

DOCUMENT RESUME

ED 271 225

PS 015 898

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**TITLE** Kindergarten Curriculum Guide.  
**PUB DATE** 85  
**NOTE** 39p.  
**PUB TYPE** Guides - Classroom Use - Guides (For Teachers) (052)

**EDRS PRICE** MF01/PC02 Plus Postage.  
**DESCRIPTORS** Art Education; \*Educational Objectives; \*Elementary School Curriculum; Health; \*Kindergarten; Language Arts; \*Learning Activities; Mathematics Curriculum; Music Activities; Nutrition; Physical Education; Play; Primary Education; Science Education; Social Studies

**ABSTRACT**

Preceded by a list of broad educational goals, subject areas of a kindergarten curriculum are specified generally in terms of domain-specific goals, skills, activities, and resources, and incidentally in terms of philosophy and suggested learning centers. Subject areas addressed include art, health and nutrition, language arts, math, music, physical education, social studies, play, and science. Concluding remarks briefly address the issues of testing and evaluating kindergarten children. (RH)

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ED271225

KINDERGARTEN CURRICULUM GUIDE

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Summer 1985

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I. Philosophy - Our philosophy is based upon the belief that the child's early years are formative years rather than waiting years. We believe if the child is to reach his optimum potential, he must have opportunities to think creatively and abstractly, to communicate his feelings about himself and his environment, and to work and play cooperatively. We further believe, some classic academic concepts can best be developed during these years.

II. Goals

- \* To assist each child in understanding the relationship between written and oral language.
- \* To assist each child in increasing speaking and listening vocabulary.
- \* To help each child understand the concept of "number."
- \* To help each child understand that science is everywhere.
- \* To help each child learn to work and play with others.
- \* To give each child opportunity to express themselves creatively.
- \* To help each child develop physically.
- \* To function effectively within the group.
- \* To relate to members of the group.
- \* To involve themselves in cooperative play.
- \* To enlarge their environment by bringing about a keen awareness of the everyday world.
- \* To foster curiosity and encourage discovery.
- \* To coordinate mind and body.
- \* To learn in a group situation.
- \* To express themselves creatively.
- \* To express themselves verbally.
- \* To relate a story in sequence.
- \* To recognize: colors, shapes, numerals and number concepts to 10, names, alphabet, parts of body, left and right, spatial relationships.
- \* To promote a positive self-image.
- \* To learn basic movements: hopping, skipping, galloping, running, walking, balancing.

- \* To learn appropriate behavior for different situations (to realize the need for self-discipline).
- \* To develop an appreciation of community helpers.
- \* To develop a respect for property and the rights of others.
- \* To establish good health habits.
- \* To develop a singing voice and a sense of rhythm.

### III. Subject Areas

#### A. Art

The values of art education to the child are many and varied. Physically, art activities aid coordination. Different art activities aid motor control and eye-hand coordination. They provide excellent methods to develop reading and writing readiness and improvement. Art sharpens all the senses and makes children more aware of their environment. Art participation and knowledge enhances the ability to visualize and sharply increase perception. Art can help children gain self-confidence in their judgment and ability as they find their work accepted and respected for its own uniqueness. Their self-concept is enhanced through the many decisions, challenges, and solutions they encounter in their work. Through art children also develop appreciation for the individuality of others. Art provides real joy for the child, both in their creation and in their appreciation of the work of others. Art can serve as an emotional release as children express feelings that they might verbally repress. It increases understanding of self and of others. Complex ideas and concepts can be expressed in art that children might not be able to verbalize. Art develops work habits as children complete projects and a sense of responsibility as they care for materials. Art provides individual and problem-solving opportunities as children use their minds to find the best solutions to their immediate creative needs. Decision-making and problem-solving situations are an individual part of art activities from the time they start. Last, and perhaps most importantly, art develops creative, individual thinking. Creative and individual thinking can be developed in art as children observe, classify, interpret, analyze, decide, experiment, and find solutions. This thinking carries over into all areas of life. If a child learns to find solutions in art, he is more likely to do so in medicine or science or teaching. Opportunities in creative, individual, and problem-solving thinking abound in art that are often neglected or even discouraged in regular classroom work. These habits lay the foundations for future contributions to society.

1. Goals

a. Perceptual

Visual Skills:

1. Incorporate experiences that involve the child in looking at natural and man-made forms. Emphasis on discovery through observation and noticing details of things. Key words here are searching, pursuing, seeking, and discovering.
2. Constant encouragement of the child. Establishment of success-oriented experiences.

Tactile Skills:

1. Emphasis on learning how things feel through touch.
2. Detecting differences in tactile discrimination through comparisons.
3. Discovering similarities in touch.

Listening Skills:

1. Emphasis on discovery through listening to people, animals, and to natural and man-made sounds.
2. Flooding the child with continual opportunities to utilize his senses in order to take in data and to spark his learning receptors.

Emphasis at this stage on the full awakening of one's potential through complete intellectual, sensory, and artistic stimulation through the fullest utilization of the senses.

b. Artistic

Manipulative Skills:

1. Emphasis on tools that present uninterrupted movement such as felt-tip pens and crayons. Painting encourages large-muscle movements.
2. Encourage working with a variety of crafts involving sanding, rubbing, weaving, bending, modeling, shaping, pasting, and the like.

Production Skills:

1. Experiences in making art forms that are unique to the child's expression and concepts.
2. Emphasis on a variety of subject matter and discovery experiences that lay the foundation for personal creative expression.

3. Opportunities to work in both two- and three-dimensional media.
4. Encourage the child to complete his work and to experiment as much as possible; do not interfere with the child as he works.

c. Intellectual

1. Emphasis on opportunities for the child to compare, relate, analyze, synthesize, and play around.
2. Learning the names of flowers, plants, trees, mechanical things, people, clouds, vegetables, and the like.
3. Naming simple tools, learning colors, discovering craft media, putting things together, and taking things apart.
4. Inventing simple games on the spur of the moment to challenge the child and keep him at a state of alertness and primed for further discovery.

d. Aesthetic

Art Looking:

1. Experiences in looking at pictures and crafts of various types.
2. Combine looking with discussions at the child's level of thinking.
3. Subject matter should be of interest to the child, such as food, circus, work and play, self-image, body parts, make-believe, television, books, fantasy, and imagination.

Art Heritage Skills:

1. Learning how various culture contributed to America's growth.
2. Learning that art heritage begins with sharing one's own artwork.
3. Discussing art made in the past.

Art Judgment Skills:

1. Emphasis on making aesthetic choices and telling why.
2. Choosing beautiful things in nature and of man and talking about it, subjects can be clouds, machinery, stars, fruit, trees, cars, planes, pebbles, anything.

e. Creative and Expressive

1. Continual encouragement to put down ideas with art media. One must scribble in order to grow.
2. Emphasis on an uninterrupted flow of scribbling experiences permits the child to gain fluidity and ease in controlling and varying his use of appropriate media.
3. Mastery of movement through repeated opportunities to model and make marks over and over.
4. Continual giving out of information previously taken in.

f. Evaluative

Perceptual Growth:

1. Does the child scribble freely and without interruption?
2. Does the child cover the entire space?

Intellectual Growth:

1. Does the work indicate richness of flow and detail?
2. Does the child concentrate?
3. Does the child talk about his work?

Artistic Growth:

1. Is there a feeling for design?
2. Are the spaces well filled?
3. Are proportions intuitively felt?

Aesthetic Growth:

1. Does the work show harmonious organization?
2. Does the child know his colors?
3. Can the child handle the media?

Creative and Expressive Growth:

1. Is the work forceful?
2. Does the child say something unique in his work?
3. Is the child eager and enthusiastic?

(from Linderman, Earl W., and Linderman, Marlene M. Crafts for the Classroom (New York: MacMillan Publishing Co. 1977) pp. 42-43)

## 2. Skills

### a. Selection and Use of Materials and Tools

#### Basic Skills:

1. Selects materials and tools independently.
2. Identifies a variety of tools (paintbrushes, scissors, hole puncher, etc.)
3. Identifies a variety of tools and materials (paints, crayons, clay, chalk, paper and glue).
4. Uses a variety of tools and materials (scissors, brushes, paints, crayons, clay chalk, paper and glue).
5. Uses different media and techniques for artistic endeavors.

#### Developmental Skills:

1. Creates with self-selected materials and tools.
2. Selects and uses a combination of materials and tools in innovative ways.
3. Demonstrates correct care and handling of tools and materials.
4. Conserves materials.

### b. Freedom of Expression

#### Basic Skills:

1. Shows that he/she feels free to express himself/herself using a variety of materials (paints, clay, sand, legos, yarn, blocks, woodworking and natural objects).
2. Creates lines and forms.

#### Developmental Skills:

1. Integrates artistic expression with other areas of the curriculum (puppet-making and illustrating a story).
2. Shows that he feels free to share out-of-school experiences using various art media.

### c. Appreciation

#### Basic Skills:

1. Demonstrates an awareness of different types of art (illustrations in books, pottery, weaving and sculpture).

Developmental Skills:

1. Observes art produced by famous artists and others.
2. Surveys the art produced by craftsmen (weaving, quilts, pottery, woodworking and sculpture).

Extensions:

1. Uses the acquired skills to produce a finished product.
2. Distinguishes works of famous artists and others.

(from Arkansas Public School Course Content Guide)

3. Activities

Recipes:

Play Dough "Clay"

3 parts flour (non self-rising wheat flour), 1 part salt, 1 part water, 3 tablespoons salad oil. You may vary the size of the recipe, but keep the proportions exact. Mix the ingredients until pliable. To color the dough, add food coloring to the water. Stored in an airtight container, playdough will keep about two weeks. To keep for several months, add 1 teaspoon of alum for each 2 cups of flour. Use more salt and less water when the children want to model small objects to harden and later paint.

Cornstarch Soda "Clay"

This variation of play dough will keep a month or two if stored in an airtight container, is gentle to hands; colorability - food coloring or tempera paint may be added to the water or it may be left white and colored as a separate operation. The clay takes any kind of paint, crayon, or felt-tip marker; harden overnight or within a half-hour if placed in a warm, turned-off oven; is safe if hands go in the mouth; will not stain clothing, and crumbs are easily vacuumed; makes attractive holiday gift objects, decorations, beads.

Soda Clay Recipe #1

2 cups (1 lb. pkg.) baking soda, 1 cup cornstarch, 1½ cups water. This recipe is for 2 or 3 children. Combine in a saucepan, heat to boiling, stirring constantly. Remove from heat as soon as the mixture reaches a doughlike consistency. When cool enough to handle, knead lightly.

Soda Clay Recipe #2

2 parts table salt, 1 part cornstarch, 1 part water. Mix and cook over low heat until stiff. Add 3 drops of cooking oil to delay drying. Vegetable coloring may be added to both recipes.

### Plaster

Molding plaster is less expensive than Plaster of Paris and works well for most art projects.

Mix plaster by adding the plaster to the water as long as it will absorb it. When "islands" form, stir gently to avoid formation of bubbles. Pour when it reaches the consistency of thick cream.

Marblize plaster by making the mixture thicker than usual, add tempera, and mix slightly.

Zonolite, Perlite, and Vermiculite added to plaster lighten the weight and add texture for carving mixtures. They can be purchased at lumber yards and feed stores. Dampen plaster blocks before carving. Collect: plastic or waxed cartons to use in pouring blocks for carving; knives, saws and saw blades, files, dental tools, chisels and hammers for carving.

### "Edible Glue"

Can be used with marshmallows, cereals, etc. for young children to "sculpt" characters from stories, etc.

1½ Cup Powdered Sugar  
1 Egg White  
Beat until stiff

Painting:

### Paint Recipes

1. Oil Paint - Thoroughly mix 2 level tablespoons of dry powder paint with turpentine to make a thick paste. Add 3 tablespoons of varnish and stir until smooth. More varnish gives more gloss, and more dry powder paint gives a more matte finish.

Mix 2 tablespoons powder paint with turpentine or liquid starch to make a thick cream consistency. Use zinc oxide with linseed oil for a white oil paint.

2. Water Base Paint - To brighten powder paint, add a small amount of glycerine or evaporated milk.

Use buttermilk instead of water with powdered paint. The product will be a chalk-like paint which won't rub off.

3. Liquid Starch - Pour it on the paper and shake on powder paint. The starch can be smoothed over the paper and played with before adding paint or it can be used alone on dark paper. Simplest method - if paint is put in a shaker can, the child can add it himself.

4. Wheat Paste - If you are out of starch, put a cup of water into a bowl, then add wheat paste slowly, stirring constantly until it is the consistency of whipped cream. The whole recipe can be colored with poster paint or each individual portion can be colored separately.

### Activities

1. Window Painting - Window cleaners (such as Glass Wax or Bon Ami) may be colored with dry paint powder and used to paint windows.
2. Sponge Painting - If the child learns to pat, not rub, with the sponge, a very interesting texture results, especially if a natural sponge is used. This is also a form of printing but makes lovely paintings. There should be a separate sponge for each color, if it is being dipped in paint. Or paint may be applied to the sponge with a brush. The sponge can be held in the hand or by a spring type clothespin.
3. Resist Painting - The child creates a design or a scene with crayons or rubber cement, then paints over the entire paper with a thin wash of water color, tempera, or food coloring. The crayon or rubber cement resists the paint to provide an interesting effect. Rub off the cement when the paint is dry.
4. Object Painting - Objects include large cartons for hide aways and puppet theaters, gift boxes, rocks, pine cones, etc.

### "Looking Activities"

1. Try "looking walks" in the neighborhood, woods, park, or even indoors. Make it a time of looking and touching, when children really feel the textures around them. Begin with the adult picking up leaves, rocks, shells, and so on, and exclaiming over texture and color. Play dough can be taken along in which to stick gathered objects. Have children look for hidden spots of beauty, the tiny things that usually are not noticed. Compare the world to a giant painting, and let them know that walking into nature is like walking into a painting. Since nature is constantly creating the painting, they can take the same walk over and over and see a new picture each time.
2. The "color walk" is a specific kind of looking walk where the focus is on seeing as many kinds of colors and shades of color as one can.

3. Encourage children to bring "found objects" from nature and put them in a special box or on a table. Additional awareness is developed by having the children feel the objects with their eyes closed. This is "looking with the hands."
4. Look for likenesses and differences in shapes, sizes, and color, and such in everyday objects.

Drawing:

### Chalk

1. Wet Chalk - When used wet or on a wet surface, the chalk will dissolve, becoming richer in color and more fluid. The wetting agent acts as a fixative so that the color is not as easily rubbed off.
2. Wet Paper-Dry Chalk - Nonabsorbent paper may be brushed or sponged with water to which a small amount of sugar has been added. For variety, wet paper towels can be used as drawing paper. Add 1 part sugar to 4 parts warm water. This is as satisfactory as milk solutions and more easily available.
3. Dry Paper-Wet Chalk - The paper can be used dry, with the chalk dipped in the above wetting solution before drawing. This saves the extra step of wetting the paper, and the child sees the immediate results. wetting the chalk makes it unsatisfactory for dry use again, so keep it separated from the rest.

### Activities (Also good for learning centers.)

1. "Color Me Joyful"

What to Use:

White drawing paper  
2 or 3 colors of chalk

What to Do:

1. Choose an emotion or feeling that you have had or that any human being might experience.
2. Think about what color (or colors) that feeling is - or what color might represent it.
3. Choose 1, 2, or 3 colors.
4. Use the whole paper to create a design which shows that emotion. Experiment with the chalk. You can use it to make sharp bold lines, wide lines, or pale shaded areas.

5. Make a frame for your design or mount it on a larger piece of colored construction paper. Label it with the word that names the feeling.
2. Pointilism - A method of making a color by combining tiny bits of other colors. To make an area appear green, you would fill it with points or dots of blue and yellow. Experiment! Don't draw lines, just points.

What to Use:

Drawing paper  
Crayons  
Pencils

What to Do:

1. Plan a design or picture. Sketch it on drawing paper.
2. "Color" each area by mixing dots close together.
3. Remember to mix dots of 2 colors to form the color you want.
4. Stand away from your picture, and you will see that the dots blend together.

Resources

Free and Inexpensive Materials. Compiled and published by George Peabody College for Teachers of Vanderbilt University, Nashville, Tennessee. 1981.

Educators Guide to Free Films, published by Educators Progress Service, Inc., Randolph, Wisconsin. Compiled and edited by John C. Diffor and Elaine N. Diffor. 1984.

B. Health and Nutrition

The total health of a child includes his physical, social, mental, and emotional wellbeing, determines the balance and stamina which free him to learn and give him the strength to face his world. The school, which carries a major responsibility in the development of an individual, cannot leave any opportunity unexplored which will foster the child's finest health potential. The health and safety curriculum should contribute to all aspects of the school health program. A health and safety program should encourage good health and safety practices. The health and safety curriculum should include programs in personal health practices, nutrition, drug education, growth and development, mental health, values and decision making, family life education, community health, and disease prevention and control.

1. Objectives and Skills:

At the completion of health curriculum, kindergarten student should be able to:

- a. List orally common practices necessary for good health (cleanliness, proper food, dental hygiene, rest, sleep and exercise).
- b. Demonstrate knowledge that germs are spread by coughing, sneezing and poor hygiene, etc.
- c. Practice correct use of the water fountain and toilet.
- d. Name the basic food groups.
- e. Tell some safety rules (bus, classroom, traffic, emergency procedures and playground rules).
- f. Recognize changes in growth and weight.
- g. Demonstrate appropriate health practices (washing hands, covering mouth or nose when sneezing or coughing).
- h. Identifies foods which help the body to grow and develop.
- i. Identifies different food sources (animals and plants).
- j. Knows personal safety procedures (getting involved with strangers, using inappropriate or dangerous objects, poisons, etc.).

2. Activities:

- a. School nurse or teacher weighs and measures children. Chart the growth of individuals and discuss nutrition and good health. At the end of year and possibly several times throughout the year weigh and measure children again and note differences to individual child.
- b. Tell the flannel board story about tooth care and possibly follow-up with a visit by a dentist or dental hygienist.

Lil' Angel Tooth

This is a story about the sad life of Lil' Angel Tooth. Before he became an angel, he was called Little Tooth. He first lifted his head into this world as a beautiful, shiny, fully grown tooth. He

found that he wasn't alone, but stood at the end of a row of other teeth, smaller and not quite like himself. (Illustrate with arch of teeth) People called him a "six year molar" and he was by far the biggest tooth of all. For, you see, his owner, Peter, was only six years old and his other molars hadn't made their appearance.

At first Little Tooth was very happy in his surroundings, because he felt he was useful. He helped Peter chew his food and helped him talk so people could understand him, and he was very proud because he was such a handsome tooth. Like a little soldier he stood straight and tall and strong, and held the other teeth in a nice row. Little Tooth did his job well.

But the sad part of the story was the Little Tooth was neglected. His owner didn't realize how important he was as a permanent tooth. Day after day Peter ate sundaes, all kinds of cakes, pies, and sweet things. (Put up various types of sweet food.) He didn't know what he was doing to Little Tooth, but each time he ate these sweet things, the top of Little Tooth was filled with food. Owner Peter never thought much about brushing his teeth and brushing this food off--so after a while, Little Tooth discovered a tiny hole. (Put small black decay on tooth) in his white coat. He didn't think much about it because it didn't hurt, but oh, how he wished Peter would take care and brush the food away.

As time went on, the hole in Little Tooth got bigger and bigger (put larger decay on tooth) and each time Peter ate sweets, they got into the hole more. Pretty soon it began to hurt, so Little Tooth fussed a bit, but still Peter paid no attention--he kept right on eating sweets. The hole in Little Tooth got bigger until finally his whole insides were hollow, black and ugly. (Put on larger black decay covering entire inner tooth.)

Little Tooth was unhappy because his owner didn't take care of him. Late on night Little Tooth could stand it no longer. He caused sharp pains to go shooting through Peter's jaw so that he woke up and cried and cried. In the morning Peter's mother took him to a dentist. The dentist looked at Little Tooth, shook his head and said that the tooth must be removed--taken out. (Little Tooth was put to sleep and the dentist took him out.) Peter was so unhappy because the dentist told him that there would never be another molar to replace Little Tooth, because he was a permanent tooth.

Peter took Little Tooth home, put him under his pillow and the good fairy came and carried him to heaven where he was made an angel tooth. He had been such a good soldier that she changed him from an ugly, hollowed-out tooth to a beautiful tooth like he was in the beginning. He could have still been in Peter's mouth but lost his life because of carelessness.

Your teeth can be destroyed by carelessness too, if you forget to brush them. Candy, cakes, pies, and foods like that change in the mouth and help to cause your teeth to decay. And if you don't go to the dentist twice a year, the tiny holes, such as the first one in Little Tooth, will grow bigger and bigger until they get so big that they will hurt. And then it might be too late and the dentist might have to pull your tooth too.

So let's be extra careful from now on--to not eat so many sweets, (illustrate with apples, carrots, milk and other good foods) but instead drink lots of milk, eat fresh fruit, apples, carrots, eggs and meat. And brush them every time we eat. And go to the dentist twice a year so he can find any of those little holes before they get too big. "Angel Teeth" are very beautiful, but they can't be seen. So let's keep our teeth sparkling and healthy so they can do their job well and keep us happy.

- c. Conduct a tasting center where there are examples of several different types of foods for the children to sample. Encourage the children to try some of everything. This can be done when studying each food group or have an example of each food group as a culminating activity.

### Resources

LaMesa Spring Valley School District: Curriculum activities for Relevant Education.

Arkansas State Department of Education: Guidelines for the Development of Kindergartens in Arkansas.

Arkansas Elementary School Council: Handbook for Elementary Teachers.

Arkansas State Department of Education: Arkansas Course Content Guide.

C. Language Arts

1. Philosophy:

Kindergarten provides opportunities for an integration of all subjects in the language arts program. For the child to reach his/her optimum potential, he/she needs avenues to be creative and to think abstractly.

2. Goals:

- a. To identify and print upper and lower case letters.
- b. To discriminate rhyming words.
- c. To imitate consonant sounds.
- d. To recall details of story, poems, and songs.
- e. To identify emotions in pictures.
- f. To understand differences in left and right.
- g. To understand left and right in progression.
- h. To repeat important family information such as, name, address, and phone number.
- i. To listen and follow simple directions in progression.
- j. To learn to relate and cooperate with members of the group.
- k. To increase sensory awareness.
- l. To increase the ability to differentiate between reality and fantasy.
- m. To develop sequencing and memory skills.
- n. To provide opportunity for conversation, listening, clarifying speech and social interaction.

3. Suggested Learning Centers for Language Arts

a. Puppets

Puppets can be used for dramatic play. Shy children will sometimes speak more freely with puppets. Stages can be made from large cardboard boxes or tables covered with cloth. Puppets can be made from wooden spoons, socks, papers sacks or sticks, usually as an art activity.

b. Machines or Tools

Typewriters and adding machines are appealing and reinforce letter and number recognition. Tools help with eye-hand coordination and foster successful feelings.

c. Dress Up Box

Use clothes for role playing for adults. This is spontaneous and free of teacher direction. Dramatic play increases creative language expression.

d. Tape Recorder

- (1) Let children listen to riddles and identify the correct pictures.
- (2) Let children listen to story and arrange pictures in sequence.
- (3) Let children listen to a story and respond to questions by picking correct pictures.
- (4) Let individuals record their own story and draw pictures for it as an art project.

4. Suggested Activities

a. Feely bag or box of objects to pass around a circle of blindfolded children.

b. Visual Activity: Let a group of children change 2 things (hats, mittens or etc.) while another group has their back turned. After turning around they can decide what or who is missing or changed. Pictures or areas of the room can also be changed.

c. Storytelling: Consult a Read Aloud Handbook for appropriate age stories.

- (1) After reading part of a story, let students guess what they think the outcome will be.
- (2) Ask about story characters. Emphasis is not put on remembering exactly what the character said but how the character felt or made them feel.

d. Tag Games: Use cards with alphabet letters or rhyming words for variations of this game. Let each player clip a card to their shirt. Players face each other in 2 lines while caller calls out name of a letter or picture. Players with that letter run to change places before the caller can tag them.

Another use for the pictures would be to reinforce correct use of pronouns. Each student could address the other saying: I have a plane and you have a train.

e. Rainy Day Activities:

- (1) Sprinkle different colors of powdered tempera on paper and let the rain paint a picture while you watch.
- (2) Put out a pan of water and see how long it takes it to freeze.
- (3) Make a class stew with everyone bringing something to put in it.

5. Language Arts Activity

Self Awareness: Mini book - Children make "All About Me"  
Books:

I am \_\_\_\_\_, I have \_\_\_\_\_ eyes. I have \_\_\_\_\_  
hair. I am \_\_\_\_\_ years old. I can \_\_\_\_\_. I  
like to \_\_\_\_\_. I don't like to \_\_\_\_\_. I am  
happy when I \_\_\_\_\_. I like the color \_\_\_\_\_.  
This is my family: My Daddy is a \_\_\_\_\_. My Mommy  
is a \_\_\_\_\_. When I grow up, I want to be a  
\_\_\_\_\_.

Suggestion: This can be combined with an art activity  
by putting one sentence on each page and letting the  
child draw a picture to complete the statement.

Ideas for Show & Tell:

- a. The biggest surprise I've ever had...
- b. The best place I've ever been...
- c. Emergency procedures at my home are...
- d. My favorite TV show is...
- e. Good manners are...

Resources

Leeper, Sarah H. Good Schools for Young Children.

Castello, Gloria. Left Handed Teaching.

Sullivan, Dorothy. Games As Learning Tools.

Romer, Terry L. Complete Kindergarten Tools.

Miller, Mabel. Kindergarten Teachers Activities Desk Book

Jacobson. Creating Innovative Classrooms Materials for Teaching Young Children.

Arkansas Department of Education Basic Education Skills.

LaMesa Spring Valley School District: Curriculum Activities for Revelant Education.

D. Mathematics

Quantative concepts for the kindergarten child should include many and varied uses of arithmetic. In the daily activities, rather than teach arithmetic as a separate subject or a set of unrealistic standards for individual groups, most work should come naturally. When a child or a group encounters a problem, a skillful teacher will guide them toward a solution. Topics in arithmetic should include vocabulary time and space relationships, size, shape, counting, heavy versus light, recognition of groups, fractional parts, and understanding in everyday activities.

1. Skills and Objectives

- a. Sort and match objects with like characteristics such as color, size, shape or texture.
- b. Use positional words such as: up - down, over - under, above - below, beside - between, front - back, left - right, inside - outside, on - off, top - bottom, first - last.
- c. Replicate patterns with beads or other concrete objects.
- d. Match objects to make equivalent sets.
- e. Duplicate a group with the same number or members as a given group.
- f. Build a group with more members than a given group.
- g. Build a group with fewer members than a given group.

- h. Count aloud to 100.
- i. Count objects accurately to 50.
- j. Recognize and name numerals 0 - 20 and associate a numeral with the number of concrete objects in a group.
- k. Write numerals 0 - 25.
- l. Identify positional relationships first through fifth.
- m. Show that the number of objects in a group can be changed by adding to the group.
- n. Remove from a group of ten or fewer objects, a specific number of objects and state the number of objects remaining.
- o. Demonstrate that a whole can be separated into two equal parts and that each of these parts is called one-half.
- p. Make comparisons of two objects or groups and use terms: wide - narrow, long - short, big - small, more - less, all - some, full - empty, light - heavy, tall - short, open - closed.
- q. Demonstrate proficiency in the order of three or more objects and identify them as smallest to largest, shortest to tallest, etc.
- r. Recognize that length is measured by a ruler.
- s. Understand the time is measured by calendars, watches, clocks.
- t. Understand that weight is measured by a scale.
- u. Understand that temperature is measured by a thermometer.
- v. Recognize and name some of the coins in our monetary system, such as penny, nickel, dime, and quarter.
- w. Use non-standard units in measuring, such as straws, paper clips, hands, feet, etc.
- x. Identify and name a triangle, rectangle, square, and circle.
- y. Recognize likenesses and differences in geometric shapes.

- z. Identify equivalent sets using one-to-one matching.
- aa. Use cardinal numbers one to ten.
- bb. Identify ordinal positions first to tenth.
- cc. Recognize time on the hour.
- dd. Recognize time on the half-hour.
- ee. Know that there are seven days in a week.

2. Activities

a. The Number Garden

Objectives:

- (1) Stimulate matching skills.
- (2) Develop number-recognition skills.
- (3) Promote number correspondence
- (4) Enhance counting skills.

Themes:

- (1) Flowers.
- (2) Gardens
- (3) Spring.
- (4) Plants.
- (5) Counting.

Subject Areas:

- (1) Math.
- (2) Science.
- (3) Language arts.

Materials:

2 pieces of black tagboard, 22" x 28"  
1 piece of red tagboard, 22" x 28"  
1 piece of green tagboard, 22" x 28"  
1 piece of white tagboard, 10" x 18"  
library-book pockets  
black felt-tip marker  
clear contact paper or laminate  
scissors  
glue

Directions:

- (1) Trace and cut out flowerpots from the black tagboard sheets.
- (2) Cut out and glue white dots on the flowerpots for each number from 1-10.

- (3) Cut out flowers from the red tagboard with a corresponding number of petals to match the dots on each flowerpot, and glue on a white center as illustrated in the photo.
- (4) Write the number of petals and dots on the white center of the flower.
- (5) Trace and cut out green tagboard stems and leaves for each flower and glue the flower to the stem.
- (6) Cover the flowers and flowerpots with clear contact paper or laminate.
- (7) Glue library pockets onto the back of each flowerpot.

Strategies for use:

This activity can be used with a single child or with a small group of children. The objective is to match the petals or the number to the corresponding number of dots on the flowerpot. Ask the following questions to motivate the children:

- Can you find the flower that goes with this flowerpot?
- How many dots are on this flowerpot?
- Can you find that number on a flower?
- Which flower has the most petals? The least petals?

b. Number Jigsaw Puzzles

Objectives:

- reinforce counting skills
- develop number recognition
- strengthen one-to-one correspondence
- promote visual discrimination
- encourage eye-hand coordination
- increase small-muscle coordination

Themes:

- sizes
- shapes
- games

Subject areas:

- math
- reading readiness
- language arts

Materials:

- 10 tagboard cards, 4½" x 9"
- colored felt-tip markers
- clear contact paper or laminate
- ruler

pencil  
scissors

Directions:

- (1) Draw an object on one side of a card and the number 1 on the other side. Draw two objects on one side of a card and the number 2 on the other side. Repeat through 10.
- (2) Cover all pieces with clear contact paper or laminate.
- (3) Cut each card in half vertically with a different cutting pattern, that is, zigzag, wavy, straight edge.

Strategies for Use:

The children should match the halves of the cards and then sequence the cards from 1-10.

c. Milk Carton Sort

Objectives:

develop color-recognition skills  
practice shape-recognition skills  
promote visual perception  
develop sorting and matching skills  
enhance problem-solving skills

Themes:

colors  
shapes

Subject Areas:

math  
reading readiness

Materials:

7 half-pint milk cartons (or equivalent-sized containers)  
colored contact paper or construction paper  
scraps of red, blue, and yellow tagboard  
scissors  
glue  
staples

Directions:

- (1) Cut off the tops of the seven half-pint milk cartons.
- (2) Cover the outside of each carton with colored contact paper or construction paper.

- (3) Glue one piece of red, yellow, or blue paper in the bottom of each of three cartons.
- (4) Cut out a square, a triangle, and a circle (red, yellow, blue) from the tagboard scraps and glue one in the bottom of each of the next three cartons.
- (5) Staple the cartons together as shown in the photograph.
- (6) Cut out matching squares, circles, and triangles from red, blue, and yellow tagboard and store in the seventh carton.

#### Strategies for Use:

Encourage the children to sort the pieces of tagboard into the milk carton that contains the same color or shape. To maintain interest during the activity, you can ask the following questions:

- Where do you think the blue square should go?
- Why did you put it in that box?
- In which color carton did you put the most shapes?
- In which shape carton did you put the most colors?

### 3. Learning Center

An excellent learning center in mathematics concerning geometry would be very useable and informative.

Construct the following activities on geoboards, shape dice, and shape and color matrix.

Put the activities in sequence on a "learning" table then on index cards put the instructions for use. (See strategies for use)

#### Geoboard

##### Objectives:

- practice eye-hand coordination
- develop concept of shape
- practice following visual directions
- encourage problem-solving skills

##### Themes:

- shapes
- colors

##### Subject Area:

- math

Materials:

1 piece of wood, 11" square, 3/4" thick  
100 nails with small heads, 3/4"  
ruler  
felt-tip markers  
6 sheets of tagboard, 11" square  
hammer  
rubber bands (colored)  
clear contact paper or laminate  
scissors

Directions:

- (1) Mark off a 1" border on the four sides of the 11" square piece of wood.
- (2) Draw ten lines, 1" apart, horizontally across the piece and then draw ten lines, 1" apart, vertically, to form a grid.
- (3) Pound one nail in each corner of every square formed by the grid, leaving about  $\frac{1}{2}$ " of the nail above the surface.
- (4) Draw the same grid pattern on each tagboard card.
- (5) On each tagboard grid, draw patterns of lines, shapes, or designs using colored markers that match the rubber bands.
- (6) Cover the tagboard cards with clear contact paper or laminate.

Strategies for Use:

The child should be encouraged to produce his or her own patterns first. After this introduction, the child can reproduce the patterns from the tagboard cards on the wooden board using colored rubber bands stretched around the nails.

Shape Dice

Objectives:

encourage problem-solving skills  
enhance classification skills  
foster awareness of sets  
develop visual perception

Themes:

shapes  
colors

Subject Area:

math

Materials:

tagboard  
colored felt-tip markers  
glue  
scissors  
yarn

Directions:

- (1) Make twelve dice with 3" sides.
- (2) Using red and blue markers, mark the dice as follows:  
Key: =blue; =red; =1 side of a die  
Set 1: On four dice, mark each side with 1 red or 1 blue circle.

Set 2: On four dice, mark each side with a red or blue square, circle, or triangle.

Set 3: On two dice, mark each side with the following colors and shapes.

Set 4: On two dice, mark each side with the following colors and shapes.

Strategies for Use:

Children can use these materials by themselves or in small groups. Begin with Set 1. Have the children throw the dice, and circle the different sets with yarn. Sets could be: all the red circles, all the blue circles, or all the red and blue circles. Allow the children to make sets as they would classify them and encourage them to discuss the reasoning behind their classification.

Introduce each set of dice as the children master the preceding set.

Shape and Color Matrix

Objectives:

reinforce matching skills  
promote problem-solving skills  
extend classification skills  
reinforce visual discrimination

Themes:

colors  
shapes

Subject Areas:

math  
reading readiness

Materials:

1 piece of white tagboard, 12" x 12"  
red, blue, and yellow construction paper or  
tagboard  
scissors  
felt-tip markers  
ruler  
clear contact paper or laminate

Directions:

- (1) Using a marker, divide the piece of white tagboard into sixteen squares, each measuring 3".
- (2) Make blobs of color on the vertical axis of the entire card: blue, yellow, and red.
- (3) On the horizontal axis, draw the outlines of a triangle, circle, and square.
- (4) Leave the upper-left square blank.
- (5) Cover tagboard with contact paper or laminate.
- (6) Cut out red, yellow, and blue circles, triangles, and squares from the colored construction paper.

Strategies for Use:

Demonstrate to the children how to select a card and then place it on the appropriate matrix, matching both color and shape. Then encourage the children to play individually or in a small group.

Resources:

North Central Self-Study, 1983

Creating Innovative Classroom Materials for Teaching Young Children, Debeak/Herr/Jacobson  
Harcourt Brace Jovanovich Publishing, 1981.

Good Schools for Young Children, 4th edition, Sarah Leeper, Dora Skipper, Ralph Witherspoon, Macmillian Publishing, 1974.

## E. Music

Teachers need to keep experimental and creative attitudes toward music. The child's growth characteristics should be considered when planning music experiences. Music can furnish satisfying and rich experiences in the kindergarten when it is woven into the curriculum every day.

### (1) Skills and objectives

The child will be able to:

- distinguish between loud and soft
- distinguish between high and low
- distinguish between long and short
- design musical instruments
- reproduce matching beats of music
- sing songs
- write new words to a familiar song
- listen to music
- move to music (dance and creative movement)
- locate objects that produce sound for use in music
- experience listening to a live orchestra or band
- play various musical instruments, harp, sticks, drums, and kazoo

### (2) Activities

- a. Light bulb maracas (copy materials, directions, strategies)
- b. Various activities for circle time song and finger plays included.

Objectives:

- explore sound
- encourage group cooperation
- foster listening skills
- reinforce concepts, such as loud-quiet, fast-slow

Themes:

- music bands
- instruments
- sounds

Subject Area:

- music

Materials:

bowl  
spoon  
wallpaper paste  
water  
newspaper  
paint  
large, burned-out light bulbs  
scissors

Directions:

- (1) Mix the wallpaper paste in a bowl according to the directions on the package.
- (2) cut the newspaper into 40 strips, 1" x 4", and dip them in the paste.
- (3) Remove the strips from the paste and wrap around the light bulb. Continue wrapping until the bulb is completely covered, including the screw-in metal part.
- (4) Allow the papier-mache covered bulb to dry thoroughly and then hit it against a hard surface to break the glass.
- (5) Paint the maraca.

Strategies for Use:

Maracas can be used by a single child, by a group for a rhythm band, or for exploring music concepts, such as loud-quiet, fast-slow, even beat-uneven beat. Make an instruction chart (see page 148) so the children can construct their own maracas.

F. Physical Education

Physical Education as an integral part of a kindergarten curriculum offers unique contributions to general educational goals and should be viewed not only as training of the body but as a way to help each child develop skills of moving, utility and grace-with creative expression. An acquisition of motor skills which children can utilize in play and later in the development of specialized skills for sports and games undergirds the philosophy of teaching.

(1) Basic skills and objectives:

Performs basic locomotive movements including: jumping, hopping, walking, running, skipping, leaping, sliding, galloping, climbing, and crawling.

Performs basic nonlocomotive movements including: bending, stretching, pushing, pulling, raising, lowering, twisting, turning, shaking, bounding, and circling.

Walks forward, backward and sideways  
Imitates animal movements  
Rolls, catches and kicks a ball rolled to him/her  
Balances on one foot  
Walks on the balance beam forward, backward, and sideways  
Plays simple group games including musical games  
Jumps a moving, but not turning, rope  
Performs a forward roll and a log roll on a mat

2. Developmental skills and objectives:

Moves through an obstacle course using climbing, crawling, walking, running, jumping, and other locomotive and nonlocomotive skills  
Bounces and catches a ball  
Uses a target with a ball or a beanbag  
Demonstrates partner activities using manipulatives (balls, beanbags and hoops)  
Performs using a jump rope while the rope is turned  
Performs backward roll on a mat  
Balances a beanbag on various parts of the body while walking  
Performs fundamental locomotive and nonlocomotive movements to rhythm  
Jumps rope alone  
Performs a rhythmic activity with a partner

3. Activities:

simple tag  
drop the handkerchief  
red rover  
bear walk  
crab walk  
forward rolls  
ring around the rosy  
london bridge

G. Social Studies

Social studies should be taught to the kindergarten child so that socialization skills may be acquired to produce better, more aware citizens. The disciplines which form the basis of social studies are history, political science, economics, geography, anthropology/sociology, and environmental studies.

1. Goals and Objectives:

- a. Practices responsibility for a task.
- b. Shows respect for rights and properties of others.
- c. Aware of different cultures.
- d. Knows names of certain school staff.
- e. Knows names of classmates.
- f. Knows where parents work.
- g. Knows names of family members and their roles.
- h. Recognizes American flag.
- i. Identifies community helpers.
- j. Classifies land, water, air transportation.
- k. Identifies maps and globes.
- l. Recalls information about national holidays.
- m. Understands town, state, nation, world.
- n. Shows respect for the environment.

2. Activities

- a. History: Have a family unit. Compare life in the past to life in the present.
- b. Political Science: Have a responsibility unit. Talk about rules, rights, responsibilities.
- c. Economics: Play a wishing game. Ask the children what they want if they could have anything.
- d. Geography: Have children discover land and water on maps and globes.
- e. Anthropology/Sociology: Talk about the different types of family units. Have children bring family photos. Note similarities and differences.
- f. Environmental Studies: Have a litterbug project. Talk about waste. Have children clean up the school area.

3. Learning Centers

Design an area where the children will find enrichment of the unit they're studying. For the family-history unit which compares the past to present life, have picture books showing the different lifestyles. Have antique objects.

H. Play

Play provides an important vehicle for first hand learning. It is the appropriate time to use large muscles, a time also for rigorous self-expression. It takes place indoors and outdoors, directed or free, under the teachers watchful eye. Play may be structured and geared to any learning situation wherein the pupil receives enrichment in all subject areas.

## 1. Objectives and Basic Skills

The pupil will be able:

- (1) to use play materials and equipment with others
- (2) to take turns
- (3) to lead and to follow
- (4) to ask for what they want or need
- (5) to understand the role of mother, father, baby, or the doctor, etc.
- (6) to communicate with other children at play and thus help to stimulate language growth
- (7) to develop laterality and directionality in using large muscles
- (8) to develop body coordination
- (9) to develop gross motor coordination skills using unilateral, crosslateral and bilateral activities

## 2. Activity

### Animal Walks

Animal walks are a form of mimetics in which the child is given an opportunity to imitate the movement of various animals. Preschool children have vivid imaginations and are very interested in animals. There is no single best way to imitate the following movements. The situation should be left open-ended, allowing the child to explore and experiment with many possibilities.

- |                      |                      |
|----------------------|----------------------|
| (1) Bear Walk        | (10) Prancing Horses |
| (2) Elephant Walk    | (11) Birds           |
| (3) Puppy Run        | (12) Stork           |
| (4) Lame Puppy Run   | (13) Crab Walk       |
| (5) Bunny Hop        | (14) Seal Walk       |
| (6) Rooster Walk     | (15) Ostrich Walk    |
| (7) Galloping Horses | (16) Mule Kick       |
| (8) Kangaroo Jump    | (17) Monkey Jump     |
| (9) Frog Jump        | (18) Duck Walk       |

## 3. Learning Center

### Dramatic Play

Dramatic play involves the use of creative thinking while enacting roles that are familiar to the children. By being involved in such a process, children are able to experience growth in all areas of development.

Dramatic Play Corners

Doctor or Nurse  
supplies needed:

Nurses Cap  
Medical Kit  
Stethoscope  
Tape, gauze, cotton  
Scale & measuring  
chart  
Glasses without  
lenses  
Smock  
Mat or cot

Service Station Attendant  
supplies needed:

Rubber Hose connected to  
decorated like a gas pump  
Empty (clean) oil cans  
Air pumps  
Tools & Play Automobile  
Cap  
Keys  
Cash register & play money

Other suggestions for Dramatic Play

Astronaut	Grocery Clerk
Police Officer	Beautician
Fire fighter	Post Office Worker
Airline Pilot	T.V. Star/Newscaster
Circus Performer	Restaurant Worker

4. Resources (Play)

Vannier, Mary Helen, and Gallahue, David L.  
Teaching Physical Education in Elementary  
Schools. 6th ed. Saunders College Publishing,  
PA. 1978.

Leeper, Sarah, Skipper, Dora, and  
Witherspoon Ralph. Good Schools for Young  
Children.

Arkansas Dept. of Education. Guidelines for  
the Development of Kindergartens in Arkansas.  
Division of Instructional Services, Little Rock,  
Ar. 1970.

I. Science

For the kindergarten child the interest in Science comes naturally. The incidental interest of the child should be followed closely. It should be a "doing" followed by a "talking about" experience. Experience with materials which help explain and answer the "why" about the child's environment. Topics for study should include the natural living things, our earth and the universe, and matter and energy. Also important is the process approach in the curriculum which includes observing, classifying, recognizing space-time relations and measuring.

1. Basic skills

- Identify the body parts
- Name the five basic senses
- Identify the body part used to sense a specific item (ex. eyes to see a rainbow)
- Recognize differences between plants and animals
- Identify some plants and some animals
- Identify some living and non-living things
- Identify weather characteristics (rain, fog, cold)
- Identify simple science equipment (magnet, thermometer)
- Identify seasons of the year

2. Developmental Skills

- Describe functions of body parts
- Distinguish different odors, textures, sounds and tastes
- Distinguish differences using his eyes (shape, size, colors)
- Name those elements necessary for life
- Identify animals according to categories (mammals, birds, fish, insects, reptiles, etc.)
- Identify animals according to use, size, habitats
- Names and imitates the ways in which animals move about
- Tell ways in which plants change in relation to the seasons
- Name some parts of the solar system
- Know that the sun gives the earth heat and light
- Know that the earth is composed of water and soil
- Relates characteristics of each season
- Identifies the weather thermometer
- Uses various tools to solve problems
- Names machines in the home that will help with tasks

3. Science Activities

- a. How we use our senses. Give a small group of children a paper closed bag of items such as a small rubber ball, a nail, a piece of cloth, a rock, a top, a bell, a piece of onion, or any other small item. Each child is to take turns reaching into the bag and "feeling" the items, "smelling", "listening" and finally "looking" at the items. Children should "guess" each time a different sense is used to try to identify the items in the bag.

- b. What makes the earth warm?  
At noon on a sunny day, take the children outside and ask them to describe the day (sunny, warm, hot). Ask them to find "warm" things by feeling them (sidewalk, soil, rocks, windows). Ask them to feel some things in the shady areas. How do they feel? Why? Discuss how the sun is the source of this heat.

#### 4. Science Learning Centers

a. Nature Nook:

Nature Nook should be close to the entrance of the room so the children will bring their collection to the table while exploring other specimens.

Materials:

Small table  
Any items the children want to bring in rocks, leaves, insect collections, magnets, machines, animals, plants, clocks, gloves, scales, compass, sleds, bulbs, water can, etc.

Variation:

This table could have different themes to correlate with units being taught. Ex. Ocean Unit could include sea shells, toy boats, pictures, etc.

a. Smelly Table

To be used with unit on the 5 basic senses materials:

- small baby food jars with holes punched in the tops. Cover jars with paint or foil so the sense of smell alone is used.
- include items familiar and unfamiliar to children: onion, lemon, orange, vanilla bean, cinnamon, perfume, soaps, water, etc.

#### Testing and Evaluation

We need to be able to evaluate the goals and objectives of our curriculum guide to see if they set the stage for learning as well as how the children progress through the

various areas. Some questions, such as: (1) What has each child learned? (2) What can we do differently or better? (3) Are we meeting our goals?, are very important.

"Evaluation of a general and specific nature should be done by the teaching staff on a continuing basis and not left to the end of a term or school year," according to Verna Hildebrand. This pretty much sums up the feeling of most educators with regard to any evaluation system, but most especially with kindergarten students. Only through on-going evaluations can a teacher be assured that educational progress is taking place. Therefore, one must be careful when talking about evaluation. Are we "testing" students, teachers, or programs?

Evaluation, for our purpose, will broadly include both of the concepts. We must evaluate how the children exhibiting specific behaviors and to what degree they are 'on grade' or 'age level' in relation to the program being used. As teachers, we must select goals to fit the children, the program, and our own values. Our evaluations may be carried out through direct observations of the children, standardized tests, conferences with parents, and informal rating scales.

In many schools today, pre- and posttesting are being used to a great extent. This is testing at both the beginning and end of a term and comparing the tests. There are many problems encountered with this type of testing. Kindergarteners are too young for mere paper and pencil tests and testing is, therefore, very time consuming as it must be done individually, in most cases. Also, many tests are very biased, generally being oriented to the white middle-class society.

Another method is the checklist observation form. Again, this is very subjective and should not be used alone to determine a child's ability.

Testing and evaluating a child's progress is a difficult but necessary part of a teacher's responsibility. Being able to look objectively at both the program's goals and the child's progress will strengthen the entire procedure.

Resources:

Hilderbrand, Verna. Introduction to Early Childhood Education, 2nd ed. MacMillian Publishing Co., Inc. New York, New York, 1976. Chapter 16.

Lillie, David. Early Childhood Education. Science Research Association, Inc., Chicago, 1975. Chapter 3.

Sufeldt, Carol. Teaching Young Children. Prentice-Hall, Inc. Englewood, Cliff, N.J., 1980. Chapter 3.