to write at school. Children tend to imitate what they see. It is, therefore, important that the writing done on the blackboard, bulletin board, etc. should conform to what will be expected of them. Manuscript writing is the easiest possible way for children to learn to write.
It is composed simply of a series of circles or parts of circles and sticks or straight lines. Children can be taught first to make circles and straight lines and then to form individual letters. A chart of the manuscript alphabet is included below with numbers indicating the order in which the individual strokes should be made. It will take much practice to master manuscript writing but the results are worth the effort.

PRIMARY ALPHABET

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z

1 2 3 4 5 6 7 8 9 0
MATERIALS FOLDERS

It is very important that the instructional materials be protected and stored in such a manner that they can be located readily for reuse. Folders can be constructed easily and quickly for this purpose. Many types of construction material can be used to make materials folders: Tagboard, butcher paper, construction paper, etc. Be sure the material is large enough that when folded in half it will hold the material. 24” x 36” sheets of oak tag make excellent folders. They do not tear easily and are large enough to hold most instructional materials.

Directions: 1. Fold the sheet of oak tag or other material in half lengthwise as indicated by the diagram, leaving about 3” at the top to be used as a flap to close the folder; 2. staple at about 2” intervals up each side or close with masking tape; 3. fold the flap over. Masking tape will serve to keep it closed.
DISPLAY AND DISPLAY BOARDS

Displays and display boards are among the most effective teaching aids available to the teacher. They are important for the following reasons:

They can help create an environment and an atmosphere where effective learning can take place. They can make the room attractive and give the children a feeling that they like their school room and that it is a place where they can learn. It can provide a friendly, happy, and attractive setting which can set the mood for good learning situations.

They can provide motivation that will create a desire on the part of the child to learn.

Children can be involved in the planning, preparation, and creation of displays and display boards. This involvement is extremely important as the child is provided with many opportunities for learning by experience. Through his experiences of planning, preparing, and creating the display, the child is experiencing a change of behavior and real learning takes place.

They can effectively teach many concepts, both concrete and abstract, and they are most effective in teaching concepts that must be kept in front of children for a period of time.

There are many types of display and display boards: the bulletin board, chalkboard, felt or flannel board, peg board, magnetic board, hook "N" loop board, table displays, etc. The most common type of display board is the bulletin board, which is used for many purposes. It can be used to post children's work, to display pictures to make the room attractive, to represent the seasons, to emphasize holidays, and to teach educational concepts or ideas. The last of these offers tremendous opportunity for insuring that important ideas or concepts will be remembered by the children.
A good teaching bulletin board should have the following essentials:

It should have a headline. The headline should be bold, attention getting, clear, and concise. It is usually a statement of fact or a question that is verified or answered by the balance of the material on the board.

It should have a dominant element. The dominant element should stand out above all else. It should draw the viewer's eye to the board and should present boldly the message of the display. It usually is larger than any other individual part of the display.

It should have illustrations. The illustrations might be pictures or other illustrative material. They should illustrate, enlarge upon, verify, or clarify the heading and the dominant element.

It should have captions. The captions should be concise and clear and identify the illustrations.

It should be noted here that many primary boards do not always contain all of these essentials. Because little children cannot read, the heading and captions often are either eliminated or are replaced with geometric shapes. The film, "Bulletin Boards: An Effective Teaching Device," will help the aide understand these principles.

It is important that displays and display boards be planned well before production of the materials or arrangement of the board is begun. A layout should be prepared to scale. In this way an attractive arrangement can be devised, colors and shapes can be experimented with, and relative sizes of material can be examined. This will insure that the display, when completed, will have good composition, unity, good use of color, and that it will fit the desired display area. Much time can be saved in this manner.

Two methods are helpful in preparing layouts for display boards. One is that sketches can be made to scale. If this method is used, it may be necessary to experiment with several sketches before arriving at a final design. Another method that is very effective is to make a construction paper layout. One sheet of construction paper is cut to a scaled size of the display board. Scale can be determined by measurement or can be obtained by using the diagonal system in which the sheet of construction paper is placed in the center of the display board to be used. A piece of string is stretched from each corner of the board to its opposite corner. The scale of the board can be recognized instantly by the areas within the string, and the next step is to cut out, using other pieces of colored construction paper, shapes and sizes to represent the headline, dominant element, illustrations, and captions. These pieces can be manipulated until they form an attractive and interesting layout.

Bulletin boards should be arranged attractively, they should have unity, they should be colorful, and they should show originality. Backgrounds should be just that. They should be of the pastel colors and should not distract from the message of the board. Three colors other than the background should be sufficient because too many colors can be distracting. Keep the board simple. Too much material can be confusing. Present only one major idea or concept. Illustrations usually are easier to arrange if odd numbers are used, i.e. 3, 5, 7. Remember, formulate a purpose before starting to plan the display board.

Flannel or felt boards are particularly useful for communication in the primary classroom. They are especially helpful where manipulation of materials is impor-

*See film bibliography.
Designing and making display boards with paper cutouts.

...tant to the learning process. They can be used very effectively as a means of illustrating stories that are told to the children because they lend themselves to the teaching of sequential material. They can be used to help teach right to left progression as children manipulate materials across the board, and they can be used to help children learn the relationships between numbers and other symbols. Flannel or felt boards are easy to make and easy to use. One can be made by stretching flannel or felt over a sheet of plywood, masonite, wallboard, or heavy cardboard. Materials for use with the board can be cut from felt, flannel, pellum, or other materials that will adhere to the felt or flannel board. Construction paper also will adhere temporarily. Or, objects can be cut from other materials and backed with strips of felt, flannel, or sandpaper. The film, “Flannel Boards and How to Use Them,” effectively demonstrates methods for making and using them.*

Magnetic boards are easy to make and use; and if they are painted with chalkboard paint, they offer great flexibility of use. A magnetic board consists of fine-mesh steel screen or sheet steel. Small magnets are glued to the back of the objects or graphic materials to be used on the board. Materials are moved easily from place to place on the board and remain in position until changed.

Peg boards can be an effective means of displaying educational material. They are particularly helpful when the material is of a three-dimensional nature. Peg board is inexpensive and can be obtained from any lumber yard. Commercial attachments are available, but golf tees and coat hanger wire can be used effectively.

*See film bibliography.
And the chalkboard must not be forgotten. Even though other types of display boards have come into prominent use, the chalkboard is still a very valuable teaching tool, and the teacher-aide should practice using it. The film, "Chalk and Chalkboards," demonstrates the care and use of chalkboards.*

Table displays offer an excellent opportunity for presenting real, concrete objects in an organized manner, and children enjoy preparing this type of display. Again: simplicity, attractive arrangement, harmony between objects, and clarity of the display are important.

The following evaluation form should be helpful in determining the effectiveness of display boards:

DISPLAY BOARD EVALUATION

A. EDUCATIONAL
   1. Suitability
   2. Ease of Communication
   3. Accuracy
   4. Interest and Motivation

B. TECHNICAL
   1. Composition
   2. Color
   3. Headline
   4. Captions
   5. Illustrative Materials
   6. Dominant Element

*See film bibliography.
It has been said that "A picture worth using in the classroom is a picture worth mounting." It is important that pictures used in the classroom be mounted, and the aide can help greatly in doing this. When the teacher and aide have selected pictures for use in the classroom, the aide can mount the pictures and free the teacher for teaching activities. Consequently, it can be very helpful if the aide learns the techniques of selecting and mounting pictures. If mounted according to basic principles, the pictures will have a better chance of attracting and holding attention, they will be attractive, and they will be protected and can be filed easily for future use.

The following basic principles will insure that pictures will accomplish the above:

**FLAT PICTURES**
Use generous margins. The following diagrams indicate proper margins for various picture shapes. It will be noted that the bottom margin always is the largest. For a horizontal picture the top margin is the smallest, the side margins are equal and slightly larger than the top margin, the bottom margin is the largest. For a vertical picture the side margins are the smallest and equal, the top margin is slightly larger than the side margins and the bottom margin is the largest. For the square picture the top and side margins should be equal and the bottom margin should be the largest.

Use mounting materials that fit the subject of the picture. These will include colored construction paper, tag board, colored drawing paper, poster board, photographic mounting board, textured materials, etc. The mounting material should compliment the picture rather than draw attention away from it.

Use colors which direct attention to the picture rather than to the mount. It is well to choose a minor color in the picture so that harmony can be created between the picture and the mount. Colors should be used in such a way that there is contrast between the picture and the background.

Teacher-aides should be familiar with the objectives for using flat pictures, the criteria for their selection, and their uses in the classroom. The following outline should prove helpful in this respect.

Flat pictures can be important teaching media, i.e. a picture may be worth 1,000 words if, and only if, it is the right picture, in the right place, at the right time, and used in the right way.

CLASSROOM USES:
1. To create an environment and atmosphere conducive to learning
2. To make the classroom attractive
3. To stimulate discussion
4. To motivate
5. To provoke interest or wonder
6. To report progress or a series of events
7. To teach or convey a concept or lesson
8. To present key ideas or impressions that must be studied at length.
UTILIZATION:
1. Use pictures for specific educational purposes
2. Have specific objectives for their use
3. Integrate them into the teaching lesson
4. Limit them in quantity
5. Arrange them artistically
6. Mount them properly for effective use
7. Back them with appropriate materials and color
8. Select them according to the following criteria

CRITERIA FOR SELECTION:
1. Is the picture technically correct?
2. Is the picture suitable?
3. Does the picture have a center of interest?
4. Are details in the picture clear?
5. Is the picture realistic?
6. Does the picture show relationship?
7. Is the picture effective in color or contrast?

Remember! A picture may be worth 1,000 words if, and only if, it is the right picture, at the right time, in the right place, and used in the right way.

PICTURE MOUNTING
Picture mounting can be an enjoyable experience or a chore, depending on the way the person doing the mounting approaches the task. There are many techniques and methods. If the aide learns the specific steps involved in mounting by these different techniques and methods, the task will be enjoyable and effective, and it will make a decided contribution to classroom learning.

Pictures can be mounted or laminated by using the dry-mount press or a flatiron and various adhesive materials. They can be mounted either permanently or temporarily by using rubber cement. They can be mounted temporarily by using rolled masking tape or adhesive wax sticks or discs. They can be mounted with double-coated adhesive tape. Or they can be mounted with adhesive spray. Each of the methods has its special advantages and can be used effectively for specific mounting tasks.

Mounting with the dry-mount press or flatiron, using dry-mount tissue and other forms of adhesive material is fast, easy, and relatively inexpensive. It provides a picture or other visual with a permanent mount that is flat and attractive. Spraying the picture with Krylon or other fixative after mounting will add to its permanency by providing a protective coating over the picture area.

Laminating with Sealamin in the mounting press or with a flatiron is a much more expensive process, but it provides permanent protection for the picture or other visual. This process is recommended where the picture or other visual is very valuable or where it will be important that the picture be handled often by children in the classroom.

Rubber cement, either temporary or permanent, provides a simple and effective method of mounting pictures and does not require special materials or equipment. Most regularly shaped visuals can be mounted in this manner.

Adhesive spray is a quick and efficient way to mount pictures and is especially effective with pictures and other visuals that have irregular shapes.
Rolled masking tape and adhesive wax sticks or discs are excellent for temporary use or for attaching visual materials to chalkboard, bulletin boards, walls, etc. Both can be removed without removing paint or tearing the mount or the visual.

Double-coated adhesive tape is helpful where time is an important factor or where other mounting materials are not available. It is a quick method and reasonably effective.

Here are steps to follow when mounting pictures or other visuals, using the above techniques and methods:

MOUNTING WITH DRY-MOUNT TISSUE
1. Trim picture to approximate size.
2. Cut dry-mount tissue slightly larger than picture.
3. Tack tissue to center of the back of picture with tacking iron or flatiron.
4. Trim picture on all four sides with picture attached.
5. Select and trim desired mounting board.
6. Place picture face up in desired position on mount.
7. Lift opposite corners of picture and tack tissue to mount.
8. Place paper over picture for protection and place in dry-mount press set at 225 degrees.
9. Lock press and leave for 5 to 8 seconds.
10. Alternate method to steps 8 and 9: Place paper over picture for protection, set flatiron for rayon, and iron picture to mount. Keep the iron in motion and work from the center out toward the sides.
11. Visuals other than pictures can be mounted in the same way.

MOUNTING WITH SEALAMIN LAMINATING FILM
1. Trim picture to size desired.
2. Trim Sealamin film at least ½ inch larger on all sides than picture.
3. Select and trim desired mounting board.
4. Place picture in desired position on mount.
5. Place Sealamin film over picture shiny side out, dull side toward picture. Be sure Sealamin overlaps picture by at least ½ inch.
6. Cover with paper and place in mounting press at 275 to 300 degrees.
7. Lock press for thirty seconds. If not completely sealed return to press for an additional thirty seconds.
8. Alternate method: Place paper over picture for protection. Set flatiron for cotton and iron picture to mount. Keep the iron in motion and work from the center out toward the sides.
9. Visuals other than pictures can be mounted in the same way.

SEALAMIN LAMINATING
1. Trim picture to size desired.
2. Cut Sealamin twice the size of picture with ½” - 1” overlap.
3. Make an envelope of Sealamin and place picture inside being sure shiny side is out - dull side toward picture.
4. Tack at edges so picture will not move.
5. Place sheet of paper on both sides.
6. Place in mounting press with a sheet of masonite on top of felt pad at 275 degrees for 30 seconds or press with flatiron set for cotton.
7. Visuals other than pictures can be laminated in the same way.
RUBBER CEMENT MOUNTING - TEMPORARY

1. Trim picture so that all edges are squared.
2. Trim mounting material to desired size.
3. Place picture on mounting board in the desired position.
4. Make small guide marks with pencil at each corner.
5. Thin rubber cement with rubber cement thinner until it is runny and will flow evenly like paint.
6. Use wide brush, one to three inches in width, and apply a thin even coat of rubber cement to the back of the picture. Brush back and forth with a smooth, easy motion. Be sure to place a sheet of paper under the picture so that cement will not get on the working surface.
7. Position picture within the guide marks and smooth down the surface of the visual with the palm of the hand. Remove excess cement and guide marks by rubbing around the edges of the visual with the finger.
8. Your picture is now ready for use. If you wish to remove the picture from the mount after a time you will be able to do so as this is a temporary mounting.
9. For further protection of the picture, spray the surface with fixative.
10. Visuals other than pictures can be mounted in the same way.

RUBBER CEMENT MOUNTING - PERMANENT

1. Trim picture so that all edges are squared.
2. Trim mounting material to desired size.
3. Place picture on mounting board in the desired position.
4. Make small guide marks with pencil at each corner.
5. Thin rubber cement with rubber cement thinner until it is runny and will flow evenly like paint.
6. Use a wide brush, one to three inches in width, and apply a thin even coat of rubber cement to the back of the picture. Brush back and forth with a smooth, easy motion. Be sure to place a sheet of paper under the picture so that cement will not get on the working surface.
7. Apply with the brush a thin even coat of rubber cement over the marked area of the mounting board allowing the cement to extend slightly beyond the guide marks.
8. Allow the cement on the mount and the picture to dry for about twenty seconds.
9. Place two sheets of ordinary translucent wax paper on the cemented surfaces of the mounting board, slightly overlapping them at the center. This will prevent the picture from sticking to the mount while you are positioning it.
10. Place picture with cemented side down on top of wax sheets. Position it within the guide lines. Remove the top sheet of wax paper by giving it a quick pull while holding the bottom portion of the visual in place.
11. Remove the bottom wax sheet in the same manner while holding the top of the visual in place.
12. Smooth down the surface of the picture or other visual with the palm of the hand and remove excess cement and guide marks.
13. You now have a permanently mounted picture ready for use in the classroom. You will not be able to remove it from the mount.
14. For further protection of the picture, spray the surface with fixative.
15. Visuals other than pictures can be mounted in the same way.
Using tacking iron to attach dry mount to tissue.

Rubber cement mounting — temporary.

Rubber cement mounting — permanent.

Using dry mount press.
SPRAY ADHESIVE MOUNTING

1. Carefully trim picture.
2. Trim mounting material to the desired size and shape.
3. Place the picture on the mounting material in the desired position and make guide marks lightly around edge with pencil.
4. Turn picture over and spray the back of it evenly with spray adhesive. Be sure to shake the can well. Keep the spray can about twelve to eighteen inches from the picture and spray with a back and forth movement across the back of the visual. A sheet of paper under the picture will keep cement from getting on the working surface.
5. Position the picture on the mounting board within the guide lines.
6. Smooth down the surface of the visual with the palm of the hand and remove the guide marks with an art gum eraser.
7. Your picture or visual is now ready for use in the classroom.
8. For more permanent protection spray the surface with fixative.
9. Visuals other than pictures can be mounted in the same way.

OTHER TEMPORARY MOUNTING TECHNIQUES

Rolled masking tape: Cut pieces of masking tape about one inch long from a roll of masking tape. Roll these into a small cylinder with the adhesive side out. Attach at the four corners and the center of the picture or visual and apply to mount, wall, board, or other material by applying pressure to the areas where the tape has been applied.

Adhesive wax sticks or discs: These materials are available commercially and provide a means for quick and easy temporary mounting. The discs are ready to use and can be applied to the corners and center of the picture or visual as you would rolled masking tape. With the sticks it is necessary to pull off small portions of the wax and form your own discs.

Double-coated adhesive tape: This is a thin acetate tape with pressure-sensitive adhesive on both sides. To use, pull protective paper off both sides and apply to the back of the picture or other visual to be mounted. Position picture or visual on the mount and apply pressure.

USING THE PAPER CUTTER

One of the tasks which the aide can perform for the teacher is using the paper cutter for various purposes. It is important, therefore, that the aide learn how to use the paper cutter effectively.

Unless the paper being cut is very large, it is best to use the vertical calibrated lines on the cutter to line up the paper. This keeps the paper away from the upper rail of the cutter. Most cutters cut more accurately in the center area of the cutter. Do not try to cut too many sheets of paper at one time. When the paper is properly in place, bring the cutter blade down with a sure, even stroke. You should apply slight pressure on the blade toward the board as you bring the blade down. This will insure that the blade make good contact with the cutting board edge, and the paper will be cut smoothly and accurately.
It is often necessary when preparing instructional materials that drawings, letters, diagrams, charts, and other visual symbols be enlarged or reduced in size. This can be done easily by using the grid method. Following are the steps for enlarging or reducing copy by this method:

1. Trace the visual to be enlarged.
2. Rule off, on the tracing, squares of one-quarter to one inch, depending on the size of the visual to be enlarged or reduced. Number the top horizontal and left vertical rows of squares. The number of squares will be determined
somewhat by the size of the visual being enlarged. A number between six and ten vertically and horizontally will be easy to work with.

3. Rule off another sheet of paper in the same manner for the enlargement. If the enlargement is to be twice the size of the original then the squares on the enlargement paper should be twice the size of those on the original. If it is to be three times as large, the squares should be three times as large. Number the enlargement sheet to correspond with the original tracing.

4. Draw in the outline of the original visual on the enlargement in the corresponding squares.

5. You will now have an enlarged visual corresponding exactly to the original.

6. If you wish to reduce the size of a visual, simply reverse the above procedure.

DISPLAY EASEL

Pictures should be displayed so that all children can see the picture easily. One method of accomplishing this is to prepare cardboard easels for desk or table display. The aide easily can prepare easels of various sizes for this purpose by following these instructions:

1. Prepare a pattern similar to the one shown below for the size easel you wish to make. Use the grid method of enlargement to make this pattern.

2. Trace your enlarged pattern two times on heavy cardboard.

3. Cut out both pieces. An exacto knife or single edge razor blade will be easy to use for cutting the cardboard.

4. Hinge the two pieces together on the straight sides with masking tape. You should leave about a sixteenth to a quarter inch of space between the two pieces when hinging them together to allow your hinge to fold easily.

5. Fold your easel at the hinge and it is ready to use.

DISPLAY EASEL PATTERN
LETTERING INSTRUCTIONAL MATERIALS

Instructional materials (for greatest effectiveness) should be lettered simply and attractively. If the teacher-aide is to help prepare instructional materials it is important that he or she be aware of the many lettering devices and materials that are available for school use and learn some of the fundamentals of good lettering techniques.

Two types of spacing are used in lettering instructional materials: Mechanical spacing and optical spacing. Mechanical spacing places each letter the same distance from each other letter. Optical spacing provides the same amount of open space area between letters. It is generally agreed that optical spacing is more pleasing to the eye and is usually used in lettering instructional materials.

The following outline should prove helpful in showing what types of lettering devices are available and where and when they can best be used. The film, "Lettering Instructional Materials," will help the aide learn how to use these materials and devices.* The following outline is based on this film.

LETTERING INSTRUCTIONAL MATERIALS:
A. Lettering can be effective and interesting even for inexperienced persons.
B. Rubber Stamp Letters
   1. Many sizes and types available
   2. Economical and easy to use
   3. Good for bulletin board captions
C. Cut-out Letters:
   1. Hand cut-folding method
   2. Pre-cut-adhesive back and plain
   3. Plastic adhesive-clear or transparent
   4. Many colors, styles, and sizes available.
D. Stencils
   1. Interlocking metal
   2. Paper stencils
   3. Economical, easy to use
   4. Many sizes and styles
   5. Can spray over, trace, or fill in
E. Speedball Type
   1. Wide pen brush
   2. Many style and size points
   3. Economical and easy to use
   4. Requires much practice
F. Paint Brush
   1. More difficult
   2. Takes much practice
G. Mechanical Lettering Devices
   1. Wrico type
      a. Plastic stencil with guide and brush type pens
      b. Easy to use
      c. Work looks very professional
   2. Mechanical Scribers
      a. Professional looking lettering

*See film bibliography.
b. More difficult to use
c. More expensive

3. Rapidograph Type
   a. Plastic stencils
   b. Gravity flow pens
   c. Quite easy to use
   d. Professional looking
   e. Good for small lettering as on transparencies, small captions, etc.

H. Availability:
The above lettering materials and devices are available from art supply and drafting supply stores.

CUT-OUT BLOCK LETTERS
It is easy to cut out large size block letters if one follows the fold and cut pattern method:

1. Cut, on the paper cutter if possible, as many pieces of construction or other paper as you will need for your letters, in the size you wish the final letters to be. These should be at least three inches high as it will be too time-consuming to cut smaller letters.
2. Fold paper in half the long way of the paper.
3. Cut in from the folded side as indicated by the diagram.
4. Cut out the center sections.
5. Open the paper. You should have a rectangular pattern with two open areas.

Steps in making cut-out letters.
6. Cut out sections to make the letters desired. This pattern can be used to make fourteen of the twenty-six letters of the alphabet, i.e., B, C, D, E, F, G, H, J, L, O, P, Q, S, U. With experimentation you will be able to fold and cut in such ways as to make the rest of the letters.

ART VALUES

The aide can be of great assistance to the teacher by helping to prepare instructional materials for use in the classroom. If the aide is to be effective in this respect, he or she should have some knowledge of basic art principles. The films “Discovering Color,” “Discovering Texture,” “Discovering Line,” “Discovering Perspective,” and “Design,” will help in understanding these principles.* The following outlines are based on these films.

COLOR

A. Hue
   1. The basic colors
   2. Red, orange, yellow, green, blue, violet
   3. Warm Hues
      a. Red
      b. Orange
      c. Yellow
   4. Cool Hues
      a. Green
      b. Blue
      c. Violet
   5. Warm colors seem to advance or come toward you
   6. Cool colors seem to recede or go away from you
   7. Primary Hues
      a. Red
      b. Yellow
      c. Blue
   8. Secondary Hues
      a. Orange — Red and Yellow
      b. Green — Blue and Yellow
      c. Violet — Blue and Red

B. Value — lightness or darkness of a color
   1. White lightens the value of any color or hue
   2. Black darkens the value of any color or hue

C. Intensity
   1. A color’s brightness or dullness
   2. Dull and bright colors can be made by adding complimentary hues

D. Adding primary and secondary colors gives many in-between hues

TEXTURE

A. Every surface has texture
   1. Differences in surface we call texture
   2. An object may have several textures

*See film bibliography.
B. We learn about textures by feeling and looking
   1. Our first experiences with texture come through our sense of touch
   2. Textures look different, depending upon the way they reflect light
C. Rough and matte textures
   1. "Rough texture"
      a. A surface that reflects light unevenly
      b. Many small shadows
   2. "Matte" texture
      (Surfaces that reflect even amounts of soft, dull light)
D. Smooth and shiny textures
   1. "Smooth" texture
      (Surfaces that reflect much light)
   2. "Shiny" textures
      (Surfaces that reflect a great deal of light)
E. Textures look different
   (Whether a texture looks shiny, coarse, matte, smooth, rough, rocky, bumpy,
   or fuzzy, depends upon the way it reflects light)
F. Man creates textures
   1. Man uses paints, tools, and materials to change the texture of surfaces
   2. Man may use sandpaper or he may polish surfaces
G. Textures in clay
   1. Many different textures can be created in familiar materials
   2. Clay can be given many textures
H. Textures in paint
   1. Paint brushed on wet paper — fuzzy or furry texture
   2. Even or uneven — stippling
   3. Dry brush dragged over surface
   4. Lifted brush creates irregular, raised areas
I. Texture of combined materials
   1. Crayon over paint
   2. Paint on crayon with pallet knife
   3. Scraped layers of crayon and paint
   4. Combine crayon, paint, and ink
J. Textures reveal I by photography
   1. Can create new textures
   2. Can help us see textures
K. Selecting textures
   1. Man selects and organizes textures
   2. Sculpture — combines textures
   3. Clothing — contrast and harmony
   4. Homes — woods, fabrics, fibers, and metals
   5. Buildings — metal, plaster, glass, brick, stone
   6. Gardens, plants, rocks, pebbles
LINE
A. Line is the path of a point moving through space
B. Line is a record of action or movement
C. Line is one of the major elements of art
D. The two major sources of line are natural and man-made
E. Man uses line in ways that are both functional and imaginative
F. Five major ways in which man can vary line
   1. By changing width
   2. By changing length
   3. By varying the degree of curvature
   4. By changing direction or position
   5. By changing texture

G. The use of line in art demands selection and organization
   1. By repetition
   2. By opposition
   3. By transition
   4. By variety of length, width, curvature, direction and texture

PERSPECTIVE
A. We live in a world of depth, of distance
B. In art, we use perspective to create the appearance of distance on a flat surface
C. There are several ways to create perspective
   1. By overlapping objects
   2. By placing distant objects higher and closer objects lower in the picture
   3. By showing distant objects in grayed colors
   4. By showing less detail in distant objects
   5. By showing distant objects small and close objects large
   6. By making lines come closer and closer together in the distance
D. Any one or more of these methods helps to create the appearance of distance on a flat surface.

An understanding of color can be learned by preparing a color wheel containing the primary and secondary colors in their proper relationships and by preparing a color transparency using color adhesive acetate overlapping primary colors to form secondary colors.
EVALUATION OF FILMS AND OTHER INSTRUCTIONAL MATERIALS

Evaluating films and other instructional materials is an important part of the work of those instructing children. Because films and other instructional materials carry a powerful communication message, it is important that films, filmstrips, and like materials be previewed before being used with the class. It is necessary to be sure that the material is suitable for the age and grade of the children; it must be accurate as to content; it must fit the curriculum being presented; it should serve the needs of the class, and it should be of good quality with good sound and color if it is a color film.

The teacher-aide should be able to help the classroom teacher with the task of previewing and evaluating instructional films and other materials. An evaluation form, such as the following, should make the task easier.

**FILM EVALUATION FORM**

<table>
<thead>
<tr>
<th>Film Title</th>
<th>Study Guide: Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributor</td>
<td>Local Source:</td>
<td></td>
</tr>
</tbody>
</table>

Check __________________________ (color) (B&W) (sound) (silent) (running time) (date prod.)

Grade range for which film was made: K-3, 4-8, 9-12, Adult

I. CONTENT AND TREATMENT ARE
   1. Well adapted to your grade level
   2. Too difficult
   3. Too simple

II. FACTS AND IDEAS PRESENTED ARE
   1. Authentic and well organized
   2. Acceptable but poorly organized
   3. Inaccurate

III. QUALITY OF PHOTOGRAPHY
   1. Excellent
   2. Average
   3. Poor

IV. QUALITY OF THE SOUND
   1. Excellent
   2. Average
   3. Poor

V. VALUE OF THIS FILM TO YOU
   1. Excellent
   2. Average
   3. Poor

VI. HOW WOULD YOU USE THIS FILM?
   (Check one or more)
   1. To introduce topic
   2. To summarize or review
   3. As a tool during teaching of topic
   4. To introduce related concepts
   5. For independent uncorrelated use
   6. Would use only part of film
   7. Would use film without sound
   8. Would not use film at all

VII. BRIEF DESCRIPTION OF FILM CONTENT:

_________________________________________________________________________

_________________________________________________________________________
ENLARGING BY PROJECTION

When preparing instructional materials, particularly for charts, posters, bulletin boards, and large displays, it often is necessary to enlarge material from books, pamphlets, slides, filmstrips, transparencies, etc. This can be accomplished easily by projection. The teacher-aide can contribute greatly by learning the techniques of enlarging by projection.

Materials that lend themselves best to this technique are those with little detail and those with strong outline form. The following projectors can be used easily for enlargement by projection: The opaque projector, for visuals from books, pamphlets, etc. The overhead projector, for materials that are on transparencies or can be traced easily on clear acetate. The filmstrip projector, for materials that already are in this form. The slide projector, for materials that are in slide form or readily can be put in this form.

It is only necessary to place the desired material to be enlarged in the appropriate projector and project the image onto the material on which you want the enlargement. It is then easy to trace the visual by following the lines of the projected image. Much time can be saved if the tracing is done with felt pens in the colors desired for the final enlarged image.
Children will be interested in how the overhead projector works.

OVERHEAD PROJECTION

The overhead projector has proven to be one of the most valuable teaching tools available for use in the classroom. The teacher-aide can give valuable assistance by helping prepare instructional materials for use with this projector.

The need for having specific objectives and purposes when preparing materials for overhead projection should be stressed at this point. This medium is a powerful communicator. It can teach incorrect concepts or ideas as well as correct ones, and it can teach correct concepts and ideas improperly. What is to be taught and the sequence in which it will be taught must be perfectly clear.

Below are some of the advantages and disadvantages of the overhead projector:

ADVANTAGES
- A daylight projector
- Lights may be left on
- Black-out curtains not necessary
- Chalkboard substitute, but more —
  - No dust or mess
  - Teacher faces students while writing
  - Increased impact of projected image
  - All students can see image from anywhere in the room
- Projector remains in front of the room
- Large size projection materials
  - 10" x 10" or 7" x 7"
- Simple as writing at your desk
- Many prepared transparencies available. They can be written on for increased emphasis
- Teacher- or student-made materials easy to prepare
- Color can be used for emphasis
Materials can be prepared in advance or produced during the learning situation. Materials can be saved easily for future use. Informational material can be exposed one line at a time. Overlays can be used to build up or break down the components of a system or process. Tremendous visual impact. Attention getter. Attention keeper. Provides means for dynamic visual presentations that maintain student interest.

**DISADVANTAGES**

- Material must be transparent.
- Cost of commercial materials is relatively high.
- Time is required to prepare effective visual materials.

PREPARATION OF TRANSPARENCIES—OVERHEAD PROJECTION

Because the aide will help the classroom teacher prepare transparencies for overhead projection, the aide should understand the following techniques and materials for producing this type of visuals.

Transparencies for overhead projection can be produced in many ways. Following are some of the methods:

Handmade for temporary use
Handmade for permanent use
Machine prepared by the following processes: Thermofax or other heat process, reflex photocopy method, and the diazo process.
Combination of hand and machine processes
Transparencies prepared as single visuals
Transparencies prepared as overlays. Overlays can be placed one on top of another to build up or break down the components of a system or process.

**HANDMADE TRANSPARENCIES**

The simplest type of transparency to prepare is that made by hand for temporary use. This can be done by writing or drawing directly on a piece of...
clear acetate or plastic with ceramic or grease pencils or with water-soluble felt, nylon, or bamboo tip marking pens. Frosted acetate also can be used, using nearly any writing tool, but the image projected will not be as clear and bright. The clear acetate can be placed directly over material in books, pamphlets, etc. The visual image then is traced directly onto the transparent acetate. Where large areas are to be colored, it is recommended that water soluble felt pens be used. Special grease pencils that project the color of the pencil lead also can be used for this purpose.

If it is expected that the material will be used again at a later date, it may be desirable to prepare the transparency as a permanent visual (one that cannot be removed easily from the acetate).

Permanent handmade transparencies are prepared in much the same way as temporary handmade transparencies except that the materials used to draw, trace, etc. on the acetate are more permanent in nature. The person producing the transparency substitutes special acetate inks or India ink for the grease pencil, and permanent type markers for the water soluble type. For large areas to be colored, colored acetate, either plain or adhesive backed, may be substituted. The latter can be cut to size and shape and placed directly on the area to be covered. Slight pressure will cause it to adhere directly to the acetate. Dry transferred adhesive rub-off letters and adhesive tapes, either transparent or opaque, also might be used. Following is a list of available materials for preparing handmade transparencies:

*Ceramic or grease pencils:* These are now available in many types from many sources, and many of them are being made specifically for use on transparency materials. Most of these project a black, opaque image on the screen, but some, as the Lumocolor and Dixon pencils, project the color of the pencil.

*Markers of many types:* Permanent felt markers in many colors. Water soluble markers with felt, nylon, or bamboo tips. Most of the markers on the market can be used if the water content is not too high.

*Clear Acetate:* This is available in many forms. It can be purchased in long rolls that can be attached to the projector, as well as in sheet form in a variety of sizes and thicknesses. One of the least expensive types of acetate material is cleared X-ray film which can be purchased in quantities for three cents a sheet, or less, for ten-inch by twelve-inch sheets.

Colored acetate sheets, plain and adhesive backed. India ink, and special acetate inks in various colors. Adhesive tapes, opaque and transparent in various colors. Dry transfer rub-off letters, opaque and transparent in a variety of colors and letter sizes and styles. Frosted acetate sheets and rolls. Transparent water color stamp books. Dry transfer patterns and designs. Speedball pens and holders. A variety of points in different sizes and lettering styles are available. Drawing boards and T-squares. Typewriter and reproduction carbon. Cut-out silhouettes. Transparency mounts.

And, as the aide works at the preparation of transparencies, he or she will discover other materials that will help prepare this type of transparency.
Preparing transparency with Thermofax copier.

THERMOFAX OR OTHER HEAT PROCESS TRANSPARENCIES

The Thermofax dry heat process is a simple and quick method of preparing transparencies for projection on overhead projectors. Original material can be transferred to heat-sensitive transparent projection material. Lines and markings on the original copy must be of a mineral base material. Typewritten commercially printed, mimeographed, or drawn material (use a black pencil, India ink, or a type of marking pen that will reproduce), carbon copies, and other mineral base masters may be used. Colored materials normally will not reproduce. Masters for making Thermofax transparencies may be prepared on any white paper including tracing paper. The master should not cover an area more than eight and one-half by eleven inches. Material from books, pamphlets, etc., cannot be reproduced in this manner unless the pages are removed from the book or pamphlet. Originals are not destroyed by this process and can be used over and over again. When you have prepared or selected the master, follow these steps to produce the transparency:

1. Place a sheet of heat-sensitive Thermofax film over the original with the notched corner in the upper right-hand area.
2. Pass the transparency and the original through a Thermofax copy machine at a dial setting halfway between the buff and white dial indicator settings. (This setting may vary from machine to machine and tests should be made. If copy is too light set dial for a slower setting, if too dark set dial for a faster setting.)
3. As the material comes from the copy machine, separate the original from the transparent copy. Your transparency, in a matter of seconds, is ready for projection.
The 3-M company makes many types of transparency film for preparing transparencies with the Thermofax copy machines. Following are some of these with a brief description of each:

**Type 125 Etched Image Positive**: A transparency material which produces a frosted white image which projects a black image on a white background. Color can be added to the image areas by filling in (on the back side of the transparency) with a colored pencil. It is available in 100 sheet packages.

**Type 127 Direct Reading Image Positives**: A transparency material which produces a black image on the film and projects a black image on a white background. Type 127 can be most easily read on the projector stage. It is available in 100 sheet packets.

**Type 129 Tinted Direct Reading Image Positive**: A transparency material which produces a black image (similar to Type 127) but on a tinted background. This material comes in red, blue, green, or yellow. It is available in 100 sheet packages of each color.

**Type 133 Economy Direct Reading Image Positive**: Available in 500 sheet packages only, this is a lightweight transparency material which produces a black image on a film (similar to Type 127) and projects a black image on a white background.

**Type 128 Color Negative**: A transparency material that produces a colored image on a dark background. Available in silver, red, blue, green, and yellow. This material also is available in 100 sheet packages of each color.

**Reflex Photo Copy Transparencies**

The reflex photo copy method of preparing transparencies is not a difficult process and has the added advantage of being able to produce materials from books, pamphlets, etc., and to reproduce almost anything in either black and white or color, including photographs. It should be noted that the transparency is not produced in color by this process. There are several makes and types of photo copy machines on the market. Some produce dry transparencies, some necessitate that the transparency be developed in a liquid developer. All operate on the principle of light being reflected from the original onto a sheet of sensitized paper to form a negative image. When the negative image is developed in contact with a sheet of sensitized transparency film, the image is transferred from the negative paper to the transparency film and a positive photo copy results. As procedures vary greatly with different photo copiers, specific directions will not be given here. Refer to the directions for using your particular photo copier, or contact your sales representative.

**Diazot Process Transparencies**

With the diazo process it is possible to produce color transparencies and overlays. They are made by preparing a master on transparent or translucent material. White tracing paper is a good medium for making masters. Diazot transparency foil is sensitized with a diazo coating of special light sensitive dyes. These foils are available in twenty-five sheet packets in a wide range of colors. When ultraviolet light is passed through the translucent master or original, the areas that are not protected by the opaque image on the master are removed from the foil or "burned out." The exposed film is then placed in a developing jar containing ammonia fumes. The unexposed diazo (the areas protected by the opaque image) combines with a dye coupler to form a dye image. The dye image is an exact image of the one on the master and is the color of the foil selected.
Several types of diazo printing and developing units are available on the market. A unit in kit form can be ordered from the Audiovisual Center, Arizona State University, Tempe, Arizona. This kit includes all the parts necessary to construct a simple but effective printer. Directions are included for constructing the printer. The price is $15.00. A gallon pickle jar can be used to develop the exposed foils. Place a small sponge in the bottom and saturate it with twenty-six per cent ammonia.

The following are steps to be taken in preparing diazo transparencies:
1. Prepare a master on transparent or translucent material. Use India ink, black pencil, tape, cut-outs of opaque paper, or carbon materials. The silver foil that accompanies each sheet of diazo foil is excellent for making opaque
cut-outs. The cut-outs can be attached to the master with translucent tape. The image on the master should be as opaque as possible.

2. Determine the color image that is desired. Place the translucent master so that the image side will be in contact with the dye side of the diazo foil. The dye side of the foil can be determined by the notch at one corner of the film. When this notch is in the upper right hand corner as you look at it, you will be looking at the dye side.

3. Place the master and the diazo film into the printer so that the light will shine through the back of the master. Expose to ultraviolet light for the required amount of time. (As this time varies with different printers, tests should be made to determine the exposure time.) For the printer noted above an exposure of two and one-half minutes gives satisfactory results.

4. Separate the exposed film from the master and place the exposed film in the ammonia container. You will be able to see the image develop. Development usually takes no longer than the exposure. When the image has developed to the color desired, remove the foil from the jar. It is now ready to mount and project.

**COMBINATION METHOD**

The above methods of preparing transparencies for overhead projection can be used singly or in combination to make outstanding transparencies that will have tremendous visual communicating power when projected on the overhead projector.

Overhead projector showing transparency in position to be shown.
PROJECTOR OPERATION
1. Remove power cord and plug into an electrical outlet.
2. Place the On-Off switch in the ON position.
3. Lay transparency to be projected on the projection surface.
4. Fill screen with image by moving projector toward screen to make picture smaller, away from screen to make larger.
5. Raise or lower projected image by tilting projection head up or down.
6. Adjust for best image focus by raising or lowering complete projection head by means of the focusing knob.
7. Proceed with presentation. Turn projector ON when you wish to present the visual image. Turn projector OFF when you wish audience to listen to you.

RECORDINGS, TAPE RECORDERS, AND RECORD PLAYERS

Recordings, either tape or disk, are most helpful in motivating and increasing learning in the classroom. Certainly they are no substitute for the teacher and the aide, but there are many ways in which recordings, whether produced in the classroom or purchased commercially, can save effort and energy. Many things can be accomplished in the classroom better by using recordings, and there are some things which can be accomplished only through this medium.

It is important that the teacher-aide have some knowledge of the uses of recordings, and that she be able to operate the tape recorder and the record player effectively.
RECORD PLAYERS AND RECORDINGS

A record player should be a part of the equipment of every primary classroom. Many recordings are available for use at this level of education. If a piano is not available, the record player can be an effective substitute. Recordings are available in all areas for young children—music, stories, rhythms, games, songs, etc.

Most modern record players are equipped to play recordings at three or four speeds, i.e., 16, 33 1/3, 45, and 78 revolutions per minute. Most educational recordings are being recorded now on 33 1/3 RPM disks. It is important that the proper stylus be used for each type of recording. The microgroove stylus should be used for 16, 33 1/3, and 45 RPM recordings, the standard stylus for 78 RPM recordings. Following are steps to follow when using the record player:

1. Place machine gently on table, open case, set speaker (if separate from player) where all will be able to hear.
2. Insert speaker plug in speaker receptacle of record player (if speaker is separate from player) and plug in power cord.
3. Select and set correct turntable speed.
4. Select the proper stylus (microgroove or standard) according to the record to be used.
5. Adjust tone-arm weight control if provided.
6. Unlock and lift the tone arm. Place the stylus gently in the run-in groove near the edge of the record.
7. Adjust the volume and tone controls for greatest listening satisfaction.
TAPE RECORDERS AND TAPE RECORDINGS

A tape recorder should be a part of the equipment of every primary classroom. Many pre-recorded tapes are available for use in enriching the experiences of young children. In addition, the tape recorder offers an easy and efficient method of directly recording and playing back classroom activities.

There are many uses of the tape recorder in the primary classroom. Some of them are:

- Reading readiness: Can help to make children conscious of the sounds in the world about them. Help them distinguish between sounds. Help them learn the sound of their own voices and the way they pronounce words and sounds.
- Speech correction: As the child hears words and sounds properly pronounced he can compare his own speech, and thus correct it.
- Develop creative expression: The child can freely express his ideas to the impersonal tape recorder and thus gain confidence in oral expression.
- Music: Music of all types can be pre-recorded and used for rhythm, dance, play, art, and other activities. It can be used as background music for rest periods, lunch periods, etc., and it can be used to give the child an appreciation for music.
- Story telling: The tape recorder is an excellent aid to enhance story telling. The story can be pre-taped. In this way there is assurance that the story will be told in sequence. Pictures, chart drawings, flannel board figures, puppets, etc., then can be used easily while the tape recorder is telling the story, to bring another dimension into the learning situation.

The above are only a few of the many ways the tape recorder can be used in the classroom.

The tape recorder is not a difficult piece of audiovisual equipment to operate. Extensive technical knowledge is not necessary to make successful recordings on magnetic tape. Fortunately, most modern school tape recorders operate in much the same manner, and when the aide has mastered the operation of one tape recorder she will be able to transfer this skill to the operation of other recorders.

A knowledge of magnetic tape, types, sizes, etc., will be helpful to the operator. Magnetic tape is a long strip of plastic, either acetate or Mylar, which is coated on one side with a thin coating of iron oxide. This strip of tape is wound on reels of different sizes. One side of the tape is glossy, and is called the "backing." The other side is dull. The iron oxide coating is on the dull side, called the "working" side. The microscopic bits of iron in the iron oxide coating are magnetized so that they line themselves up according to the sound vibrations received from the magnetic recording head as the recording is being made. The tape then can be played back through the recorder and an almost exact replica of the recorded sound will be heard. The recording can be erased or removed completely and a new recording made on the same magnetic tape.

Magnetic tape may be purchased on reels from three inches in diameter holding 150 feet of standard tape to ten and one-half inches which hold 2,400 feet of tape. Most tape used for educational purposes is on five- and seven-inch reels. A five-inch reel will hold 600 feet of standard tape and the seven-inch reel 1,200 feet. Extra thin long-playing tape with a Mylar base will give one-half again or twice the playing time.
The operating speed of any tape recorder is measured in inches per second (ips). This is the speed the tape travels across the recording, play or erase heads. Most school recorders have operating speeds of three and three-fourths and seven and one-half inches per second. Some also operate at one and seven-eighths ips. The speed at which the recorder operates and the size of the reel used will determine the playing time of the recording. A five-inch, or 600-foot, reel of tape recorded at 3 3/4 ips will give one hour of recording.

A one-hour recording can be made on a five-inch, or 600 foot, reel of magnetic tape when the recorder speed is set at 3 3/4 ips. If a seven inch, or 1,200 foot, reel is used you will be able to record for twice as long. If the speed at which the recorder is operated is changed to 7 1/2 ips, you will be able to make only a thirty-minute recording on the five-inch reel, and a one-hour recording on the seven-inch reel. The quality of the sound reproduction generally increases with the speed of the recorder: 3 3/4 ips is sufficient for good voice reproduction and for some music; however, for best reproduction of music the recording should be made at 7 1/2 ips.

Most school tape recorders are dual track recorders. This means that the tape can be recorded all the way through the tape length in one direction and then turned over and recorded the length of the tape again. The controls will differ on different tape recorders and it is recommended that the operating manual furnished with the recorder should be followed. However, this step-by-step procedure should prove helpful:

1. Place the tape recorder on a table with the speaker facing the class. Remove the lid. Remove the accessories (tape, empty reel, power cord, microphone, etc.). Plug the power cord into the machine, if not attached, then plug the cord into a wall receptacle.

2. Turn the OFF-ON switch to ON. This switch usually controls the tone as well. Set the tape speed control to the speed desired. Activate the play or forward control to see that the recorder is operating. Return the play or forward control to its OFF position.

3. Place the full reel of tape on the left hand spindle (as you are facing the recorder). Place the empty reel on the right hand spindle. The tape should come off the full reel counterclockwise with the shiny side of the tape on the outside or toward the operator.

4. Pull out about 12 to 18 inches of tape and place it vertically in the tape slot. Be sure that the shiny side is toward you as you face the machine. Thread the loose end of the tape on the empty reel. If you make a small loop at the end of the tape, it will help in threading it to the empty reel. Wind on by hand two to three winds of the free tape.

5. Insert the microphone in the microphone input jack. You are now ready to record.

6. Engage the recording control. To do this, it will be necessary to activate the safety control, which prevents accidental erasure.

7. Speak into the microphone and adjust the volume and tone controls using the recording-level indicator as a guide. It is well to record a short section of tape and then replay it as a check of volume and tone control before making a long recording.

8. When the recording is completed, rewind the tape, using the fast rewind control. Stop the recorder. Now activate the play control and adjust volume and tone controls.
MOTION PICTURE PROJECTION

Research and experience have proven that the educational film and the sound projector combine to form one of the most used and respected of the many media available today to improve the quality of education. Educational films are available on practically any subject or idea taught in the schools.

So that the greatest value can be received from the use of educational films, it is necessary to understand some of the values and advantages inherent in the medium and to know some of the technical and production techniques which make educational films such an effective medium. It also is important to know the limitations and disadvantages of the medium. Finally, an understanding of the way motion picture projectors work is necessary to effective projector operation.

VALUES AND ADVANTAGES

Educational Films Can:

1. Bring motion to the learning situation where its presence is necessary
2. Compel attention and heighten reality
3. Bring the past or present into the classroom
4. Speed up or slow down time
5. Present physical processes invisible to the naked eye
6. Be combined with sound and thus appeal to two learning senses at the same time
7. Enlarge or reduce the size of things
8. Offer esthetic experiences that are satisfying to the learner
9. Provide common experiences for all children in the class
10. Help to influence and change attitudes, feelings, and preconceived notions
11. Clarify abstract relationships
12. Motivate toward other types of learning situations
TECHNICALITIES AND PRODUCTION TECHNIQUES

A motion picture is a series of many still pictures shown on a screen in rapid succession. We see this series of pictures as an impression of continuous motion because the eye continues to "see" a picture for a brief period of time after it has disappeared from the screen. As our eyes are unable to adjust faster than about 1/50 of a second, we do not see the "blackout" between the series of pictures when they are projected at 24 frames per second. We thus have a visual-mental impression of continuous motion without interruption on the screen.

Most educational films are 16 m.m. sound films.

The motion picture camera is a device for taking a series of still pictures in rapid succession, the normal number taken per second for sound films being 24.

Silent film usually is taken at 16 frames per second. It is possible to take pictures with the motion picture camera at a faster or slower rate and thus speed up or slow down the action as it appears on the screen when the film is run through the projector at a speed of 24 or 16 frames per second.

The motion picture photographer uses many techniques to create special effects when the film is projected, thus leading to some of the specific values listed above. Some of these are:

DIRECT PHOTOGRAPHY

The camera records things as they are happening. A photographic record is the result.

SLOW MOTION, STOP MOTION, AND TIME LAPSE PHOTOGRAPHY:

By taking pictures at a much faster rate than the normal rate of 24 frames per second that will be used to project them, the photographer is able to slow down the motion on the screen. Thus it is possible for the camera to record something that happens too fast to be grasped through normal vision. It is also helpful when a particular skill or action must be observed carefully in slow motion.

By taking a number of pictures of the same frame the film maker is able to stop the motion at any point in a process. This makes it possible to emphasize a particular point in the film.

By taking a series of pictures at a slower rate than they will be projected on the screen the film maker is able to speed up the motion appearing on the film. By taking a series of pictures of an event at intervals over a long period of time, the event can be made to happen in a few seconds or minutes on the screen. Thus the life cycle of a plant can be shown in a few minutes.

COLOR PHOTOGRAPHY

Color can be essential in the teaching of some concepts, and the motion picture film can be taken in either black and white or color.

MICROPHOTOGRAPHY, TELESCOPIC PHOTOGRAPHY AND X-RAY PHOTOGRAPHY

The motion picture camera can be combined with a microscope, telescope, or X-ray equipment to bring to the screen things that cannot be seen with the naked eye, things that cannot be photographed easily or seen at close range, and things that cannot be seen from the outside.
Animation

Animation is a process by which the film maker is able to visualize a concept. Abstract ideas often can be made concrete through the process of animation. It has been said that "anything that can be imagined can be produced through animation." It is a filmed series of drawings or overlays. Hundreds of drawings or overlays often are needed to visualize a simple concept. Each drawing in the series is changed only slightly and is filmed individually. Then, when the filmed series of still drawings is projected on the screen, planned movement takes place. Animation is used a great deal in educational films and has proved to be very effective.

It is necessary to understand the above techniques so that they can be explained to children who are watching films where the techniques are being used. If this is not done, children will get false ideas about the size, movement, relationship, and perspective of the things seen on the screen.

Limitations or Disadvantages

Educational films and projectors are expensive. Films, however, usually can be rented from a lending library at a nominal fee. There is a tendency to over-use films on the theory that they are easy teaching tools. A great amount of time and preparation are necessary if the film is to be used to the best advantage, and it often is necessary to pay very close attention to explanations so that incorrect concepts will not be the learnings grasped by the children.

Administrative difficulties involved in the use of films include: The room must be in semi-darkness; screens must be provided and set up; film is perishable and is damaged easily; distribution sometimes can be a problem, and it sometimes is difficult to get the film you want when you want it.

Many educational films cover too much material in a single film and, because the material is prepared for wide distribution, the concepts often are presented in a sequence different from that desired.

Motion pictures are essentially a group device and give little opportunity for individual study. This latter limitation is being overcome with the production of 8 m.m. single concept films that are designed for individualized instruction.

Sound Motion Picture Projector

It is not difficult to operate a 16 m.m. sound projector. All projectors for school use work on much the same principle and have common systems and parts. When operation of one type of projector has been mastered, the knowledge can be transferred to the operation of other projectors.

Three systems function together to project the picture on the screen and make the sound audible to the viewer. They are the mechanical system to draw the film through the projector, an optical system to condense light through the film and project the image on the screen, and a sound system to reproduce and amplify the sound.

Common Parts

The Mechanical System

1. A feed reel arm and reel. The full reel of film is placed on the arm.
2. A take-up reel arm and reel. The empty reel is placed on this arm.
3. Drive sprockets. These engage the sprocket holes on the edge of the film and move the film through the projector.

4. Film channel and gate. This is a smooth channel for the film to pass through as it passes the aperture where the light shines through the film. The film gate locks the film in this channel.

5. Claw mechanism. The claw mechanism or shuttle brings each still picture in front of the aperture at the rate of 24 frames per second.

6. Shutter. The shutter rotates at a speed that will insure that there is no light passing through the aperture while the film is being moved by the claw mechanism.

7. Film loops. A film loop is required above and below the film channel so that the film will not be torn as the claw mechanism draws it through the aperture.
THE OPTICAL SYSTEM

1. Master projection lamp. This lamp provides the light to project the image on the screen.

2. Reflector. It is behind the lamp or in the lamp itself to concentrate the light from the lamp in the direction of the condenser lenses and the aperture.

3. Condenser lenses. These lenses concentrate the light on the film at the aperture opening.

4. Projection lenses. These lenses focus the image on the screen.

THE SOUND SYSTEM

1. Sound track on film. On most 16 m.m. sound motion pictures the sound is photographed on the film along the edge.

2. Sound drum. This is a smooth surface for the film to travel over as it receives light from the exciter lamp.

3. Exciter lamp. It provides a constant light source to the sound track.

4. Photo electric cell. It picks up the variable light patterns coming through the sound track on the film and converts them to electrical vibrations.

5. Amplifier. The amplifier amplifies or increases the vibrations and sends them on to the speaker.

6. Speaker. The speaker changes the electrical vibrations into sound vibrations which are an exact replica of the sound track photographed on the film.

Before threading the projector it is important that the operator know whether the film is properly wound on the feed reel. The following suggestions will help determine this.

1. Are the sprocket holes on the operator's side as he or she faces the projector?

2. Is the film coming off the reel in a clockwise manner?

3. Will the picture go through the projector upside down and backward?

Before threading the projector the operator should study the threading diagram carefully and then follow it specifically. Threading diagrams usually are provided with the projectors. However, diagrams are included here of the most common projectors in use in classrooms today.

A simplified procedure also is included. Learn thoroughly the steps involved. It is easy to form the habit of good projection procedure.

PROJECTOR OPERATION

STARTING PROCEDURE

1. Unpack and assemble

2. Connect power cord — check for power at projector

3. Pre-focus and adjust for proper size

4. Turn on amplifier

5. Thread projector

6. Check threading by hand
7. Start motor
8. Turn on lamp
9. Focus and frame
10. Adjust volume and tone

Stopping Procedure
1. Turn off light
2. Turn off sound
3. Turn off motor (after cooling bulb)
4. Rewind film
5. Unplug power cord
6. Disassemble and repack

Ready to project the film.

Learning to thread the 16 mm projector.
FILM LOOP
(ABOUT TWO FINGERS WIDE)
FILM MUST FEED FROM FRONT OF REEL
IMPORTANT FILM MUST BE SNUG AROUND SOUND DRUM
FILM TAKE-UP MUST BE FROM BOTTOM

Bell & Howell Filmosound

TAKE-UP REEL
REVERSE
THREAD
FORWARD
REWIND
FEED REEL
LOCK

Galaxy
PREPARATION OF THE CLASSROOM FOR FILM SHOWINGS

One of the tasks that well might be assigned to the teacher-aide is that of preparing the classroom for showing instructional films, filmstrips, slides, and other projected materials. The following are some steps that should be followed while performing this task.

Have projector focused and ready to project.
Darken the room in the best possible manner.
Be sure that the room is properly ventilated.
Arrange the seating and the screen in such a manner that all the children will be able to see and hear.
Carry out the preparations with the least possible interference with the activities going on in the classroom.
When the room and equipment are ready, let the teacher know that everything is in readiness for the showing.

35 MM PROJECTION

The 35 mm projector and the materials used with it provide important instructional tools because they have unique physical and instructional characteristics that make them extremely valuable aids. The teacher-aide should be familiar with these characteristics and be able to operate the projector efficiently. Many school projectors are equipped to show either filmstrips or 2" x 2" slides. Filmstrip and slide projectors also can be purchased as separate pieces of equipment.

Using the Kodak Carousel 35 mm projector with hand controls.

Projection of filmstrip.
FILMSTRIPS

PHYSICAL CHARACTERISTICS
1. A related sequence of transparent still pictures or images on a strip of 35 mm film
2. Sound or silent; may use tape or record
3. Single or double frame; single ¾" x 1" — double 1" x 1½"
4. Inexpensive; color, $5.00 to $7.00; black and white, $3.00 to $5.00
5. Film enters channel upside down and backward
6. Easy to use and store
7. Projectors relatively inexpensive

INSTRUCTIONAL CHARACTERISTICS
1. Easy and convenient to use
2. Takes up little space
3. Inexpensive
4. Black and white or color
5. Can be used at the appropriate pace
6. Fixed sequence
7. Only partial darkening usually needed
8. Availability — excellent; most subjects and concepts covered
9. Can be made by teachers

LIMITATIONS
1. Still medium
2. Fixed sequence
3. Easily damaged

SLIDES
Same as above except that sequence is not held rigid, they are easier for the teacher to prepare, and automatic projectors are making them almost as easy to use.

PROJECTOR OPERATION
1. Unpack and plug power cord into wall outlet.
2. Place filmstrip holder or slide holder into the projector.
3. Place filmstrip or slide into the holder; the filmstrip or slide must enter the projector upside down and backward.
4. Turn the projector on.
5. If a filmstrip, draw film through the holder with the film advance knob, and frame with the framing lever.
6. If a slide, move slide into the projector with the slide holder.
7. Move the projector toward the screen for smaller picture, away from the screen for larger picture.
8. Focus the image on the screen by rotating the projection lens forward or backward.

**35MM PROJECTION SYSTEM**

**FILMSTRIPS & 2"X2" SLIDES**

**OPAQUE PROJECTION**

The opaque projector, an important classroom instructional tool, has some of the advantages of other projection equipment and some unique advantages of its own. It has two major disadvantages.

**ADVANTAGES**

- Attention is concentrated
- Valuable classroom time can be saved; preparation of materials is not difficult
- Opaque materials can be projected
- A wide range of available teaching items can be used: Books, magazines, maps, illustrations, three-dimensional materials, student work, etc.
- Can be used for individual and group instruction
DISADVANTAGES
Reflected projection necessitates a dark room
Projector bulkier than some other projection equipment

HOW THE PROJECTOR WORKS

The opaque projector operates on the principle of reflected projection (see diagram).

The lamp (1) with help from reflector (2) shines light on stage (3).
The projector has a ten-inch by ten-inch stage (3).
Material on stage (3) is reflected to mirror (4).
Mirror (4) reflects image through lens (5).
Lens (5) projects, focuses, and enlarges image on screen.
Pointer (6) projects an arrow on the screen.
The tray (7) is used to project flat materials; a glass plate over the material keeps it flat and protects it from excessive heat.
The roller (8), a continuous rubber tracked device, moves materials such as study prints, opaque rolls, and long pictures or visuals through the projector.
The platen (9) projects books, three-dimensional objects, etc.

OPAQUE PROJECTOR OPERATION

1. Plug in power cord
2. Place material to be projected in tray, on roller, or on the platen.
3. Turn on the projector.
4. To make the image smaller, move the projector toward the screen; to make the image larger, move the projector away from the screen.
5. Focus the projection lens to make the image on the screen sharp.
STUDY TRIPS

Study trips can provide dynamic learning environments. If proper preparation, procedure, and follow-up activities are provided, they can be the means for making abstract concepts concrete and real. The importance of proper planning cannot be emphasized too strongly. Without it the study trip becomes a pleasure jaunt and is not defensible from an educational standpoint. The teacher-aide can be of great help in planning and carrying out study trips that will make learning more meaningful.

The following procedural outline can be followed to make study trips dynamic:

I. PREPARATION

A. PRE-PLANNING
1. Make specific arrangements for transportation well in advance.
2. Preview, by taking the trip yourself before taking class.
3. Discuss with authorities at place of destination the specific objectives of the trip.
4. Prepare a set of objectives for the study trip.
5. Prepare a set of safety rules that may be necessary, including bus safety.
6. Have individual permission forms available.
7. Prepare a vocabulary list specific to the study trip.
8. Plan material to be studied before taking the trip.
B. PUPIL PREPARATION
1. Let students know in advance that you are planning the trip. It is good motivation.
2. Study material available on the subject of the trip.
4. Do experiments applicable to the learning situation.
5. Plan and execute dramatic bulletin boards.
6. Study vocabulary necessary to an understanding of the trip.
7. Set up a library table of materials available and applicable.
8. Have individual permission slips signed well in advance.
9. Study safety precautions, including safety on the bus.

II. CONDUCTING THE TRIP
A. ON THE BUS
1. Discuss the route being followed.
2. Point out and discuss places of interest on the route.
3. Maintain complete control, but keep it informal. The trip should be enjoyable to all.

B. AT DESTINATION
1. See that guides or persons responsible point out the important concepts agreed upon before the trip.
2. Maintain complete control, but keep it informal. Let everyone enjoy the experience.
3. If the trip will take more than the morning hours, be sure that luncheon arrangements have been made.
4. Return to school at the designated time.
III. SUMMARIZATION AND EVALUATION

A. GENERAL
1. Discussion of the trip
   a. Answer questions about the trip
   b. Concomitant learnings
   c. Merits of the trip
   d. Anything out of the ordinary that happened
2. Have other rooms visit your room to discuss the trip and make projects arising out of it
3. View pictures taken during the trip
4. Take picture of class and individual projects arising out of the trip for later discussion

B. SPECIFIC
1. Write thank you letters
2. Evaluate concepts learned
3. Complete any projects started
UTILIZATION OF INSTRUCTIONAL MATERIAL AND DEVICES

Research has proven that the use of audiovisual materials and devices in the classroom contributes greatly to the effectiveness of the learning process. Because of their emphasis on nonverbal and concrete experiences rather than on verbal and symbolic experiences, they supply a concrete basis for conceptual thinking. They offer reality of experience. They develop continuity of thought. They provide a high degree of interest and motivation. They increase the speed of learning. They increase retention of things learned. They bring experiences to the classroom not possible otherwise. They contribute to the efficiency, depth, and variety of learning experiences.

The effectiveness of audiovisual material and devices, however, depends upon the way these materials and devices are used in the classroom. Although they are broad in scope and function, they are specific in their application.

The great potential of audiovisual materials and devices will be obtained only if the proper material and device is selected for each particular learning situation and is used in the most effective way.

The following outline can be followed to provide for effective utilization of audiovisual materials and devices.

A. AVAILABILITY AND SELECTION
   1. Is the material or device available? Can it be obtained? If so, where? Is there an expense involved that would prevent its use? How long would it take to get it?
   2. Is this material or device the best possible aid for a particular learning situation?
   3. Does it, or will it, make a unique contribution to the particular learning situation?

B. PREPARATION OF THE USER
   1. Preview the material in advance of presentation.
   2. Prepare behavioral objectives for use of the material or device.
   3. Prepare questions or outline for discussion and evaluation.
   4. Be sure you know what the learner should get out of its use.
   5. Make sure that all materials, devices, equipment, etc. are available and in good condition.
   6. Prepare vocabulary list if new words are to be used.
   7. Make sure you are familiar with the operation of the equipment that will be used.

C. PREPARATION OF THE CLASSROOM
   1. Set up in advance any equipment or display that is to be used in the learning situation.
   2. Provide for the best possible lighting or darkening of the room and for good ventilation.
   3. Check seating arrangement for maximum effect.
4. Use the chalkboard or other display board to list titles, vocabulary, etc.

5. Provide for a normal, relaxed classroom atmosphere.

D. PREPARATION OF THE LEARNER

1. Discuss the material, device, equipment or technique according to the outline or objectives prepared while previewing.
   a. What the student should look for
   b. The concepts to be developed
   c. New vocabulary that will come into use
   d. Suitability of the material to the learning situation
   e. Need for complete cooperation of all members of the group for effective learning

2. Discuss the reason the particular material or device is being used.

3. Explain that there will be an evaluation and the type of evaluation.

E. PRESENTATION OF THE MATERIAL OR DEVICE

1. Correlate the aid or aids with the overall goals being developed.

2. Do not hurry in the use of audiovisual aids.

3. Avoid distractions of any nature.

4. Show the learners that you are genuinely interested.

5. If any elements are omitted or distorted make them clear.

6. Whenever possible, let the audiovisual aid do the teaching. Some teachers are too prone to verbalization that can distract from the material's effectiveness.

E. SUMMARIZATION AND FOLLOW-UP

1. Discuss the points developed in the presentation.

2. Evaluate to see if the objectives have been accomplished.

3. If results are doubtful, go over the presentation again or from another angle, stressing the points of uncertainty.

4. Provide an immediate opportunity to apply the knowledge gained.

BASIC A-V EQUIPMENT LIST FOR A KINDERGARTEN CLASSROOM

16 m.m. projector
   Bell & Howell Auto Load
   Graflex — General Precision
   R.C.A. Victor
   Kodak — Pageant

35 m.m. projector
   Bell & Howell — Auto Load
   Viewlex — Viewlex, Inc.
   Kodak
Overhead projector
   Appolo — American Optical
   Thermofax — 3M
   Porta — Scribe — Besseler

Opaque projector
   Besseler — View Lyte
   Taylor — Spotlight
   Opaque Delineascope — American Optical

Tape recorder
   Sony 211 TS
   Wollensak
   Audiotronics — 440VT

Record player
   Neucomb
   Audiotronic

Copier & transparency maker
   Thermofax: Can make transparencies and ditto masters as well as general copy.
   Diazo Printer: Small printer available from Arizona State University Audiovisual center in kit form for $15.00.

Chalkboard

Flannel board and readiness materials
   Seal — Dry-mount press #200 or flatiron
   Wrico — Lettering set or rubber stamp lettering set, 1" letter size.
   KOH-I-NOOR — Visi-color-set-lettering set

Screen — Wall mounted 70 x 70 or Tripod 60 x 60
   Daylight
   Radiant
   Knox

One-half frame or full frame 35 mm camera
   Several available

MATERIALS
   Clear acetate sheets or roll for overhead
   Transparency material for type of copier purchased
   Adhesive color film
   Tracing paper
   Water soluble colored, assorted marking pens
   Grease pencils
   Transparency mounts
   Dry-mount tissue
   Sealamin laminating tissue
   Masking tape
   Other items according to teacher need.

It is possible that a one-room operation could not afford the above equipment and materials. However, if the kindergarten is in a combined school, many of the above pieces of equipment can be shared.
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Books
Ozalid Audio-Visual Department, They See What You Mean, Johnson City New York: Ozalid Division of General Aniline and Film Corporation, 1959.

Pamphlets

FILMS

AUDIO-VISUAL MATERIALS IN TEACHING"
13 min., Coronet

The film shows how, in our audio-visual world, audio-visual materials can challenge children’s attention and interests in the classroom. Integration of audio-visual materials into a unit is demonstrated as we see the work of the teacher and the audio-visual center in coordinating efforts to bring rich learning experiences to the classroom. Actual class situations, teachers, class activities, and an audio-visual center are shown.
"BULLETIN BOARDS: AN EFFECTIVE TEACHING DEVICE"
11 min., Bailey - 1956 - Color
Shows how to plan, gather materials, and arrange bulletin boards for various classroom uses; how to use the bulletin board as a class project.

"CHALK AND CHALKBOARDS"
15 min., Bailey - 1959 - Color
The chalkboard is one of the oldest teaching aids, but it is not always used to best advantage. This comprehensive film discusses the physical properties of chalk and chalkboards, showing what they are made of, and demonstrating how they should be cared for to obtain the best results. The film also shows many techniques which can be used on all grade levels to improve everyday teaching.

"CHARTS FOR CREATIVE LEARNING"
10 min., Bailey - 1961 - Color
Whether charts are purchased or made by teacher and/or students, they serve an important role in presenting information to the class. Charts should be bold, clear, and direct, providing quick clarification or emphasis when needed. This film demonstrates methods of planning and making charts, then shows numerous situations in elementary and secondary classrooms where charts are being used.

"CREATING CARTOONS"
10 min., Bailey - 1955
Using humorous animation, this film introduces students to the method of the cartoonist; shows the use of the circle in creating the rough first drawing, how to draw expressions by observation and simplification, how to express action and movement, and how to simplify and exaggerate for effect and humor.

"CREATING INSTRUCTIONAL MATERIALS"
15 min., McGraw-Hill - 1963 - Color
Shows that creation of instructional materials in the classroom contributes significantly to the student's learning experience.

"DESIGN"
11 min., Bailey - 1955 - Color
Offers a non-technical formula for basic design through the use of animated drawings. Shows how to make flat surfaces interesting and effective through the application of basic shapes, combining basic shapes, repeating shapes, stylization, exaggeration, and distortion.

"DISCOVERING COLOR"
15 min., Film Associates - 1960 - Color
This film presents the basic language of color. It demonstrates clearly the techniques of color mixing and explores the great variety of color we can see in the world around us. The more we know about color, the more we can see, create, and appreciate.

"DISCOVERING LINE"
17 min., Film Associates - 1963 - Color
Illustrates the way in which a line records movement, shows that a line is a major element in art, the perception of which involves a major aesthetic skill. Leads the student to an increased awareness of visual beauty and function of the line.
"DISCOVERING PERSPECTIVE"
14 min., Film Associates California - 1963 - Color

Overlapping, vertical position, graying colors, varying detail, varying size, and converging lines are techniques used to create perspective. Any one or more of these methods helps to create the appearance of depth, or distance, on a flat surface.

"DISCOVERING TEXTURE"
17 min., Film Associates California - 1961 - Color

Every surface has texture, and an object may have several textures. We learn about textures by touching the surfaces of objects and looking at the way light reflects from these surfaces. Some textures are natural; some are man-made. The film shows how man uses paints, tools, and materials to change the texture of surfaces. Some textures we feel, some we see, and some we create.

"FACTS ABOUT FILM"
20 min., International Film Bureau - 1959 - Color

A good film for training teachers, adults taking audio-visual education, and anyone else who uses films. An overall coverage of the various kinds of film, what materials are used to make film, how to keep film in good repair, and causes of film damage. Proper storage methods and the treatment of "green" film are shown. Each step in learning to clean, inspect and repair film is shown clearly and in great detail, with many diagrams.

"FACTS ABOUT PROJECTION"
20 min., International Film Bureau - 1959 - Color

A carefully detailed training film on the parts of the projector and how to operate a projector skillfully. Using diagrams, we are shown the method of threading various types of sound projectors. Proper care in oiling and cleaning of the projector is shown. Stress is made for the operator to be prepared for emergencies by always having spare parts available, and for advance preparation of the room before screening. The use of diagrams and close-up photography of many details clearly makes this a useful teaching aid.

"HANDMADE MATERIALS FOR PROJECTION"
20 min., Indiana University - 1955 - Color

Demonstrations of how the basic principles of transparency, translucency, and opaqueness can be applied to the preparation of teaching materials for use in overhead, standard slide, and opaque projectors. Shows the carbon-film method of making a transparency for projection of typed materials, the use of adhesive colored materials and textured backgrounds.

"HOW MOTION PICTURES MOVE AND TALK"
10 min., UW-Educ. - 1940

The mechanical, electrical, and visual principles behind the talking motion pictures.

"LETTERING INSTRUCTIONAL MATERIALS"
20 min., Indiana University - 1955 - Color

Surveys easy-to-use lettering methods and shows how the inexperienced person can use the methods for lettering on signs, posters, bulletin boards, displays, and materials for projection and publication.
"POSTER MAKING: DESIGN AND TECHNIQUE"
10 min., Bailey - 1952

Poster layout, lettering, tracing, cutting, transfer, stenciling, and painting are demonstrated manually. The importance of correct techniques in the use of various brushes is cited. Color contrast, layout, lettering, measurement, and spacing are stressed.

"SELECTING AND USING READY-MADE MATERIALS"
17 min., McGraw-Hill - 1963 - Color

Illustrates how today's teacher can bring imagination and professional artistry to the task of adapting "finished-product" instructional materials for classroom use.