SUCCESSFUL TEACHER PRACTICES IN THE TEACHING OF INDIAN YOUNGSTERS.
BY- BERNARDONI, LOUIS C. AND OTHERS
ARIZONA STATE DEPT. OF PUBLIC INSTRUCTION, PHOENIX

THE ARIZONA COORDINATING COUNCIL FOR RESEARCH IN INDIAN EDUCATION REQUESTED THAT TEACHERS SUMMARIZE PARTICULAR TECHNIQUES, AIDS, AND UNITS EFFECTIVE WITH INDIAN CHILDREN. THIS DOCUMENT IS A COMPILATION OF THOSE SUMMARIES. TECHNIQUES PRESENTED INCLUDE DEVELOPING PRIMARY GRADE CREATIVE WRITING, CREATING READING ATMOSPHERE AND MOTIVATION, TEACHING VOWEL SOUNDS THROUGH MUSIC, STORY TELLING AND DRAMATIZATION, LEARNING TO SPEAK ENGLISH, LEARNING POETRY, USING THE LIBRARY IN SUPPLEMENTAL READING, AND PHONICS. OTHER TECHNIQUES OFFERED INCLUDE THOSE FOR DEVELOPING MOTIVATION FOR WORD PROBLEMS, BUILDING SIGHT RECOGNITION OF NUMBERS AND COLORS, DEVELOPING SCIENCE VOCABULARY, TEACHING NONENGLISH-SPEAKING CHILDREN, CORRELATING ART IN THE CURRICULUM, DEVELOPING IN ARTS AND CRAFTS, AND TEACHING GEOGRAPHY. HELPFUL IDEAS ARE PRESENTED FOR FIRST-GRADE NAVAHOS, INCLUDING AIDS FOR ENRICHMENT, AIDS FOR ARITHMETIC, SAND PAINTING, FIELD TRIPS, AND A NUMBER OF GENERAL TEACHER AIDS. SPECIAL UNITS ON SANITATION, BABY ANIMALS, LANGUAGE THROUGH GEOGRAPHY, CATTLE, AND TOTAL SCHOOL ADJUSTMENT TO THE FIRST GRADES, PLUS A BEGINNER'S DAY PROGRAM AND AN INTER- INTRA-MURAL PROGRAM ARE ALSO INCLUDED. (RB)
SUCCESSFUL TEACHER PRACTICES
IN THE
TEACHING OF INDIAN YOUNGSTERS

CO-ORDINATING COUNCIL FOR RESEARCH IN INDIAN EDUCATION

REPORT COMPILED BY:

Arizona State Department of Public Instruction
Division of Indian Education
Phoenix 7, Arizona
The Co-ordinating Council for Research in Indian Education is an organization composed of various agencies directly concerned with Indian education. One objective of the Council is to circulate information or research so that all agencies will benefit from the findings or practices that are evolved by a particular school or teacher.

In December, 1960, the Council requested that teachers summarize a particular method, technique, aid, unit, etc., that they had found effective with Indian children so that other teachers could benefit from their efforts. This pamphlet is a compilation of the summaries submitted with little or no editing.

Anyone who is interested in additional information concerning the practices described should write directly to the school or teacher involved. It is hoped that this pamphlet will encourage better communications between schools.

Louis C. Bernardoni, Chairman

Mamie Sizemore, Secretary

Co-ordinating Council for Research in Indian Education
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A Technique for Developing Creative Writing in the Primary Grades

This method consists of three steps:

Step I. Each day throughout the year the children are asked to give short oral reports of their experiences. In the early part of the year these reports are likely to be of but one or two sentences in length.

Step II. With the teacher's guidance the child writes the report which he has given orally. As the child develops, the need for the teacher's help diminishes.

Step III. About one day each week each child is asked to write a short experience-type story independently. After the story is written the teacher goes over it with the child in an individual conference and all corrections are made. Next the child re-writes the corrected story neatly giving particular attention to the form and appearance. Gradually, the child develops ability to do creative writing.

This technique has been used successfully with Navajo children in the second and third grades. With a few modifications it can be used equally well in the elementary grades.

JAMES F. ALLEN
Toadlena Boarding School
Toadlena, New Mexico

Unit - Coming to School
Level - Beginners

General Objective - To help children make proper adjustments to school life.

Short Introduction - In becoming oriented to school, the teacher helps the community and the children.

A good education results in a better community.

A good community depends upon well-educated children.

I. Language Arts
A. Language
School and Home

Activities

Minimum Essential Goals:
1. Pictures of school activities
1. Is able to name objects in a picture about school or home.
   a. Playing with blocks, balls, dolls and other toys.
   2. Cutting with scissors, coloring and pasting.
   3. Work of each member of the family.
   4. Furniture of the home — Use doll house furniture for illustrations.
   5. Furniture of the schoolroom and the dormitory.

2. Is able to color according to oral directions.
   Make color chart.
   Match colors with objects.

3. Illustrate an idea or work by means of creative drawing, clay modeling or paper cutting.
   Provide materials ready for using. Paper in various sizes and colors, clay already mixed, and crayons ready for use.

D. Social Living.

1. Feels at home in the school.
   Tour of the community. Learn the names of the various workers and what they do.
   Make a picture, mural, or model buildings of the community.

2. Is able to work and play agreeably with fellow class members.
   Work and play corners and centers of interest.
   Games — both supervised and self chosen.

3. Know his name, teacher's name, dormitory people's names, name of school, names of people who work in the dining room and kitchen.
   Visit the places where the employees work and see them and talk with them.

4. Relating Experiences.

5. Recognize his name
   Writing his name in manuscript
   Learns his colors
   Listens to stories
   Notes likenesses and differences
   Closes doors quietly
   Avoids carrying mud into buildings.
   Activities of these goals can be carried out through various situations.

   a. Playing with blocks, balls, dolls and other toys.
   b. Cutting with scissors, coloring and pasting.
   c. Work of each member of the family.
   d. Furniture of the home — Use doll house furniture for illustrations.
   e. Furniture of the schoolroom and the dormitory.

   Make color chart.
   Match colors with objects.

   Provide materials ready for using. Paper in various sizes and colors, clay already mixed, and crayons ready for use.

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II. Arithmetic or Numbers.

1. Grouping objects in 2's and 3's.
   Use many situations and objects for attaining this goal.

2. Concepts of Time.
   Recess Getting up
   Lunch Rest time
   Going to School
   Time for the show
   Months of the year
   Days of the week
   Activities:
   Use a play clock, Timmy Time and Sammy Sun for telling time. Keep a calendar of daily events. Make a special picture for each month.

3. Special Days of the Calendar.
   Celebrate these days with special assemblies, programs, parties and visits.
   Other days which can be of interest:
   Bath days, nurse visiting day, or days, and visit to the dentist.

4. Concepts of Sizes:
   Big and little.
   Use many charts, pictures, objects, and the children themselves.

5. Numbers on the clock.
   The schoolroom clock and the toy clock face. Timmy Time is a good device with large numbers.
   Children can make their own clock faces with the covers from ice cream cups.


7. Flash cards of numbers for games.

8. Games for counting.
   Bouncing the ball.
   Singing Games: Ten Little Indians, Two Little Blackbirds, Five Little Chickadees, Three Little Kittens.

9. Flannel or Felt Board.
   Numbers 1 to 10 -- Stories: Three Bears, Three Pigs, Three Little Goats. Children can make their own stories.
III. Health. (This project can be worked in with Language Arts, or as a separate part of the unit.)

1. Personal Appearance and Body Cleanliness:
   a. Activity: Daily morning inspection by the children and teacher.
   b. Demonstration: Washing hands and face, neck and ears, cleaning fingernails, combing hair, tying shoes, buttoning clothes.
   c. Use a mirror – see how pretty they look after they are clean and well-groomed.
   d. Sing songs about washing hands and other ways of keeping clean.
   e. Demonstrate or have school nurse show how to clean the nose.
   f. Use of handkerchief and tissue when sneezing or coughing.
   g. Make picture charts and simple reading charts on all activities.
   h. Show with a doll how to dry the body after a bath.

2. Nutrition and Growth
   a. Food makes us grow.
   b. Height and Weight records.
   c. Vision tests
   d. Hearing tests
   e. Milk is food
   f. Eat food slowly
   Food charts made with pictures cut out for booklets.

   Weigh each month and measure three times a year. Compare the growth each time. (Record those who are unusual in their actions.)

   Observe eating habits in the dining room.
   Teach table manners every day and follow up in the daily conversation periods.
   Family style dinner with all the children in groups of eight or ten.
   Songs, stories and poems about food.

3. Teeth and Mouth
   a. Learns how to brush his teeth.
   b. Learns that the dentist helps the children.
   c. Films and film strips on the care of teeth.
   Use a model of teeth to illustrate.
4. Care of Special Senses
   a. Care of eyes
      - Do not rub eyes.
      - Do not look at strong light.
      - Proper seating for light on the desks or tables.
   b. Care of ears
      - Proper washing and drying of ears.
      - Avoid putting objects in the ears.
      - Inspect or have the school nurse check for wax in the ears.

5. Wholesome personality and daily living
   a. Proper greeting to teachers and other employees and visitors.
   b. Good manners:
      - Practico good manners at school, at parties.
      - Great people at the door. Offer them a chair. Take part in the activity.
      - Plan and serve a lunch family style, or a dinner. Special party for parents, or a friend, or a visitor.

IV. Arts and Crafts

State of New Mexico goal (Curriculum Guide)

- Is able to use clay, kalsamine, paint-sand and crayolas in creative expression.

Activities:
- Crayola drawings, paper cutting, paper tearing, painting with tempera at the easel, clay modeling with plasticene or native clay.
- Flannel board pictures, puppets, weaving of paper, yarn or raffia, finger painting, wood work with a coping saw, sand pictures, painting rocks.

V. Music

1. Moves his body in response to rhythmic activities (sounds)
2. Sings songs learned.

Use phonograph or piano. Let children interpret rhythms such as clapping, marching, skipping, running, swinging, hopping, etc.
3. Rhythm Band
4. Folk Dances
5. Indian Games and Dances
6. Interpretations of Animals such as:
7. Dramatization of Nursery Rhymes

VI. Science.

Knows that plants and animals live and grow.

1. Watering the plants at school and at the dormitory or home.
2. Make a garden of vegetables or flowers.
3. Caring for pets as the goldfish, tadpoles, frogs, rabbits, chickens, white rats, or hamsters.
4. How do we take care of our animals at home - sheep, goats, horses, cats or dogs?
5. Keep a weather chart - rain, snow, sunshine, wind, cold, warm and hot.
7. Observe changes in plants during cold weather, and in the spring.
8. Make a seed bed and watch the seeds grow.
9. Plant bulbs in rocks or soil.
10. Plant tops of carrots, beets or turnips and watch them grow. (The leaves will grow when the tops are put in a shallow dish of water.)
11. Plant a sweet potato in a jar or water.
12. Watch for plants starting to grow in the spring. Learn the names of them.

INA M. ANGE
Bureau of Indian Affairs
Crown Point Subagency
Crown Point, New Mexico
The Use of the Library in Supplemental Reading

In the fall of 1960-1961, the Librarian and the Teacher discussed the advantages and disadvantages of using the related books suggested by The Scott Foresman Company, in connection with their basic reader, "The New Times and Places", for the fourth grade. Many of the disadvantages, we as teacher and librarian could eliminate; therefore, the plan for the use of related library books was developed.

Weekly selection of books was class policy. Prior to this selection, each child selected from the Scott Foresman Company list, a book title which he thought would interest him. Individually the child received the author's name for the chosen selection.

Upon appearance in the library, the pupil asked for the particular book chosen, also giving the author's name. He then scanned the book for size, print, ability to read, etc. If the book did not appeal to the pupil or did not meet his approval on qualifications, he then made another selection from the list and proceeded as before.

The original aim was to correlate the classroom text with library books. Other good points have also developed.

The pupil:

1. Is more aware of the author
2. Is more selective
3. Chooses more wisely
4. Chooses more individually
5. Chooses what he is capable of reading
6. Notes the illustrations more appreciatively
7. Has become more reading and book conscious
8. Feels the tie of the related materials
9. Is discussing different books with classmates
10. And has developed more respect for books.

Due to the above reasons, we feel this program has been highly successful. In addition to this program, we also provide times when the class member selects any book of his choice from the library.

Mrs. Joan Angle
Whiteriver Elementary School
P. O. Box 108
Whiteriver, Arizona
A Teaching Technique for Non-English Speaking Children

Much of the teaching of English to non-English speaking children must, necessarily, be done by pictures; therefore, it is important that very early in the school year the children learn to make an association of an object and a picture of an object.

Because most children like fruit and are familiar with some fruit, I use a unit on fruit within the first two or three weeks of school.

The first fruit brought to show the children could be apples. Showing an apple, I say, "This is an apple." Then showing a picture of an apple I say, "This is a picture of an apple." Picking up the apple again, I ask, "What is this?"

Children answer, "Apple."

"Yes, this is an apple." Again showing pictures of an apple, I ask "What is this?"

Children answer, "Apple."

"Yes, this is a picture of an apple." Now put several apples in a basket and ask, "What do you see?"

Children answer, "Apples."

"Yes, apples. The apples are in a basket." Showing picture of apples in a basket, say "This is a picture of apples in a basket." Put apples on desk and ask, "Where are the apples now?" Children will answer "Desk." "Yes, the apples are on the desk. Bobby, will you come and put the apples in the basket? Now, boys and girls, where are the apples?"

Children say, "Basket."

"Yes, the apples are in the basket. Now, Jane, will you come and find a picture of apples in a basket? Yes, Jane that is right. That is a picture of apples in a basket."

Such questions as what color are the apples, and what do we do with the apples are asked through the unit?

The following day go through this procedure again, and as the culminating activity cut apples. In doing this such words as knife, cut, smell, and eat have been used. Let each child smell and eat part of an apple. Then ask, "What is this? What color is the apple? What do we do with apples?" Then let each child make an apple to put in a basket on the bulletin board.
The following days use the same procedure introducing oranges, bananas, and other seasonable fruits. By the time the third fruit is introduced, many pictures of various fruits should be on the bulletin board. Tell the children "All of these pictures are of fruit." Pointing to one picture ask, "What kind of fruit is this?"

Children answer, "Apple."
"Yes, this is an apple. What is this?"
"Banana."
"Yes, this is a banana, but all of these are fruit. What is all of it?"
"Fruit."

"Yes, all of it is fruit."

The bulletin board is completed when the last fruit is presented and should be used daily for several days as review.

This unit is followed by one on vegetables using some techniques.

By the time these demonstrations are completed the children should be able to comprehend more easily placing things in proper categories: such as clothing, toys, animals and pets. The children should have learned many new words; and they should be able to distinguish between a real object and a picture of that object, which will make it unnecessary to always depend on using real objects.

Each child has had experience in talking and in answering questions, because there are certain words he must say before he gets to taste that piece of fruit or vegetable.

Mary Ashby
Window Rock Elementary School
Fort Defiance, Arizona
Beginners—First Grade Class, Cibecue Day School

As the one person at our school most directly involved with the Beginners, this writer felt that the amount of information accumulated on the newly entering children might profitably be expanded to provide the teacher with a "running start" as it were in teaching these children next fall and to provide, in the process of gathering the more detailed information, a better pre-school orientation program for the prospective entrants.

Consequently, in the fall of 1960 work began on a roster of children born in 1955 who will normally be starting school in the fall of 1961. The desirability for an early start has been emphatically noted during the current school year. It soon appeared that the local Public Health Field Nurse was the most valid source of information as far as being able to tell just who would be old enough to start school the following fall. Thus, with her cooperation, a list of these children was drawn up.

Next to be determined was what minimum biographical information might reasonably be gathered on each child. The following items were accepted:

- Picture of the child (date picture was taken)
- Name of the child
- Names of the parents
- Birthdate
- Birthplace
- Degree of Indian blood
- Tribe
- School the child will probably attend in 1961-62 (This was especially important in planning for the following year's enrollment inasmuch as our community also includes a mission school which usually enrolls about a third of the prospective beginners.)
- Location of home (include home conditions)
- Father's occupation
- Speaks English?
- Brothers and sisters (include sex, birthdate, and birthplace)
Immunizations (include shots and dates received for smallpox, DPT, polio and typhoid)

Enrollment information (A place at the bottom of the page to be filled in when the child actually does enroll in school. It is hoped that in this manner we might not overlook children who do not start school right away. This writer can think of nothing more pathetic than a Beginner coming in several weeks late to start his school career.)

Any other information that is applicable e.g. disrupted home situation due to death, divorce, etc.; any outstanding illnesses the child has had; any known physical defects; why the child is starting school later than usual if this be the case.

Inasmuch as there are two schools in the community, the help of the local mission school was secured with their personnel gathering much data from the parents of the children likely to attend their school.

Then in January we held a two hour Beginners' Day Program at which time the prospective Beginners were invited to attend, with their parents, our school to have their pictures taken, to see a few movie cartoons (in some instances these proved to be more enjoyed by the parents than the children), and to eat dinner with the present Beginners - First Grade Class in the school cafeteria. It included also a brief visit to the classroom and play at recess on the playground. The response to this invitation was not disappointing; twelve children who will be starting school in the fall were present, with parents, while there were also ten younger children present ranging in age from those who will be starting school in 1962 to some starting in 1965.

It is definitely believed that such opportunities to get a look at school life in their last year of pre-school childhood is most beneficial to the children involved, helpful to their teacher, and perhaps not without value in the public relations field.

Benjamin Bennett, Jr.
Cibecue Day School
Cibecue, Arizona
Expression Chart: The chart is made of two pieces --both circular-- approximately 20" x 20", made of bristol board, then put together with a fastener.

Part I is the top part, and is a girl with her face cut out; the second part has six girls' faces showing different expressions - being happy, sad, mad, surprised, crying, laughing, and a normal facial expression. Each of these faces can be turned to fill the cut-out face on chart I.

This chart is good when teaching different expressions. Children enjoy the chart in group work or individually.

Charts For Teaching Oral English: The charts pictured are from a set of one hundred charts, teacher made. They are made on oak tag, 22" x 30", with a picture depicting some action for the purpose of teaching or strengthening sentence patterns used in classrooms, dormitories, or general conversation.

The charts are used to follow up the action after the children have participated in group activities.

Sentences used are suggested in the B.I.A. Minimum Essential Goals, Beginners Level. Some sentences are not in the manual.

These charts develop the usage of "I can, We can, they can, he is, she is, we are, they are, I will, we will, the boys are, the girls are, etc."

Nursery Rhyme Charts: The nursery rhyme charts are made in color on bristol board, 22" x 30", and are used for the purpose of teaching oral English, rhymes, and rhyming words.

Each chart is shown to the children when that particular rhyme is introduced. The teacher and children discuss the chart (this provides an opportunity for pre-first children to use oral English), then the rhyme is repeated several times by the teacher. An explanation of the rhyme and dramatization are provided previous to having children repeat the rhyme.

These charts are displayed in the classroom.

Health Chart: This picture of a health chart is one of a set, consisting of twelve. Each chart is used to strengthen a health concept, and to strengthen the concept of rhyming words. The charts are made of bristol board 22" x 30".
Picture Object Card Set: The above picture is a set of picture object card set, consisting of three hundred teacher made cards, 9" x 12", used to teach Navajo Pre-first children.

These cards depict concrete objects in the classroom as well as objects not available for teaching oral English.

Other than teaching oral English to children, these cards are used:
1. To teach big and little
2. To teach things that belong -- classification of objects
3. To teach things that fly, walk, roll, etc.
4. To teach beginning consonants
5. To teach rhyming words
6. To teach sounds of animals
7. To teach likenesses - differences, plus other usages.

Likenesses - Differences: This picture is a sample of charts used to teach likenesses and differences; to strengthen the concepts after the introduction has been made with concrete objects, and previous to using dittoed seatwork.

These cards are made on bristol board 30" x 9". The set consists of thirty charts.

Note: As it was impossible to reproduce the pictures of the charts, more information may be obtained by contacting the author.

Clara Frances Bryant
Toadlena Boarding School
Toadlena, New Mexico

Class Attitude

Our experience with Indian children leads us to believe that one of the first problems in coping with Indian children is that of attitude toward them. We, as teachers, must see them in terms of their own environment, often with conflicting sets of values. The children must also learn patience and understanding. (Can a child be labeled thief whose culture demands only that he not be caught?) In some cases there is the problem of substituting our cultural concepts for theirs.

Fortunately for some Indian children they come from much the same type of Christian environment that the other children do. These children adjust readily and well to the school program. Seldom do children who adjust quickly need to
repeat a grade.

We think our greatest initial contribution in teaching the Indian child is that of developing a friendly, helpful attitude on the part of the entire group toward the Indian boy or girl.

A case in point:

A six year old Indian boy who had spent most of his life in and out of hospitals to correct a hair lip came to us with no home background, either social or academic. It was our responsibility to provide the child with a first grade program. We simply discussed the reason for his status with the class saying: "He is six years old, but not in doing. -- He is only three in doing". We discussed the need to get him through "nursery school" the first semester and into kindergarten and out by the end of the second semester.

Normally such a child would be left at home for another year, but in this case, Mr. Smith, our Indian director, said it would be highly inadvisable for the child to remain longer at home.

Our limited experience with these youngsters indicates that about half of the Indian children need to repeat the first grade. Further we find that there is a greater need for manipulative devices for the Indian child as well as for the slow child in the normal group.

Our conclusion thus far is that the whole class can be of great service to those children who need special help and understanding. Further, that a firm hand is needed in guiding them into the normal behavior patterns of the class, especially at the beginning of the school year.

Zora Chapman
Gwendolyn Klein
Emerson School
940 West 4th Street
Mesa, Arizona

Teaching Aids

In working with the Special Navajo Program at Phoenix Indian School, I developed two aids that might be of help to teachers who have over-age groups or children who live in peripheral dorms. One is a series of charts on letter writing, especially geared to the writing of home-letters. The other is a unit on Relocation, including job-application, finding rooms, making friends in the city, budgeting, meal-planning and preparation (on a minimum budget), and other questions that face the young people who plan to work in the city. It could be used in the Relocation Program, whether with
students or with young people in the Adult Education Program.

The charts on letter writing include letter and envelope forms, suggested subject matter and questions to lead students to compose newsy home-letters.

Self-compiled dictionaries for primary children are not a new idea, but perhaps some of the uses to which they might be put would be. I would be glad to give the ideas I have found successful to any interested primary teacher.

A series of charts showing the parts of speech have been helpful with eighth grade grammar classes. This idea is not original with me, but I have found it good and would be glad to pass it on.

In teaching reading to first and second graders, a "point of recall" is of such importance that all of us who work with these grades are constantly trying out new ways and once in a while, something clicks. For review, I have found that sentence strips, (the sentence being the one in which a new word was introduced) with the new word underlined in red, are a great help in establishing a sight vocabulary.

Number concepts introduction which can later be placed in the hands of the children in the Number Center, uses to which pictures from magazines may be put in developing an oral vocabulary, grouping, initial sound recognition, and other skills are some other ideas I am willing to share.

Mary H. Caress
Bureau of Indian Affairs
Hopi Day School
Oraibi, Arizona

Teaching Methods

As a teacher in the Whiteriver Elementary Public School, where classes are composed mostly of White Mountain Apache children, it is desirable to have an understanding of the problems with which you will be faced. Because of a research project that we did in 1959, I am more aware of the lack of basic fundamentals of English which the students have. One must introduce English at their level and proceed at an appropriate rate if he is to get student participation.

I correlate all other subjects with English, whenever possible, to give the class every opportunity to make use of English in one form or another. As the student learns to understand you and what you expect from him, you will notice enthusiasm and lively faces begin to shine. Most Indian children are very quite and shy until they get to know you quite well. Then you begin to wonder about the origin of the
term "stoic" as applied to Apaches.

The reason I point out the importance of having some knowledge of Apache children is because I feel this will determine your success and achievement. To understand their problems and why they act the way they do is important. They have language difficulties which are brought about because of the home environment, and other reasons, but they do have solutions. The next thing necessary is to try to stress the strong points and not so much the weakness.

To stress physical education and to say that this is the most important because it makes students sociable and leaders is not in my opinion the best program. I don’t feel that any area should be ignored. Having considered the problems, I feel I have done well in all areas because of the approach in instruction and not because of my efforts to stress one area or my pet subjects.

I use audio-visual aids and every possible means to get the point across. In health we use a chart and the names of all the students are printed on it. The requirements to qualify for a star are the following: They must have combed hair, clean nails, clean clothes, polished shoes and they must have good grades. Each week I select five boys and five girls. From those the class votes for the best groomed boy and girl. At the end of the month the winner receives a gift which must not cost less than fifty cents and not more than one dollar. The gift is paid for out of class dues and other fund-raising projects which we undertake. The gifts are things which are useful in cleanliness. The class and I have decided on things of this nature: face lotions, combs, nail clippers, hair oil, shoe shine kits and many other useful items.

Science is perhaps one of the most enjoyable subjects, especially when we are doing experiments. We are very fortunate to have a PORTABLE SCIENCE LABORATORY. Last fall we started with Unit IX which dealt with foods. The unit is first assigned to be read at home. In class we read the chapter again and discuss it. At this time a group of students are assigned a particular experiment for which they are responsible. At times they are required to write their own questions or sometimes they are to look up difficult terms with which they are not familiar. The encyclopedia is referred to when necessary.

The most exciting phase of science which last year’s class enjoyed was working with the Visible Man. It was really an introduction to anatomy. Here they learned about the human body and the many functions of the organs. We first learned much of the terminology and later the names of all the bones, then drew pictures and named all the parts. We took each part of the system as a unit. We first discussed the Circulatory system; next the Excretory system, etc., and finally we finished the unit with the Digestive system.
The final test was for the class to place all the organs on a chart which was laid on a large table and then to assemble all the organs in their proper position in the body.

Frank Carrillo
Whiteriver Elementary School
P. O. Box 188
Whiteriver, Arizona

A Learning Game

This is an illustration of how to memorize a poem. I have found this game gives sufficient guidance to teach my pupils to memorize a poem, not being conscious that they have to think. No particular attempt is being made to develop this skill.

Say to the children, "Here is a poem that we'll all like. Let us read it and enjoy it together. This little poem gives us words that (sound alike) rhyme, or have the same sound."

Write the poem on the blackboard. Each child reads this poem, then finds the words that sound alike.

The house is brown;
It is in the (town).

He put some coal
In a deep (hole).

My name is Sue
My eyes are (blue).

I am a boy
I have a (toy).

All the children close their eyes, while the teacher erases one word from each line. Then all children read the poem with the words gone. They close their eyes again and more words are erased. They read again. Erase words until all the poem is erased. The children are surprised and happy that they learned the poem.

Bertha Darter
Window Rock Elementary School
Fort Defiance, Arizona
Creating Interest in Reading

Believing that sound instruction in reading can make a strong contribution to a child's emotional, social, and intellectual development and also believing that serious reading deficiencies will lead to a child being retarded, I have tried to find some method that would stimulate a child's desire to read. I have used two plans that I think are accomplishing improvement and interest in reading.

On the day we go to the library for our books we have a free reading period. The children are permitted to read their library books. At first many children read very little but now every child in the room spends the time reading. I take personal interest in the book selected and share their interest in the book. If they read something interesting they are permitted to talk about it which often leads to a group discussion. The children take pride in being able to contribute some facts or an interesting story to their class. This has encouraged the children to make better selections of books on his grade level.

We try to get the main idea of what is read and in our discussion to draw a conclusion about the selection read.

We continue this free reading idea on Friday by allowing each child to select and read a page that he especially enjoyed reading in a lesson in our basic text. The child then tells why he liked that page or something else interesting about the story.

This has been especially helpful in getting the Indian children to take part in a discussion and develop a feeling of belonging and being able to contribute to the work of the group. Nearly every child in the room now is willing to at least answer questions which wasn't true at the beginning of our free reading period.

We use our Phonics program as another means of getting the Indian child to express himself.

Evelyn Gregston
Whiteriver Elementary School
P. O. Box 188
Whiteriver, Arizona

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Attitude And Atmosphere In Reading

First of all, you will need to set the emotional stage for successful learning. Your classroom will need to have a friendly, cheerful, inviting atmosphere conducive to living and learning. The teacher should create an atmosphere in the classroom which radiates warmth and friendliness and in which human personality flourishes.

Train the children to have good work habits.
1. Listen to directions and begin work promptly.
2. Do first things first.
3. Stick to the job until it is finished.
5. Be considerate of others.

Successful reading at any level depends upon readiness for the type of reading to be done.
1. Children should read and write title and subheads to get an over-view of what is coming.
2. The teacher will aid pupils to use the clues in the pictures to anticipate time, place, characters, mood and action.
3. If the reading is difficult, we do choral reading. This may help to develop personality by giving timid children a chance to function as a part of the group. When choral reading is done, let the child ask about words after every paragraph, that way you find words he doesn't understand.

Develop vocabulary:
1. Teach word recognition skills.
2. Develop vocabulary by concepts.
3. Teach word meaning.
4. Build new words by adding common suffixes: er, est, ful, ed, and ly.
5. Know sounds of vowels modified by r, er, or, ir, ur.
6. Omitting first or last letters to make new words.

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Have pupils do creative writing as much as you can for I find Indian children express themselves better when they write.

Sybel Harrison
Whiteriver Elementary School
P. O. Box 188
Whiteriver, Arizona

Learning To Speak English By Doing

"Learning To Speak English By Doing", has been my motto for teaching non-English speaking children.

Dramatization of simple actions is a must with these small children. By acting them out you arouse and keep the children's interest. With my help I have the children follow-through with what I have presented. Use short and simple sentences. Example: "walk" - I can walk.

The use of music has proven to be a very strong and effective teaching tool for teaching these youngsters if applied correctly. It should not be isolated but integrated to suit the classroom situation.

There is music for:

Social Studies
   Songs about various Holidays

Literature
   Nursery Rhymes (The repetition of the short phrases also help phonetically.)

Health and Safety
   Various singing circle games

Art
   "Silent Night" (Each child draws or paints his impression.)

Numbers
   Simple little songs such as, "Ten Little Indians."

Another feature which has proven to be very successful is the use of fingerplays, poems, and stories. I introduce one of each of these once a week. They should be dramatized to arouse the children's interest. The following week we review the previous week's work. I let the children make a choice of which they would like to review and call for volunteers to dramatize with my help.
By using these various fields you establish rhythm, coordination, and background which is essential to learning a second language.

The foregoing is just a small part of the unlimited ways I have found very advantageous in teaching non-English speaking children the spoken English word.

Lucille T. Hawley  
Whiteriver Elementary School  
P. O. Box 188  
Whiteriver, Arizona

A Science Play Builds Vocabulary

The most important overall goal in Bureau Schools is teaching English to the Indian pupil. Our job, as teachers, is to make these children bi-lingual. To develop a science vocabulary for our classroom work, I wrote a science play. One pupil, who acts as the teacher, asks other children different questions. Sometimes the questions require group or solo answers.

The use of choral speaking in science has helped to make information available to the entire class. Speaking in unison has also aided children who were previously too shy and timid to respond. The pupils are progressing in their ability to speak more English and are enjoying their success.

Loretta Hesterwerth  
Chinle Boarding School  
Chinle, Arizona

Successful Teaching Activity

Many Navajo students will tell you that arithmetic is their favorite subject, and this is partly due to the minimum amount of reading necessary in this field. However, their preference, as well as their performance, falls off sharply when it comes to solving arithmetical story problems.

One device which I use that increases the students’ interest and understanding in problem solving is the preparation of original story problem sheets. However, instead of the typical middle-class Anglo setting for such problems found in textbooks, I use a Navajo setting.
For example:

**Instead of:** Bill sold five turkeys last year. For each one he received $15.00 at the market. How much money did he receive for all his turkeys?

**Try this:** Mrs. Hosteen sold five rugs last year. For each one she received $15.00 at the trading post. How much money did she receive for all her rugs?

**Instead of:** Mrs. Jones makes pies to sell at the bakery. She makes the same number of pies each day. In 7 days she made 35 pies. How many did she make each day?

**Try this:** Sally Begay likes to make fry bread. She makes the same number of fry breads each day. In 7 days she made 35 fry breads. How many did she make each day?

As soon as the children realize the setting of these problems, their interest and their performance improve. Informal experimentation with my class of fourth graders showed that with two worksheets, identical except for the setting of the problem (that is; the clues to which process to use, the numbers, and the questions were the same in both cases), class achievement went up an average of 20% on the "Navajo sheet" and the children looked forward to their next exercise in problem solving.

Edward C. Hinckley
Chinle Boarding School
Chinle, Arizona

**Correlated Art In Language Art - Science - Social Studies**

Children seem to have, from the very beginning, an urge to know and an urge to do. Children learn about things by seeing, by feeling, by smelling, and by doing them. Art may be correlated with all subjects in primary work.

A. Some objectives for primary grades in the following subjects:
   1. To stimulate interest. (creative work)
   2. To introduce interesting subjects
   3. To learn the value of and to promote their conversation.
B. How to carry out your projects:
   1. Pre-planning. (Find material so that all children may participate.)
   2. Stimulation. (A trip - Cone of experience)
   3. Encouragement and praise while children are doing.

Science:
   First semester the class made four murals of animals, fowls, insects, and things
   that live in water, learning their characteristics. This included art and pictures from
   magazines.

   The second semester the class will study Social Studies, which will be taught by
   units. This will also include art and pictures from magazines.

Inez Holmes
Whiteriver Elementary School
P. O. Box 188
Whiteriver, Arizona

Sight Recognition Of Numbers And Color Names - Grade One

For emphasizing sight recognition of number and color names I find the following
procedure helpful in first grade. Begin by dictating instructions such as:

"Make two blue balls-
Make three red boats-
Make six green cars-
Make five orange airplanes -"

Later, similar instructions are written on the board and read together. Gradually
let the children read the instructions silently and independently and follow them.

Emphasize that the name always goes in the top right corner, and that a left to
right sequence be followed (after folding the paper in fourths or eighths).

Later in the year the instructions may be varied to read, "Make a big green house
and a little yellow house. Make a big brown horse." Or: "Make a white house and
black horse."
Animal families of one or two big animals of one color and several babies of another, are other variations. If the vocabulary is limited to names of objects in the reader series, this makes independent seat-work while the teacher is working with small groups for reading, etc.

Virginia M. Hurt
Window Rock Elementary School
Window Rock, Arizona

Educational Field Trip

For several months, the third grade class in Room 14 at Leupp Boarding School had been planning to visit Flagstaff, Arizona. This trip grew out of the social studies in the classroom.

During the first months of school, the class had difficulty in the reading and oral English of the social studies text, In City, Town, and Country. Units, charts, films, filmstrips, and books were studied to improve the children’s vocabularies, oral English, critical thinking and reading.

The following questions arose after looking at pictures of cities, towns, and countries:

1. How far away are the nearest cities and towns?
2. How large are the towns?
3. What business centers do they have?
4. What kinds of work do the people in cities do?
5. How do people in the city travel to their work?

To answer these questions, the class was divided into committees, and each committee was responsible for getting answers to questions. The class began letter writing in their language class and wrote a letter to the Flagstaff Chamber of Commerce for information about the city and a visit to the city.

In preparing the children for the trip, charts were made, films and filmstrips shown; vocabulary drills on new words, units and centers of interest studied.

The trip was planned to motivate learning and oral English and to promote the understanding that all communities, large or small, produce, exchange, and provide for resources. Flagstaff Chamber of Commerce was very helpful in organizing our trip.

In response to letters from the children, the Chamber of Commerce sent a schedule for a trip to Flagstaff. This was accompanied by many brochures which enabled the class to learn a great deal about places they would visit and things they would see.
The trip was planned to help in accomplishing our goals and answering our questions.

The school academic and guidance heads, together with the dining room staff, helped with necessary details, such as giving permission for the trip, arranging with Flagstaff Chamber of Commerce by telephone and letters for a certain date, time and starting point.

The trip improved the children’s oral English, their ability to observe, to listen, to read, and to think critically. They learned how to use sources of information such as people, letter writing, map reading, pictures and books. Events on the trip improved attitudes, helped to develop new understandings, and clarified points which were introduced in the classroom. Above all, it helped to develop interpretation of stories in the third grade social studies text, In City, Town, and Country.

Units Studied

I. Our Community

This unit contributed to the basic understanding that all people at all times and places provide new tools and techniques to meet new demands. In this unit we compared Old Leupp School and community with New Leupp, touring the community and buildings and drawing maps of each.

Film Shown

"Model Houses"
(Educational Film)
Service-Wide Film Library
Field Technical Staff
Bureau of Indian Affairs

Books Read

Living Together Today and Yesterday
by Prudence Cutright

This is a Town
by Polly Curren

Living Together Around the World
by Prudence Cutright

How We Travel

II. This unit developed understanding of how transportation brings communities together and the many changes that have taken place since the first settlers came to America. A center of interest showing how people traveled long ago and how we travel today, with concrete materials, such as toy stage-coaches, wagons, horseback riders, boats, cars, busses, trains, airplanes, ships, and motor boats helped the children realize the changes that have taken place in transportation.
Film Shown
"Development of Transportation"
Service Wide Film Library
Bureau of Indian Affairs

Books Read
The Freight Train
by George J. Zaffo

The Big Book of Real Boats and Ships
by George J. Zaffo

The Big Book of Real Trucks
by George J. Zaffo

Plants and Animals
III. This unit broadened the children's understandings of the kinds of plants and animals that are raised near our community. The kinds of trees and flowers found, something about the soil, weather, and their effects upon the animals and plants found in our community, were concepts developed.

Films Shown
"Putting Animals in Groups"
"Wonders of Plant Growth"
"How Trees Help Us"
"The Nature of Things"
Service-Wide Film Library
Field Technical Section
Bureau of Indian Affairs

Books Read
Birds and their Homes
by Addison Webb

Insects
by Herbert S. Zim

Plants and Animals
by Jane Werner Watson

Our Flagstaff Trip
The boys and girls in room 14 visited Flagstaff. This trip was very educational for the children; especially because they were learning a second language, English. Many of the things we learned and discussed in the classroom seemed very remote and distant to the class. Events and things on the trip made answers to their questions concrete and real instead of just a picture on a brochure.
We saw how lumber is made at the Southwest Lumber Mill. Toured the campus of Arizona State College and ate lunch in the college cafeteria with grown-up students. We realized the need to know and use good table manners.

At Arizona Daily Sun and the Northland Press, the children saw how newspapers, signs, booklets, cards, and papers are printed. They also watched groups of people working together.

They visited the grounds of Lowell Observatory where giant telescopes are used in studying the moon, stars, and planets like our earth which we study with a globe.

The Museum of Northern Arizona had special meaning to this group because here their arts and crafts are exhibited each year in the All Indian Junior Art Show. The strange giants of long ago like dinosaurs, are no longer characters that belong in pretend stories. Plants and animals were also seen that we had studied in class.

The children saw the city from the observatory hill near Lowell Observatory and could point out places previously toured in the downtown business area, such as the elementary and high schools, the residential areas where the pupils really saw city blocks, names and numbers on the streets and a mailman walking his mail route.

The following schedule was arranged by careful planning of both groups, our school and the Flagstaff Chamber of Commerce. Guides were available to conduct the class through each place visited.

<table>
<thead>
<tr>
<th>Time</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 to 11:00 A.M.</td>
<td>Southwest Lumber Mill</td>
</tr>
<tr>
<td>11:15 A.M.</td>
<td>Arizona State College</td>
</tr>
<tr>
<td>12:00 to 1:15 P.M.</td>
<td>Northland Press</td>
</tr>
<tr>
<td>1:30 to 2:30 P.M.</td>
<td>Lowell Observatory</td>
</tr>
<tr>
<td>3:00 to 4:00 P.M.</td>
<td>Museum of Northern Arizona</td>
</tr>
</tbody>
</table>

Follow Up

The experiences which followed our trip begin with the following questions:

1. What questions were answered on the trip?
2. What new questions would you like to ask?
3. Did you enjoy the trip? Why, or why not?
4. How well did we behave on the trip?

Discussions by the class helped each of us share what we learned. We will also share our experiences with other classrooms by exhibits, diagrams, maps, and making land forms with saw dust given to the children by the lumber mill. This sharing of our experience will be our next assembly program.

The class became interested in the stars and constellations after discussing and
seeing an observatory. Now, we are studying a unit on stars. This unit was developed to answer questions such as:

1. What is a star?
2. How do stars get their light?
3. What are the groups of stars in the sky called?

This unit on stars should contribute to their basic understanding that stars give off their own light and answer many other questions about stars.

Robbie S. Jordan
Leupp Boarding School
Leupp, Arizona

A Successful Teaching Activity

Children are interested in gathering information about their native State. The Navajo Child is no exception. Arizona, the Grand Canyon State, offers many splendid opportunities for discussion. Chinle was located to develop interest in where we actually live. To further develop the concept of size, we had to draw the State of Arizona and pinpoint our own site. This activity extended to gathering definite facts about our State. We learned about the population, the State flower, its Capitol and climate, the products, the date of statehood and what States are our neighbors.

These discussions involved the need for acquiring an extensive vocabulary. The possibilities for developing oral English were numerous. The children gained in their knowledge of Arizona and were able to talk knowingly on the subject.

Lulu D. Linkhart
Chinle Boarding School
Chinle, Arizona

Phonics

The reading program includes the development of auditory-visual perception; the application of phonetic analysis; other means of identifying words; and the use of reading for meaning.

To develop the above reading program the following method was used:

1. The sounds of the vowel were taught first. This included only the long and the short sounds.
2. Next the sounds of the consonants were taught. By learning the sounds of the vowels first, the child is able to sound words at an early age.

3. Picture cards were used to get the child to listen for the vowel sounds, or the sound at the beginning or at the end of the vocabulary of the Indian child.

4. Experience charts were used to provide opportunity on the function of words, phrases and sentences in the reading process in order that reading is a meaningful pursuit.

Through the use of phonics, we want to develop independence in reading through increased knowledge and functional application of all word perception skills and to improve comprehension and interpretive skills.

Marjorie Martin
Whiteriver Elementary School
P. O. Box 188
Whiteriver, Arizona

The Sanitation Unit

The sanitation unit called "The Housefly" can be carried out in the intermediate grades. It was written for the third grade. It can be developed into a project which will be carried out during a school year or it can be shortened and studied during the fly season in the spring or early fall.

This unit can be correlated with all the pupils' studies.

The primary purpose of teaching the unit was to give the children meaningful experience in sanitation. It was a means of bringing the Whiteriver Public School and the community closer together. This project gave the third grade Apache children experiences which the teacher hoped would be taken back into the homes and practiced. It showed ways to prevent flies and means of getting rid of flies. Lessons in safety, care, and use of insecticides were taught.

Many of the visual aids were employed in carrying out this study. The community resources were resorted to, as the community health worker gave several demonstrated talks. A high school science teacher gave a talk and demonstration on the microscope about the germs and diseases the fly spreads. Field trips were another local means which proved helpful and interesting to the pupils.

Two methods were used to get across their learnings. First, by a play called
"The Dangers of the Fly", which was given before a large group at a Parent Teachers meeting. A repeat performance was asked for at the dedication of the new hospital in Whiteriver. Second, a program given at the culmination of the unit. At this program the pupils demonstrated their learnings to others. They proved they enjoyed talking on a subject in which they were interested and informed. Their talks were recorded.

The art, which the children made while carrying out the Housefly unit, was demonstrated at Arizona State College in a Northern Arizona Teachers' Association meeting and Whiteriver Public School.

Evaluations

How much the pupils learned from this experience cannot be accurately measured but outward evidence indicates that some of the information learned in the classroom was applied.

When the flies began to return in the late spring, the pupils used their fly swatters. They killed all the flies in the room and then counted them.

The pupils made surveys of their dwellings in the fall and spring. The spring report showed that a larger percent had screened houses. Some reported plans to construct tight privies. Waste disposal projects were under way in many homes.

When pupils made posters called the "BEFORE" of their homes, they showed unscreened doors and windows, garbage in the yards, and open privies with swarms of flies everywhere. The "AFTER" pictures on their posters showed houses screened, trashless yards, tight garbage cans, tight privies, and no flies. These pictures indicated that the pupils had acquired worthwhile learnings about sanitary conditions pertaining to the fly.

Another indication that the pupils had grasped the significance of the study was that they wrote stories of "Things I Learned About the Fly." During the culmination, which was a planned program, the pupils made talks from these stories. These talks were recorded by the teacher on a tape recorder. The students had acquired many valuable learnings about the dangers of the fly. They were fly conscious. When flies lit on the plates of cookies and juice, they covered this food immediately. This indicated that they knew the dangers of the housefly and how to avoid their worst enemy.

It is believed that these children will attempt to get their parents to practice sanitary methods. If they do not succeed fully now, it is felt that they will apply these learnings when they reach maturity. They will live better and more wholesome lives than their predecessors.

Grace McDonell
Whiteriver Public School
P. O. Box 188
Whiteriver, Arizona
Enrichment Work For Indian And All Students

This work is designed to help the student do independent constructive seatwork or as home work. (After he has completed his assigned work.) All materials are arranged in difficulty from third through fifth grade ability and are on 5 x 7 index cards in file.

Items:
1. Arithmetic - Pages taken from discarded Silver-Burdett 3rd and 4th grade books (can be any publisher handy) and answers on a separate card. Child works problems and checks own work. Keeps record of attainment.

2. Social Studies - This includes many and varied subjects, also answer sheets.

3. Paragraph Study - Pages taken from discarded 2nd and 3rd grade readers. All questions about paragraphs answered with sentence or phrase.

4. Encyclopedia or Research Cards - Questions on various subjects on class level.

All work is done neatly and on penmanship paper. Booklet made of papers at end of the year.

Bessie M. Quade
Whiteriver Elementary School
P. O. Box 188
Whiteriver, Arizona

Painting With Sand In School

This art, taken from the Navajo Indian culture, will enable you to duplicate the skills used by Navajos in their ceremonies.

If you were a Navajo Medicine Man you would have to get different colored sandstones from all over the reservation and grind them to a fine texture. While the sandstones themselves are not sacred, they become so when ground by a Medicine Man and incorporated into a sand painting. For religious reasons the Medicine Man destroys his sand painting before sun-down, so that they will not be defiled by men.
Because we are not Medicine Men, and we do not follow their methods completely, our paintings have no significance and therefore they offend no one. The Navajos look upon them as normal art activity, and are eager to offer suggestions, and to demonstrate their ability before the children. I think they are appreciative of the fact that we are trying to pass on to their children this valuable part of their culture.

Sand painting may take the form of traditional Indian or up-to-date modern art. Generally the children will paint what is seasonal, like a full feathered turkey in November.

Over a two year period, I have used sand painting with children from six to twelve years old, and have found that they enjoy it and soon show considerable skill.

The big difference between what we do in our paintings and what the Medicine Man does is to use tempera paints instead of grinding sand stone. This is not only much easier, but gives us much more variety in our colors.

Sand painting is an inexpensive art form, as one cupful of each color will last for months. The only materials needed are:
1. Various colors of powdered tempera paint.
2. Sand, the finer the better.
3. Large cardboard box.
4. Container for mixing tempera and sand, number 10 cans are just right.
5. A small container for each color, paper cups will do.

The first thing to do is to cut a large cardboard box about 2 inches from the bottom. If it will leak sand, then cover the bottom with paper. Crepe paper stapled to the two inch sides will help make the box more attractive. Put about an inch of sand in the bottom of the box and spread smooth.

You are ready to mix colors: Take a 1/2 teaspoon of tempera and mix it well with a 1/2 cup of sand in a large container. (If you desire a lighter or stronger color, you can vary the tempera.) It is important to get it mixed thoroughly. After mixing the tempera and sand together, pour it back into the cup. This cupful will last many months as very little is required to sand paint.

After you have mixed all of the colors that you desire, then you are ready to "paint". You will of course need practice, but you will be surprised how well you can do.

Hints from Navajos on sandpainting:
1. Take a small pinch of the color you desire and position it between the thumb and the first joint of the index finger.
2. Control the thickness of a line by the pressure your thumb exerts on the sand against the crease in your forefinger. A tighter hold on the sand makes a finer line.
3. Don't breathe. That's right, if you hold your breath, you can control the flow of sand better.

4. Rub off with a tissue any remaining color from your fingers before dipping into another color.

5. Don't fret too much about mistakes. You can erase errors simply by going over them with the proper color.

6. Don't let any sand become damp; if you should spill some, clean it up with a dry brush.

7. Don't spend a lot of time getting new sand. All you have to do when you want to get rid of the old painting is to scramble the colors into the sand, and they will disappear. Just smooth it over and you are ready for another painting.

For those who wish to preserve their sand paintings and perhaps mount them like a picture you can hang, do the following:

1. Cut out of stiff cardboard a backing the size you want the picture, plus room for matting and mounting.

2. Paint the surface with varnish.

3. Spread an even coat of sand over the surface. Let it dry, then tap off excess sand. It should look like sandpaper when you have done this.

4. Prepare to sand paint. Apply varnish just where you want to put a particular color of sand. Then after it dries, tap off excess. If the colors overlap the bottom color must be thoroughly dry, and the excess tapped off before adding another color.

5. Erase mistakes by re-covering the area with a suitable color.

The opportunities for teaching an English vocabulary for this activity were wide and varied. The experiences involved learning the names of colors, mixing colors, preparing to paint, doing the actual painting and finishing the picture for permanence.

I developed these techniques while teaching at Low Mountain Boarding School with the help and encouragement of Mr. Abraham Tucker, Principal.

Eugene C. Meadows
Blue Gap Day School
Chinle, Arizona

Unit On Baby Animals

A unit on "Baby Animals" which I often used in the spring of the year is one which appeals to all children. The Navajo children are especially close to the animals they care for at home. So I begin with those animals (baby lambs and goats) that the children are more familiar with and let the class talk about their own pets.
Many pictures are used. We then make short stories about each baby animal, and these stories are put on charts with pictures and the stories are then reproduced so each child may have his own story-book.

Then I introduce other baby animals showing pictures of the babies, their homes, etc. Some children make riddles for the rest of the class to guess. This involves oral conversation as well as reading, writing, and spelling. The children draw pictures of the animals and animal homes. Then the children take turns telling about their pictures.

This unit on "Baby Animals" combines language arts, science, social studies, numbers and art work (drawing and modeling of the animals and construction of their homes).

Tressa Moore
Nenahnezad School
Fruitland, New Mexico

Language Through Geography

During the early part of January, 1961, it was discovered that the six year old beginners in my classroom were interested in locating their homes relative to the directions from the boarding school which they attended. Using light colored wrapping paper upon which to place the homes of the children, we set to work.

The children have had previous instructions about general directions. That is, they understood north, south, east, and west and most children knew in which direction they lived from the school.

By placing the paper on the north wall and holding it out from the bottom the children understood that the top of the paper was north, the bottom was south, the right was east, and the left was west.

With the children's help, known landmarks with which the children were acquainted were placed on the map.

- Highway 66 which passes by the school
- A sketch of the school plant
- Blue Water Lake
- Haystack Mountain

In order to control the size of the homes, the children were given brown construction paper two inches square from which to cut pictures of their houses or hogans. They placed them on the map in the proper places. The children, though young, were
surprisingly accurate in placement of their homes. Several became so enthusiastic that they placed trees around the hogans and added homes of relatives, usually grandparents.

Vehicles of all kinds were cut out and put along the highway. The children talked about the cars, trucks, vans, etc., which they made. One little boy was disappointed when the teacher failed to notice a racing car he had placed on the road.

The children enjoyed this project and the teacher used it in the following ways:
1. To enrich the content of oral English through first hand experiences.
2. To develop speech skills such as:
   - Proper enunciation
   - Correct pronunciation
   - The use of sentences
   - A pleasing voice
3. To foster group relationships.
4. To give meaningful opportunities to count by ones.
5. To stimulate interest in counting objects and writing the numbers.
6. To help children understand that it is possible to show pictured directions to their homes or to other places.
7. To develop pride in the community and to help the children understand that:
   - Their community is a little part of New Mexico. The children sang, Oh Fair New Mexico as they referred to New Mexico on a wall size map of North America which has only the United States and state outlines.
   - Their community is a little part of the United States. They often sang the first stanza of America, as they again referred to the map.

Flola M. Rector, Principal-Teacher
Baca Community School
Prewitt, New Mexico

Creating Interest In New Words - Grade One

To spark interest in new words, I have used the Scott Foresman stand-up pictures of Dick, Jane, Sally, Spot and Tim attached to a colorful background with the word written below in easily read letters. Displayed in a prominent place in the room, the children learn the words by association. Action silhouettes mounted in the same way with the word beneath, is also very effective.
This idea can be continued with words written on airplanes, snowballs, etc. fitting the season.

Eveline Robson  
Window Rock Elementary School  
Fort Defiance, Arizona

Intra - Inter - Mural Playground Program

In the spring of 1960 it was decided by the school administration to set up an Intra-Mural Playground Program for the Whiteriver Elementary School.

The author undertook to draw up a plan which would involve various playground activities such as boys basketball, soccer ball, flag football, individual games and low organization games. For the girls, activities were outlined such as volley ball, softball, and low organization games such as jump rope, tag, and others too numerous to mention.

Keeping in mind the Indian children in our school, the program was designed to provide:

First - Adequate instruction in the activities which would carry-over into adult life.
Second - For the normal growth and development of all the pupils in our school.
Third - A good health concept as a major necessity in being able to participate in Physical Education activities.

In the course of three months under direct supervision by the teachers of the pupils involved, we find the results satisfactory and still progressing. We believe that we have promoted a life time desire through this program for pupils to participate in physical education activities that otherwise may not have come about.

This program has made it possible for some children to join the group by learning the rules of games and then under supervision taking officiating. It has also brought about good human relations among the various reservation schools as we compete against them. The children have been observed in the community utilizing the skills and activities learned here at school in their yards at home.

School attendance, sportsmanship, co-operation, and the old time school spirit has been improved as a direct result of the activity program at our school. In any school, especially in Indian schools, a program of this type is essential for a complete,
Some Methods and Techniques for Teaching Oral English to Indian Children

Through close observation, the teachers at Sanostee Boarding School combined their methods and techniques for teaching oral English to the Indian children.

We decided that in order to establish a good oral speaking vocabulary, situations where speaking English is necessary should be provided, and much oral repetition in meaningful situations is necessary with appropriate correction.

The purpose of teaching a foreign language is to develop the pupil’s ability to use the language. The following specific objectives need to be given attention:

1. To develop the ability to comprehend the spoken language.
2. To develop readiness to express thoughts and ideas.
3. To develop by imitation the ability to use the organs involved in the production of speech correctly.
4. To develop the ability to read orally and silently in an easy natural manner.

In order to master oral English the children should be able to understand, to speak, to read and to write it. The teacher can accomplish this to a greater or lesser degree, depending upon where he places the emphasis.

It is imperative that much of the materials which the teacher uses be familiar to the child in his everyday life, such as his family, his pets, and his toys, etc. The teacher should also keep in mind that it is within this area of experience the child will respond most readily.

Another important factor in developing oral English is a wholesome relaxed atmosphere, where the child feels happy and secure and knows he is a part of the group.

Materials presented should make both a visual and auditory impression upon the child. This way he comes to identify sound concept without translating from a visual
word symbol.

Examples:

1. Hold up an object or a picture while repeating a complete sentence that identifies the item displayed. He can identify the picture of a cat by saying "This is a cat". Here all the words build contextual meaning in the mind. He thinks of an expression instead of a word.

2. Questions should be asked to avoid "yes and no" answers. Instead of asking "Do you have a red pencil?", you should ask, "What kind of pencil do you have?"

3. Songs and Rhymes
   These are excellent for creating a desirable opportunity for rapid memorization. At the lower or intermediate grade levels, the pupils should only hear such material. The teacher reads the songs or rhymes directly to the children and have them repeat after him, or he can use records or tapes on which the material has been recorded. Whenever the teacher is speaking or reading he should be in a position where every pupil in the classroom can see his face. The success of the pupil's attempts to imitate his speech depends a great deal upon this factor.

4. Games
   Games involve repetition and repetition is basic in foreign language learning. In order to achieve the maximum benefit from a game, it is necessary that all pupils in the group participate actively, or at least be involved mentally in what is taking place.

5. Dramatic Play
   Children enjoy playing roles. Through the interaction of communication with one another the children's expressions become purposeful and natural to them.

6. Tape Recorder
   The tape recorder can be used for evaluation purposes. If pupils hear themselves speak or sing, they are often motivated to work diligently to correct or improve their speech patterns and deficiencies.

7. Dramatization
   Dramatizations provide an opportunity for pupils to express themselves freely, and they are often familiar with the action that is taking place and so find it easy to move into the conversation appropriate for the moment.
Introduction To Unit

The teacher needs to keep in mind that the children, for the most part, are entering our schools from an environment that has given them little or no opportunity for learning English. The teacher needs to capitalize on the known in order to move on gradually to that which is not known.

In Introducing English to non-English speaking children, the teacher should use care so that he has an orderly systematic development based on previous experiences.

When school opens in the fall, we start with the unit!

WE GO TO SCHOOL

I. Major Objectives:
   A. (1) To help children adjust to living in a new group.
      (2) To establish in the children desirable work, study, health, safety, and play habits.
      (3) To help them become satisfied and cooperative members of their new environment.
      (4) To develop an attitude of respect for the rights of others.

   In this unit we establish:
   1. Basic concepts
   2. Obtain information
   3. Develop skills
   4. Develop attitudes

   We work, study, play and experience many activities, new and interesting to the children. We read stories, learn poems, dramatize, sing songs, elect room helpers. Draw, paint, color and do many other things that stimulate the use of oral English.

II. Approaches:
   1. Display pictures on bulletinboard for motivation
   2. Display books
      (a) Doing things at school
      (b) Travel to and from school
   3. Visit school helpers
   4. Tour the school plant
   5. Read stories to children

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III. Activities for Children:
1. Listening to stories
2. Songs and games
   (a) A good morning song
   (b) A good-by song
   (c) Birthday song
   (d) Nursery rhymes
3. Practice in receiving and greeting visitors
4. Role playing
5. Dramatic play
6. Pantomine work and helpers
7. Drawing, coloring pictures.

IV. Correlations:
   A. Language Arts
      1. Oral English
         (a) Discussion with the teacher
         (b) group discussion
         (c) show and tell period
         (d) speaking distinctly
         (e) learning to be good listeners
         (f) taking turns talking, one at a time.
   B. Number Concepts
      1. Counting necessary objects, scissors, paper, books, chairs
      2. Using number vocabulary
         big-little, tall-short, large-small
      3. Room and grade number
      4. Children's height and weight
   C. Health
      1. Cleanliness
         (a) morning inspection
         (b) washes hands before lunch
         (c) uses toilet facilities
      2. Dining Room
         (a) eating a balanced meal
         (b) importance of milk
   D. Music
      1. Dramatic play
      2. Song, rhythms, games
   E. Audio-visual Aids
      1. Pictures
         (a) children going to school
         (b) children in school
         (c) children going to and from school
2. Records
   (a) Mary Had a Little Lamb
   (b) Ten Little Indians
   (c) Baa, Baa Black Sheep

V. Evaluation:
   1. Do the children know their way around the school plant?
   2. Do children get along together in a happy manner?
   3. Have the children developed desirable habits in the following fields:
      work, play, study, safety, and health?
   4. Are the children happy members of this social environment?
   5. Do the children have a healthy respect for authority?
   6. Have the children improved in work, play, and study habits?
   7. Are the individuals satisfied and happy with and by helping others?

Sanostee Boarding School
Little Water, New Mexico

Indian Curriculum Hints and Observations

I’ve found that an Indian won’t respond to assignment dead lines. He does or
doesn’t do an assignment, but seldom will he do the one missing to save a grade.

Last year in 9th grade, my Indians did very nice work but the above was true. They
would not even make an effort to complete assignments so I listed ten or more
assignments in art and as many in crafts as suggested projects. Each pupil in class,
Indian or otherwise, was given a copy of the suggested assignments and told that
until further notice they would select their own assignments. They were to be
graded both for quantity and quality. It worked wonders! While some of the Anglos,
who had an elevated opinion of themselves, "played around" on one or two or four or
five assignments, the Indians were quietly doing eight and ten. This worked so well
in a three or four week trial that I let it continue for practically the entire second
semester - just putting in a required project (about three or four in the semester).

Pauline E. Scranton
West Junior High School
545 N. Westwood
Mesa, Arizona

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Teaching Vowel Sounds Through Music

One of the problems encountered in teaching phonics to any group of children is that of teaching the difference between the long and short sounds of vowels.

An additional problem in teaching bi-lingual children involves teaching the correct pronunciation of vowel sounds.

Because vowel sounds are the only sounds which can be sung, it seems possible that a useful connection can be made between singing and speaking vowel sounds.

The first group of songs is designed for use at the first grade level. The words of each song stress one of the long vowel sounds. Another group of songs stressing short vowels will be added.

The second group of songs is designed for use at the second grade level. The music for these songs consists of two tunes—one for long vowels and one for short vowels. It is hoped that by using one tune for all long vowels and another for all short vowels, it will be possible to form a connection in the children's minds between the tune of the song and the sound of the vowel stressed in the words, thus making it easier for the child to distinguish and remember the differences in sound.

The last song is the first of a series to be used at the third grade level. These songs will be more general in nature, but are geared to help to further clarify the differences between vowel sounds.

This project is still in its beginning stages and more time and work will be necessary before its effectiveness can be determined. The first grade children with whom these songs have been used have received them with enthusiasm and apparent enjoyment.

Margaret A. Sharp
Tuba City Elementary School
Box 285
Tuba City, Arizona

Re-usable Charts And Workcards

A need for seatwork and charts which could have the subject matter changed often to suit the background of the children created this special teaching aid. These charts and work-booklets were first made to use with a group of non-English speaking Spanish children. There were also a few children who had been tested by a psychologist and
pronounced non-readers due to being uneducable. The books are of simple construction and these underachievers were able to learn from them. The content was controlled by the teacher on an individual basis. This instructional material could be used at any grade level for any subject to begin instruction on the child's level. The workbooks were made for seat work to test individual ability and allow each child to work at his own level at the same time. The workbooks are constructed from two thicknesses of oak tag 9" x 12". The inside sheet has double slits cut at intervals in the shape of an inverted V. The space and size of the cut should be comparable with the type of subject matter used. For example, in using the "Tag" book from the Phonetic Keys the pictures are cut out and slipped in the upper slot. The children can then insert the correct word under the picture.

Pre-primer contents may be round circles of colored construction paper with the matching color in the envelope. Numbers may be inserted having the pupil find the word. Pictures from a discarded basic reader may be cut up and matching sentences inserted. If they need help, they may open their text and compare their sentence strip to remember their assignment.

Content may be placed in the booklets during the teacher's planning period and stored. When the child has completed his assignment he may work on his booklet. The matching envelope contains the materials they are to manipulate.

The booklet and the envelope may have a 2" square of material of the same color glued to the booklet and envelope for simple filing. The charts for group work are just an enlargement of the workbooks.

Ruth Shaw
Whiteriver Elementary School
P. O. Box 188
Whiteriver, Arizona

A Successful Teaching Activity

To interest my Beginners in vocabulary drill, I made a game similar to Lotto using pictures of vocabulary words given in the B.I.A. Picture File for Beginners. Each large card, 12" x 18", had six pictures. In the leader's cards were matching pictures.

For example:
1. Food: orange, apple, carrots, squash, beans, and bananas.
2. Transportation: car, pickup truck, bus, airplane, wagon, boat.
3. Body: eye, ear, hand, arm, nose, and mouth.
4. School: school house, flag, sink, toilet, table, chair.
6. Tame animals: horse, dog, sheep, goat, chicken, cat.
7. Wild animals: rabbit, squirrel, bear, pig, turtle.
8. Family: father, mother, baby, big and little sister, brother.

I would hold up a small picture card. The child who had the duplicate was asked to give it's name and make an oral request for the card.

To vary and stimulate the English responses, I would ask the question: "Do you need a rabbit?", or "Do you need a ball?", and the child would answer, "Yes, I need a rabbit", or "Yes, I need a ball", or "Yes, please". If the child couldn't identify the card he needed, I would put it on the bottom of the stack. The first one to fill his card won the game.

It wasn't long before the children were playing the game independently. They were quick to correct each other on pronunciation and English usage.

This activity could be developed into a sight word game as soon as the child has an adequate sight vocabulary.

Mozelle Truman
Lukachukai Boarding School
Chinle, Arizona

Writing Instruction In Kayenta Public School

A member of the faculty, Mrs. Lilly Cross, who is a competent writing teacher, acts as advisor in this area. She vigorously promotes the teaching of writing by other teachers, who, in turn, encourage their students to attain a standard of excellence as great as possible before entering Mrs. Cross' sixth grade. In this grade the final polish is applied.

Several times during the year Mrs. Cross is excused from her classroom duties to visit classrooms of other teachers in order to demonstrate effective teaching methods and to offer encouragement to both teachers and pupils. Samples of the work of all students are occasionally examined critically by Mrs. Cross. Pupils' daily assignments are expected to evidence a satisfactory degree of care devoted to writing itself. True, the degree of emphasis varies with teachers; still, the emphasis is present.
Students whose writing has reached a degree of maturity where drill becomes of less importance are privileged to care for certain types of school correspondences, requests by teachers for free teaching materials, and replies to letters from students of other schools who request information concerning Navajo Indians. Many pupils exchange letters with foreign students.

Specimen writing papers are graded regularly by professional examiners, and writing grades are determined chiefly from achievement as indicated in this manner. Additional emphasis upon the practice of better writing is secured through participation in a national writing contest.

Students use ball point pens, much newsprint-type practice paper (lined), regular penmanship paper, slanting line paper which is used as a guide when placed under the writing paper itself, plastic "overseers" which enable each student to check his work for accuracy of form, and large roller-mounted charts which present correct letter forms.

Our goals in writing are consistent with those developed for the Arizona State Course of Study. Methods are somewhat dissonant with respect to specific methods and materials, but are in agreement generally.

Achievement in writing has brought pride to all who are involved: students, teachers, parents, and administration.

Don Wagner
Kayenta Elementary School
P. O. Box A-7
Kayenta, Arizona

Cattle Unit

What are the most important needs to the Apache people today? Good leaders, a sense of cooperation, unity among the whole tribe, and continuous development of natural resources, land lease procurement and industry. Industry tempered by educated leaders has changed the reservation from paternal government support to tribal owned enterprises. The reservation is now a thriving, vital community of upstanding self-willed people who will someday be recipients of per capita payments from their enterprises. This requires individual and cooperative management of finances.

This educational need of management is evident in the eight cattle associations
on the White Mountain Apache Reservation, of which none has an Apache as the association leader. Thus, between $40,000 - $50,000 yearly flows into someone else's pockets besides the Indian who should have it.

Our cattle unit on the eighth grade level was guided somewhat by that purpose. We wanted the Apache child to realize his potential, to get a glimpse of what his future could and might be. We tried to show the drain on the Apache economy because they will not accept their own as leaders.

We had the Reservation Extension Agent, Mr. Allen, come over and describe and point out all aspects of the great cattle industry here on the reservation. Cattle is the major industry of the reservation today.

We divided our classes into various committees. Included were the Survey committee, the History committee, the Range Management committee, and the By-Products committee. We exhausted all materials in our library and many materials donated to us by the B.I.A.

The History committee took up the cattle origin, when the cattle were introduced to the reservation, and early problems involved in cattle industry on the reservation.

The Range Management committee studied such relevant topics as re-seeding, controlling burning, and juniper eradication.

Our By-Products committee studied the other uses of cattle besides meat for our table. This included such things as tallow, fertilizers, tankage, and gelatin.

We all had access to current events materials to make sure we were up to date. We had newspapers, radio, television, and all the aids that the Bureau gave us.

To culminate our unit, we took a field trip to McNary and observed a cattle sale in action. Many of the children's own parents were having their cattle sold there. We obtained a sales sheet there and had it mimeographed so that we could distribute them among the students.

We integrated these sales sheets into our arithmetic program and everyone computed total weight, average weight and cost per pound.

This project was carried into the study of percentage in comparing the price read with the price at last years sale. In comparing the number of cattle sold with the total number, and the number sold with the number kept on the range, also in comparing the prices for the different kinds of cattle sold, the use of percentages were made.

We also used it to teach about transportation in a study about the cost of transporting the cattle sold to their destination, many of which went to California.
Things To Make In Arithmetic

Arithmetic must be made meaningful to the child, to do this we must make use of manipulative, visual and symbolic materials to give meaning to the number system. This is very important with Navajo children.

I will describe two things we have made in our classroom which have helped our number system.

1. Individual Flannel Boards. These are made as follows:
   Cardboard 18" x 12" covered with flannel cloth. Staple the cloth on the cardboard. Take another cardboard and paste the flannel cloth on, then cut in small squares to be used as objects in counting, addition and subtraction. These squares are placed in envelopes and clipped to the flannel board. It is ready for use. This helps the child get a clear picture of the thing he is trying to solve. The child may keep this flannel board in his desk to use when he needs it doing independent work.

2. Place Value-Charts
   The place value charts I use in counting, grouping and learning the hundred's place, the ten's place and the one's place. A place value chart may be made two ways:
   a. Take a board divided into half by marking a line for tens place and ones place. Nail ten nails under the one's place and ten nails under the one's place. Color 20 empty thread spools. Place them on the nails and you are ready for work.
   b. Place value pockets may be made of wood or of paper, preferably of cardboard to make them durable. Fold a piece of cardboard, which is approximately two feet in width and use adhesive tape of some kind to hold the folds in place. Then label the pockets. The chart may be fastened to a wire coat hanger so that the chart may be hung in a convenient place in front of the class. Markers about 1" x 3" cut out of Oaktag may be used to represent the number to be shown in place value pockets.
A Period For Literature

Dramatization and story telling have been a big help to me in teaching reading and oral English to the Navajo children. It insures children a wealth of experience with good literature - both listening and reading.

I have one period every day for this work. I begin by telling or reading a story to them. The children learn to tell the story in sequential order. They learn to tell the story in their own words. They learn to dramatize stories.

There are so many occasions during the day when dramatic play can help release tensions. Other opportunities for simple dramatic play may center around pupils relationships involved in good manners, health and other subjects as follows:

1. Walking in the hall
2. Taking turns
3. Playing fair on playground
4. Family style serving
5. How to introduce people
6. Playing store
7. Playing doctor and nurse
8. Helpers in the community provides subject of interest for dramatic play
9. There are things that come up every day in classroom for dramatic play

Some of the things accomplished from the story period and dramatic play are:
1. Encourages the pupils to speak English
2. Provides experience for them to have something to talk about
3. Children learn to work and play together
4. Children learn to listen
5. Gives the pupil a desire to read books for himself
6. An opportunity for the teacher to see where the pupils need help in enunciation and pronunciation
7. Appreciation for good literature
8. Respect for books
9. Read in a natural tone
10. Opportunities to build correct speech patterns

There are many ways that story telling and dramatization have helped my children. They begin to read easy books on their own for pleasure by the middle of the year in the second grade, and comprehend what they have read. When children read for pleasure on their own, they have made a big step in reading.

The period of story telling and dramatization have helped my children with their oral English and reading and to increase their attention span and ability to follow complex story situations. This type of work involves no elaborate planning and little or no costumes.

Effie Mae Wishman
San Juan Boarding School
Shiprock, New Mexico
APPENDAGE

While this pamphlet was intended to circulate unpublished materials, listed below are some publications by the Bureau of Indian Affairs that may be of interest. While some of these materials are out of print, many Bureau schools would have them available for perusal.

Clark, Ann, Money Series, (1-8), Chilocco Indian School, Chilocco, Oklahoma, June, 1953.

                                         , Signs, Intermountain Indian School, Brigham City, Utah, 1953.

                                         , Little Herder In Spring - In Summer, Phoenix Indian School, Phoenix, Arizona, January, 1950.

                                         , Little Herder In Autumn - In Winter, Phoenix Indian School, Phoenix, Arizona, August, 1950.

Ricks, Laure, Be A Safe Driver; Strauss, Carrie, Taxes; Best, Mary, Catching Sickness; Special Program Staff, Budget Stretcher, Intermountain Indian School, Brigham City, Utah, 1953.

Wight, Edgar and others, Classroom Activities Related to Natural Resources, Sherman Institute Press, Riverside, California, 1956.

Breedlove, Caroline, Billy Black Lamb, Haskell Press, Lawrence, Kansas, 1959.

Holm, Wayne, Coyote And His Name, Haskell Press, Lawrence, Kansas, 1960.

Bureau of Indian Affairs, Minimum Essential Goals For Indian Schools, Haskell Press, Lawrence, Kansas.

Beginning Year, Levels One and Two
Levels Three and Four
Levels Five and Six
Grades 7, 8, and 9
Special Five Year Navajo Program