Topic of Study - Flowers

Introduction

Children learn many things as they are engaged in a study about flowers. They learn the names and colors of flowers. They learn what flowers need to help them grow. They learn to identify the parts of flowers. Children learn to appreciate the beauty of flowers as they observe them in their environment.

Teacher Notes about STEM

- Early Childhood Educators are now linking together science, technology, engineering, and math into what is called STEM curriculum.
- This topic of study, flowers, focuses on the science component of STEM.

Teacher Notes

Arkansas Minimum Licensing Requirements (Rev. 1.1.15) requires the following:

400 PROGRAM - 401 Program Requirements for all ages

5.a. The facility shall have an appropriate curriculum with weekly activity plans appropriate for the developmental needs of each group of children.

To assist your program in meeting this requirement, refer to Developing Weekly Activity plans for Adventures in Learning for information on how to develop your plans. Feel free to make copies of the plan sheet you select and use it each week. To help you in your planning, there are also 2 samples of completed plan sheets that you may use as guides when developing weekly activity plans for your group of children.

- Adventures in Learning is an Arkansas approved curriculum.
- This curriculum guide is a collection of activities that support the Big Ideas listed below. Choose those activities that best meet the needs of the children in your group.
- Consider implementing this topic of study when flowers are in bloom so that children can experience flowers first hand.
- Consider extending this topic of study beyond a one-week period of time. There is so much for children to learn about flowers. Carry over activities from one week to another because children enjoy and learn best through repetition.
- If you do not have some of the featured books, refer to the Additional Books section for other books you can use.
- It is important to read the same book several times to children so that they can have a better understanding of theme, plot, characters and the sequence of events. In each of the readings presented here, there is a different focus on what is happening in the story.

Big Ideas

Here are three big ideas about flowers you can help children explore:

- > Flowers have names and come in many different colors.
- > Flowers need soil, water and sunshine to grow.
- Flowers have roots, leaves, stems, seeds and petals.

Materials to Collect and Make

- Pictures of flowers (Laminate or cover with clear adhesive to preserve)
- Children's books about flowers: Planting a Rainbow by Lois Ehlert
- Illustrated rhyme chart for "Mary, Mary Quite Contrary"
- Illustrated rhyme chart for "Ring around the Roses"
- Planting a Flower Sequence Cards (laminate or cover with clear adhesive to preserve) (See Attachment: Planting a Flower Sequence Cards)
- Flower lacing cards
- Flower Concentration cards (See Attachment: Flower Concentration Cards)
- Teacher-made book: Red Rose, Red Rose, What Do You See? (See Attachment: Red Rose, Red Rose, What Do You See?)

Teacher Note: This is NOT to be used as coloring pages for children!

- Felt or Magnetic Board
- Bouquets of real flowers
- Artificial flowers (silk or plastic)

Resources

- Check with your local library for the availability of children's books.
- Children's books can be purchased online, from school supply catalogs or local bookstores.
- Check with a local florist or discount or grocery store to see if they ever have flowers they are unable
 to sell and are willing to let you have. Explain to them that the children are engaged in a topic of study
 about flowers.

Introducing and Concluding the Topic

Introduction: Finding out what Children Know about Flowers

Learning Goals:

CD2.4 Holds and manipulates information in memory (short-term and working memory and long-term memory

CD3.2 Engages in symbolic and abstract thinking (abstract thinking)

EL3.1 Responds to features of books and print (print knowledge)

To introduce the topic of "Flowers" you need to find out what children already know about the topic. This allows you to build on your children's experiences. It also helps create an interest in the topic. Here's how to begin.

- Gather the children in a group. Say, "For the next few days we're going to be learning about flowers."
- Write on chart paper, chalk board or marker board the word "Flowers."
- Invite children to tell you things they already know about flowers. "Do you have flowers at your house?" "Where do you see flowers?"
- Make a list of all of the things children know about flowers.
- Review the list with them and say, "You already know a lot of things about flowers and we'll find out even more."
- Now ask children what they would like to know about flowers.
- Make a list of things children would like to know about flowers.
- Keep the two lists until you have completed the topic of study.

What We Know about Flowers	What We Would Like to Know about Flowers	Things We Learned about Flowers

Conclusion: Finding out What Children Have Learned about Flowers

- Gather the children in a group at the conclusion of the study about flowers.
- Write on chart paper, chalkboard or marker board, "Things We Learned about Flowers."
- Invite children to tell you some things they have learned about flowers. You may have to ask prompt questions such as "What do flowers need to grow?" "How can you tell one type of flower from another?"
- Make a list of all the things children learned about flowers.
- Read the first two lists you made with the children. Then say, "Here are some new things you found out about flowers" and read today's list with the children.

Teacher Note: This method of introducing and concluding the topic is known as KWL. What do children know, what do they want to know, and what did they learn.

Reading Books with Children

Learning Goals:

- CD2.1 Focuses and sustains attention
- **LD1.1 Understands and responds to language (in child's home language)** (vocabulary and language comprehension)
- EL1.1 Shows interest in literacy experiences (engagement in literacy experiences)
- EL1.2 Engages in read-alouds and conversations about books and stories
- **EL3.1** Responds to features of books and print (book knowledge and print knowledge)
- ST2.1 Demonstrates knowledge of core science ideas and concepts (system parts and wholes)

Book #1: Planting a Rainbow by Lois Ehlert, author and illustrator

First Reading of Planting a Rainbow

- Prepare to read the book, *Planting a Rainbow*
- Show cover; give title, author and illustrator. (Explain that the author is the person who writes the book and the illustrator is the person who draws the pictures.)
- Open up the book and show the entire cover, front and back, to the children.
- Read the story so all children can see the pictures in the book.
- Point to the labels as you read the names of the different flowers.
- Follow up by asking children why they think the name of the book is *Planting a Rainbow?*

Second Reading of Planting a Rainbow

- Show cover, give title, author and illustrator.
- Read the story so all children can see the pictures in the book.
- Follow up the second reading of the book by reviewing with the children the different ways that we can grow flowers: from bulbs, from seeds, and from seedlings (small plants)
- Allow children to look closely at the pages that show the bulbs, seeds and seedlings so they see the difference. Call attention to the stems, leaves and petals.
- Explain to children that they will be involved in growing flowers from a bulb, from seeds, and from seedlings.

First Reading of Red Rose, Red Rose, What Do You See? (teacher-made book: see attachment)

- Prepare to read the book, Red Rose, Red Rose, What Did You See?
 - Show cover and give the title. Explain that you wrote and illustrated the book, therefore you are the author and illustrator.
 - Ask children to look at cover and predict what the story is about.
 - Read the story so all children can see the pictures in the book.
 - Follow up by asking children if they saw flowers in the book that they had seen before. Allow them to discuss where they say the flowers. Ask them which flower is their favorite.

Teacher Note: If another teacher helped you with the book, list both of you as authors and illustrators.

Second Reading of Red Rose, Red Rose, What Do You See?

- Show cover, give title, author and illustrator.
- Read the story so all children can see the pictures in the book.
- Follow up the second reading by inviting the children to help you read the story. For example, read "Red rose, red rose, what do you see? I see a _____
- (Pause and allow the children to fill in the rest of the sentence."
- Say to the children when the story is complete, "You helped me read the book."
- Explain that the book will be in the library area so they can "read" it on their own.

Additional Books

Flower Garden by Eve Bunting, illustrated by Kathryn Hewitt

Jack's Garden by Henry Cole

The Legend of Indian Paintbrush by Tomie dePaola

This Is the Sunflower by Lola M. Schaefer, illustrated by Donald Crews

The Tiny Seed by Eric Carle

Waiting for Wings by Lois Ehlert

Language and Literacy Materials and Activities

Learning Goals:

- **EL1.1 Shows interest in literacy experiences**
- **EL2.1 Notices and manipulates the sounds of language** (*rhyme*)
- CA1.1 Explores through listening, singing, creating, and moving to music

Flowers of Many Colors

There are flowers, flowers everywhere. Their wonderful scents fill the air.

Some flowers are orange and some are blue. I'm sure there are purple flowers, too.

Some flowers are red and some are pink. But my favorite flower is yellow, I think.

How about you? Tell me real quick, Which color flower would be your pick?

Purple Violets

One purple violet in our garden grew; (Hold up fingers on at a time as verse progresses) Up popped another and that made two. Two purple violets were all that I could see; But Billy found another, and that made three. Three purple violets – if I could find one more, I'd make a wreath for Mother, And that would make four. Four purple violets, sure as you're alive!

Why, here is another! And now there are five!

Five Little Flowers

Five little flowers (Hold up five fingers)

Standing in the sun;

(Make fingers nod) (Make fingers bow)

See their heads nodding Bowing, one by one.

Down, down, down, (Raise hands, wiggle fingers and lower arms to act out

Falls the gentle rain falling rain)

And the five little flowers

Lift up their heads again! (Hold up five fingers) Make illustrated rhyme chart for the following nursery rhymes:

Mary, Mary

Mary, Mary, quite contrary How does your garden grow" With silver bells and cockle shells And pretty maids all in a row.

- Say the rhyme with the children while showing the chart.
- Post the chart on the wall at child's eye level. Observe to see if the children look at the chart and say
 the words.

Ring Around the Roses

Ring around the roses, A pocket full of posies; Ashes! Ashes! We all fall down.

- Say the rhyme with the children while showing the chart.
- Explain to children that "posies" is another word for flowers.
- Post the chart on the wall at child's eye level. Observe to see if the children look at the chart and say
 the words.

Science / Discovery and Math

Learning Goals:

- ST1.1 Engages in the scientific process to collect, analyze, and communicate information (observations, questions and predictions)
- ST2.1 Demonstrates knowledge of core science ideas and concepts (stability and change)
- ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, (living things)

Activity: Flower Garden (Growing flowers from seeds)

- Provide marigold seeds, containers such as empty milk cartons (clean), cups or clay pots, one per child, potting soil and a small shovel or scoop. Help children put their names on their containers.
- Guide children to put potting soil in their container and plant their seeds. Discuss with children what else their seeds will need in order to grow: sunlight and water.
- Decide with children a "sunny" spot in the room for their seeds to grow.
- Place a small bowl of water and eyedroppers nearby so children can water their own plant each day. When children use an eyedropper, this prevents over-watering and spills.
- Provide a magnifying glass so children can observe the flowers.
- Involve the children in keeping a journal or creating a book about the experience.
- Take photos of the children as they plant their seeds and record their dictation about what they did.
- Involve the children in deciding what to do with the plants when they begin to outgrow their container. Consider planting them outdoors if an appropriate spot is available, or send them home to be planted in the family's flowerbeds.

Teacher Note: When using potting soil, make sure to place newspaper on the table where the planting is done. This makes cleaning up much easier.

Activity: Growing a Narcissus (Growing a flower from a bulb)

- Involve children in preparing a clear plastic container for growing a narcissus. by putting rocks in the bottom of the container and adding water.
- Plant the narcissus bulb in the water and place the container near a window.
- Invite the children to discuss the difference in planting the marigolds and the narcissus: planted narcissus bulb and marigold seed, planted narcissus bulb in water and marigold seeds in soil, narcissus bulb does not need water because it was planted in water, marigolds need to be watered.
- Involve the children in keeping a journal about the experience.

Activity: Planting a Seedling (Small plants) (Petunias for example)

- Involve children in putting potting soil in two or three clay pots for planting seedlings
- Put the clay pots in clay saucers.
- Allow the children to help plant the seedlings.
- Discuss with children what the plants need to grow. (water and sun)
- Place the pots in an area where they will get sun.
- Create a chart that allows the children to take turns watering the plants.
- Invite the children in discussing the difference in planting the marigolds, the narcissus, and the petunias: planted marigold seeds, narcissus bulb, and petunia seedling; planted narcissus bulb in water and marigold seeds and petunia seedling in soil; the bulb does not have to be watered because it was planted in water, the other two need to be watered.
- Involve the children in keeping a journal about the experience.

Teacher Note: When using potting soil, make sure to place newspaper on the table where the planting is done. This makes cleaning up much easier.

Activity: Tire Garden of Flowers

- Make a tire garden on the playground by filling a tire with garden soil.
- Let children plant flower seeds, such as marigolds, in the tire.
- Allow children turns pulling the weeds and watering the plants.
- Keep a journal or create a book about the experience. Take photos of children at different stages of growing flowers. For example, take photos of children preparing the soil and planting the seeds. Involve the children in discussing what they did and record a summary of what they say. Put the photos and the dictation together.
- Add to the journal or book additional photos and dictation as the children are watering and weeding the garden, as the plants begin to grow, and as they begin to develop buds and the buds become flowers.
- Involve the children in deciding what to do with the flowers when they bloom. They may decide to leave them in the garden, pick them to give to someone special, or bring them into the classroom to use on the science/discovery table or for a centerpiece in home living/dramatic play or the dining tables.
- Read the journal or book with the children and invite them to discuss the process of growing flowers.

Additional Learning Goal:

EL3.1 Responds to features of books and print (print knowledge)

Learning Goal:

MT3.1 Participates in exploratory measurement activities and compares objects (seriation)

Activity: How a Flower Grows (See Attachment: Planting a Flower Sequence Cards)

- Make a set of sequence cards that show the growth sequence of a flower. Copy on cardstock, color and laminate or cover the cards with clear plastic adhesive for durability.
- Show the cards to the children and invite them to put them in the correct order.
- Involve children in discussing what is happening at each stage of the growth sequence.

Learning Goals:

- SE3.1 Shows awareness of self as unique individual (preferences)
- **EL3.1** Responds to features of books and print (print knowledge)
- MT1.1 Demonstrates number sense and an understanding of quantity (connection of number, numeral and quantity)

Activity: Graphing Our Favorite Flowers

- Make a graph for three different types of flowers: rose, daffodil and tulip, for example. Use pictures of the flowers with the name of the flower written on it.
- Make name cards for each child in a size that will fit on the graph.
- Ask each child to select his or her favorite flower and tape his or her name card in the correct column on the graph.
- Involve the children in counting the number of children who like each flower.

Our Favorite Flower

5	Jonathan		
4	James		Miguel
3	Kennedy	Trude	Juan
2	Sam	Maria	Sarah
1	Ashley	Elizabeth	Jackson
	rose	daffodil	tulip

Write a summary story.

Our Favorite Flower

Five children like roses best. Three children like daffodils the best. Four children like tulips the best.

Learning Goal:

CD2.4 Holds and manipulates information in memory (short-term and working memory)

Activity: Flower Concentration (Small group activity)

- Make pairs of cards of different types of flowers. Write names of flowers on cards. Laminate or cover with clear self-stick adhesive for durability.
- Turn cards face side up and discuss with children the names of each type of flower, calling attention to differences in color and shape of petals, for example.
- Explain to children that they will play flower concentration. Turn the cards face down and mix them up.
- Allow each child to turn over two of the cards and try to find a match.
- Continue the game, mixing up the cards when it seems that all children can find a match.
- Play as long as children remain interested.

Teacher Notes:

- Store the cards in a clear plastic self-closing bag and place it on the shelf for children to use independently.
- You may need to begin the game by demonstrating turning over one card then another to help children understand how to play.
- Pairs of cards can also be made with empty flower seed packets.
- Remember! There are no winners or losers. The object is to increase children's short-term and working memory skills.

Movement / Physical Education

Learning Goal:

CA1.1 Explores through listening, singing, creating, and moving to music (exploration of music and movement)

Activity: Flower Dance

- Provide scarves or crepe paper streamers in colors such as red, pink, and yellow.
- Discuss with children how flowers might move.
- Play a tape or CD such as "The Waltz of the Flowers" from Tchaikovsky's Nutcracker Suite. Substitute another waltz if this one is not available.
- Invite children to move like the flowers.

Activity: Ring around the Roses

 Play Ring around the Roses with children. This is a good game to play outdoors where there is more space.

Learning Centers

Teacher Note: As children are involved in the learning centers, they are engaging in activities that support all or most of the domains of child development and early learning.

- Social and Emotional Development
- Cognitive Development
- Physical Development and Health
- Language Development
- Emergent Literacy
- Mathematical Thinking
- Science and Technology
- Social Studies
- Creativity and Aesthetics

Art Center

CA2.1 Explores, manipulates, creates, and responds to a variety of art media (exploration of art) Flower Garden Mural

- Begin a class mural on the first day of the study.
- Place a large strip of butcher paper on the wall. Label the paper: Our Flower Garden.
- Explain to children that they can add flowers to the flower garden throughout the study: flowers they draw, pictures of flowers they cut out, and flower seed packets, for example.

Learning Goals:

- ST1.1 Engages in the scientific process to collect, analyze, and communicate information (observations, questions, and predictions)
- ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, and physical objects and materials (nature and the environment)
- CA2.1 Explores, manipulates, creates, and responds to a variety of art media (exploration of art, art concepts)

Painting Flowers

- Bring an arrangement of spring flowers such as violets or daffodils to the classroom. Place flowers in an unbreakable vase with a small amount of water.
- Show the flowers to the children and allow children to look at the flowers and to smell and touch them. Name the flowers. Talk with the children about the stems and the leaves and the color of the petals. Invite them to notice and describe the shape of the leaves and of the petals.
- Place the arrangement of flowers near the easel.
- Place purple, white and green paints on the easel if you have violets, or yellow and green paints if you
 have daffodils.

Teacher Note: Refrain from directing the children to paint pictures of the flowers you have brought in.

Learning Goals:

EL3.1 Responds to features of books and print (print knowledge)

CA3.1 Explores feelings, relationships, and concepts through imitation, pretend play, and sociodramatic play

Block Center

- Invite children to select a vehicle to be the florist delivery truck or van.
- Discuss with children that a florist's shop has lots of flowers. Sometimes people come in and buy flowers and sometimes the flowers are delivered or taken to someone's house or to a church, for example, and that a van or a truck is used to deliver the flowers.
- Involve them in making a small sign to attach to the designated vehicle; **Joe's Florist**, for example. Read the sign to the children.
- Add a few tiny bouquets of plastic or silk flowers to the block center.
- Place index cards and pencils in a small container and add to the center. Children may decide to use
 the cards to take orders or write names and addresses.

Library/Book Corner

- Add books about flowers.
- Add pictures of flowers (laminate or cover pictures with self stick adhesive)
- Post Mary Mary and Ring Around the Roses rhyme chart on wall at child's eye level
- Place the felt or magnetic figures Growing a Flower Sequence Cards on a storyboard. Observe children to see if they put the cards in order.
- Add the teacher-made book: Red Rose, Red Rose, What Do You See?

Learning Goal:

CA3.1 Explores feelings, relationships, and concepts through imitation, pretend play, and sociodramatic play (exploration of drama)

Home Living/Dramatic Play

- Add real flowers. Place real flowers in an unbreakable vase with small amount of water on a table in the center.
- Add Flower Shop Prop Box: plastic vases, silk or plastic flowers, ribbons, cards, floral tape, blunt-tip scissors, order forms, index cards, pencils, cash register, telephone, apron
- Add Floral Arrangements props: Place clay or florist Styrofoam in the bottom of a small box or basket
 and secure it to the bottom of the container with potter's clay or florist wire. Provide a variety of silk or
 plastic flowers and greenery. Encourage children to arrange flowers as they choose.

Learning Goal:

PH2.1 Demonstrates fine-motor strength, control, and coordination (hand-eye coordination, grasp and manipulation)

Manipulatives

Activity: Flower Lacing Cards

- Cut pictures of flowers out of magazines or see attachment and glue to 5 x 7" pieces of poster board. Laminate or cover with clear self-stick adhesive for durability.
- Punch holes ½" from the edge and 1" apart around the edge of each board.
- Provide 36" lengths of ¼" wide cloth ribbon for lacing.

Sand table or tub

Activity: Rock Garden

- Add river rocks about the size of a quarter (or can use sand).
- Add small silk or artificial flowers so children can create gardens.
- Add gardening gloves, a small rake and shovel and a watering can (no water).

Learning Goals:

ST1.1 Engages in the scientific process to collect, analyze, and communicate information (observations, questions, and predictions)

ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, and physical objects and materials (living things)

Science/Discovery

- Place a variety of flowers on the science/discovery table for children to examine and explore. Add a magnifying glass. Involve children in comparing the color, shape, size and smell of each. Help them identify the different parts of the flower: stem, leaves, and petals, for example.
- Place the flowers children have planted on the table. Encourage children to observe the flowers they are growing and to discuss the growth process.

Quiet Corner

Learning Goal:

SE2.1 Experiences, expresses, and regulates a range of emotions (emotion regulation)

- Create a quiet corner in your classroom; a place where children can go to be alone and to get away from the stresses of group living.
- Place soft items in the quiet corner. Carpet on the floor, soft pillows, and soft and cuddly stuffed animals or dolls are examples.
- Discuss with children when they might want to go to the quiet corner. When they are angry and need to get away from the source of their anger? When they are sad and need to be alone? When the room gets too noisy and they need a quiet spot?
- Explain to children that the quiet corner is for one child at a time

Transition Activities

Learning Goal:

CD2.2 Shows flexibility in adjusting thinking and behavior to different contexts (adjusting behavior to match context)

Activity: What Color Flower Are You?

- Use the cards from the Flower Concentration Game.
- Place the cards in a bag or basket.
- Draw one out and say, "If you are a red rose, you may go to wash your hands." Children wearing something red will transition to the next activity.

Activity: Find Your Flower Friend

- Use the cards from the Flower Concentration Game.
- Give each child a card, making sure two children have the same card.
- Say to one child, "Isaac, find your flower friend." All children will hold up flower cards and Isaac will
 find his partner and the two children will transition to the next activity.
- Continue this activity until all children have found their partners and have transitioned to the next activity.

Teacher Note: If there are an odd number of children, you have a card and find your friend.

Family Connection and Engagement

Send home a note to parents stating for the next few days, the children will be learning about flowers. Suggest some ways families can be involved in the topic of study:

- Visit a "flower place" with their child: flower shop, stores where flowers are sold, landscape nursery, for example, or look at flowers in your own yard. Talk with your child about the names of the flowers, the colors, and the parts of the flower they see (stems, leaves, blooms).
 - o Call attention to flowers you see as you are driving around your community.
 - Involve your child in planting flowers.
 - o Invite families to send flowers from their yard or artificial flowers to the classroom.