Facilitator’s Guide
Learning Environments

About This Workshop

This workshop is designed to help you share teaching strategies with family child care educators on setting up rich and stimulating learning environments for science exploration. When educators carefully plan their science learning environments, it engages children’s curiosity and motivates them to experiment, test, and pursue their own questions and interests.

This 1½-hour workshop features a short video of a family child care educator engaged in exploring the PEEP science unit on color. As facilitator, you’ll lead a discussion of the three main teaching strategies illustrated in the video and encourage participants to share their own experiences. The workshop concludes with a “Try It!” exercise.

Preparing Ahead of Time

There are several things you should do to prepare to lead this workshop:

- **Review this Facilitator’s Guide**, familiarizing yourself with the teaching strategies so you can share them in a natural, conversational way instead of reading them. Rehearse and fine-tune your presentation to “make it your own.”

- **Watch the video** ahead of time and answer the questions in the Workshop Notebook—these are questions you’ll be asking participants. (The Workshop Notebook appears at the end of this Facilitator’s Guide.) Do the “Try It” exercise at the end of the Notebook as well.

- **Obtain and test the technology** you’ll be using. Will you be sharing the video full-screen from a computer or using a projector?

- **Use a flip chart or whiteboard** for listing the workshop agenda and key teaching strategies to be covered as well as for recording comments.

- **Photocopy two handouts** for each participant: the Workshop Notebook (found at the end of this Facilitator’s Guide) and the Teaching Strategies (a separate download, which is on the same Web page as this Facilitator’s Guide.)
**Logistics: Agenda, Handouts, and Partners**

Tell participants that they'll watch a short video and discuss three main teaching strategies for setting up learning environments. Working in pairs, they'll discuss the video and their own teaching experiences. The workshop will conclude with a “Try It!” exercise.

Pass out the Workshop Notebook and have people choose a partner to work with during the workshop.

**Sharing the Workshop’s Learning Goals**

Read the session’s learning goals to participants. They will:

- identify different types of learning environments, indoor and outdoor, that can contribute to children’s color explorations.
- design spaces intentionally to ensure that they encourage hands-on learning and facilitate exploration.
- set up an array of learning environments that will support many different types of learning.
- turn opportunities throughout the day into occasions for spontaneous learning.

**Workshop Agenda**

- Introduce Learning Environments (5 min.)
- Watch and Discuss the Video (10 min.)
- Teaching Strategy: Planning a Learning Environment (15 min.)
- Teaching Strategy: Offering Choices (15 min.)
- Teaching Strategy: Encouraging Exploration Throughout the Day (15 min.)
- Watch the Video Again (15 min.)
- Try It! Exercise (10 min.)
- Wrap-Up (5 min.)
Introduce Learning Environments (5 min.)

Welcome the participants. Introduce yourself and share your background and experience. Then discuss learning environments and how they contribute to children’s science experiences and discoveries using the outline below.

What is an effective learning environment?

- A safe and well-organized learning environment is full of sensory (visual, touch, hearing, and kinesthetic) opportunities.
- It offers children a variety of experiences, giving them the freedom to explore what captures their attention. For the family child care educator, it can include spaces in the home, the yard, or local park/outdoor play areas.
- Traditional learning centers, like a library corner, block center, or dramatic play area, can be modified or changed so they serve as color exploration centers.
- Temporary, flexible spaces can also be created or replaced as needed—whether they are indoor or outdoor areas. A feature of many family child care homes is the flexibility to set up areas that can be changed back to family spaces at the end of the day or week.
- Learning environments for exploring the science of color can be used for specific guided activities or opened up for free exploration.

How does a learning environment encourage science exploration?

- Science exploration is about direct experience and hands-on investigation. Learning centers allow children to:
  - explore on their own time and in their own way.
  - look at, touch, and manipulate objects.
  - build their understanding by repeating an activity many times.

- A variety of different spaces and materials can contribute to learning, including:
  - open spaces for energetic explorations.
  - quiet spaces for reflection, reading, or time by oneself.
  - yards and playgrounds for outdoor investigations.
Watch and Discuss the Video (10 min.)

First, read aloud the three teaching strategies you’ve written on a flip chart or whiteboard:

1. Planning a Learning Environment
2. Offering Choices
3. Encouraging Exploration Throughout the Day

Next, introduce the video:

- You’ll watch a short video of a family child care educator (Kathy) exploring the PEEP science unit on color.
- What do you notice about the teaching strategies modeled? (Participants will watch the video a second time later on.)

After watching:

- Ask for general comments and write insights and observations on a flip chart or whiteboard.

Teaching Strategy:
Planning a Learning Environment (15 min.)

Why is planning a learning environment an effective teaching strategy?

A well-organized, intentionally planned learning environment encourages children to explore with specific materials and learning goals in mind.

- **Modify your permanent learning spaces or create flexible ones.** Your permanent learning centers, such as a block, dramatic play, art, or library center, can be tailored to your science explorations.
  
  **Example:** If you add paint color samples, buttons, and bottle tops to your block center—which already contains many colorful objects—you’ve turned it into a color-sorting center. A window can become a color and light center, with color paddles and transparencies, and perhaps a hanging prism.
Use learning environments for both guided activities and free exploration. A learning center can double as a setting for an educator-guided activity that focuses on a specific investigation as well as one that offers free exploration.

**Example:** You might lead a guided activity in which children draw outlines of their hands and use multicultural crayons to match their own skin tones. After the activity, if you leave the crayons and paper out, children can revisit these materials and explore on their own.

Work with what you have. Creating a rich learning environment in which to explore colors doesn’t take a lot of additional materials. After all, colors are all around us—every inch of your space holds potential for an adventure with color.

Organize the space and materials. To help you create a dynamic environment for science exploration, ask yourself some questions that will help inform the activities you choose, the spaces you set up, and the materials you make available to children:
- What do I want children to learn about color?
- What and how will I engage the children? What are their interests, abilities, and cultural backgrounds?
- Do I want children to be sitting, standing, or both?
- Does the activity require a lot of space?
- Is the activity messy?
- Will the activity work differently indoors and outdoors?
- What other props will support the children’s learning about colors?

Place materials in accessible locations.
- If materials such as paints, food coloring, and water are easily reachable, in appropriate containers, and at the right height for children, they will feel comfortable working and will be drawn to experiment.
- Simple rules will help them develop a sense of responsibility for the materials.

Plan for messes.
- Science can get messy. If children are mixing paints or food coloring, spills are inevitable.
- Children need the freedom to explore materials in a center with as few restrictions as possible. Planning for mishaps helps eliminate some of the warnings and reprimands that can interfere with a young scientist’s discoveries.
- Asking children to help in any cleanup can also increase their sense of responsibility.
**Make the most of your outdoor spaces.**

- Not all home-based educators access to a yard, but local parks and other outdoor spaces can provide children with dynamic learning experiences. **Example:** Children can search for colors in nature or collect green leaves and arrange them from lightest to darkest. You can bring trays with art supplies outside so children can paint what they see.
- The outdoors is also a great canvas for your more messy adventures. **Example:** Children can use chalk, finger paints, food coloring in water, and other drippy substances without worrying about spills.
- Outdoor activities are also great for children who are kinesthetic learners and need lots of opportunities to move. **Example:** You might make the whole playground your learning environment as you say, *I spy something red near the swing set—can you find something red, too?*

**Checklist of Major Points**

Before moving on, make sure your discussion has touched upon these points:

- Be intentional about setting up a varied and flexible learning environment that allows children to explore in different ways and ensures that their learning is engrossing and memorable.
- Setting up a dynamic learning environment does not require special material.
- Making materials accessible to children helps them feel comfortable and to become more independent learners.
- Make the most of the great outdoors. Outdoors is the perfect place to get messy and to be really active.

**Pairs Share Experiences**

With their partners, ask participants to reflect on their own experiences, answering the following questions in their Workshop Notebook. After 3 or 4 minutes, ask for volunteers to share their thoughts with the group.

- What types of permanent indoor learning environments exist in your home child care?
- What is your outdoor space like? What activities seem to work best outdoors?
- What kinds of temporary learning centers have you created—indoors and outdoors?
- Does your space present any challenges? How have you overcome them?
Teaching Strategy: Offering Choices (15 min.)

Why is offering choices an effective teaching strategy?

Children appreciate options. Flexibility and choice are key when setting up a learning space. Offer children different and varied experiences, and let them follow their interests. This strategy not only helps address a child's individual needs, it also helps children to become independent learners.

Spaces
You already have learning centers in your home—spaces designed for specific types of exploration. Help children become familiar with what happens there and the different choices available to them. You can use cardboard boxes, rugs, or even chalk or tape to create temporary learning spaces, both indoors and outdoors. Learning areas can also be tables with chairs or just a corner of a room. You can adapt these spaces for learning about colors in a variety of ways:

- **Open space**, whether indoors or outside, allows children to move their bodies. Children can play group games like Red light, Green light or go on a color hunt.
- **Water areas**, either the kitchen sink or a water table, are great places to experiment with food coloring or discover that colors change when wet.
- **Rugs** let children get comfortable for read-alouds and sorting items by color.
- **Tables** are a natural location for spreading out and working on color-related activities.
- **The library area** lets children browse through and read color-related books.
- **The art area** gives children access to easels, smocks, paper, crayons, markers, and paints.
- **Quiet areas** give children a place to retell stories about colors and/or spend a few peaceful moments looking through and exploring color transparencies.
- **Sensory areas** are ideal for hands-on activities using clay, foam, fabrics, and other textured materials in a variety of colors.
Materials
Offer a choice of stimulating and interesting materials. Different types of materials encourage different types of exploration.

- **To experiment with mixing colors**, you can create one station where children mix paints, and another station where they'll mix colored water, using pipettes or eyedroppers. They may naturally gravitate to one station or the other. After they've explored both, you'll have a great opportunity for a discussion about how mixing paint and mixing colored water are similar and different.

- **For a color sorting station**, be creative in the types of items you set out for sorting: crayons, paint chips, building blocks, small toys, yarn, leaves, pebbles, and twigs. Or set up a sorting station with materials you know children are especially drawn to.
  
  *Example:* If a child spends the majority of his/her time in the play kitchen, prepare the area with dishes and utensils of different colors to sort.

- You can add variety and focus children's learning by **adding or taking away specific materials** on different days.

- **Remember to be selective, however**—too much choice can be overwhelming for young children. For instance, if your learning center focuses on creating different shades of a single color, set out just one color.

Checklist of Major Points
Before moving on, make sure your discussion has touched upon these points:

- Learning centers let you offer children a choice of activities. They are a great way to respond to different interests and learning styles.

- You can create many learning centers within one home child care setting that can be adapted for learning about color.

Pairs Share Experiences
With their partners, ask participants to reflect on their own experiences, answering the following questions in their Workshop Notebook. After 3 or 4 minutes, ask for a few volunteers to share their thoughts with the group.

- What types of learning centers have been most effective in your setting?
- What have you done with your space to make it varied and to stimulate the curiosity of children with different interests and abilities?
Teaching Strategy:  
Encouraging Exploration Throughout the Day (15 min.)

Why is encouraging exploration an effective teaching strategy?

- Science is all about investigation and discovery; it’s hands-on and requires that children learn through experimentation and trial-and-error.
- As you explore colors, make sure some of your learning environments support open-ended exploration, so children can follow their own interests, explore further, and make new discoveries. (At other times, you can use this same learning center as the setting for guided activity focused on a specific investigation.)

The following strategies will help encourage learning everywhere:

- **Allow lots of free exploration.** This may lead children down new and perhaps unexpected paths, and help them become invested in learning about colors.  
  **Example:** You may have a learning center with flashlights and colored water in bottles. One child may decide to experiment by using the flashlight on other objects in the room, testing whether plastic cups or towels let light shine through them the way the bottles do.

- **Follow children’s lead.** Science exploration works best when you are following children’s interests and addressing their questions—that guarantees they’ll be engaged and motivated. They will also become more confident in their abilities, and develop leadership skills and independence.  
  **Example:** A child notices his shoes are brown and so are his friend's. Take a minute to have all the children report on the color of their shoes. If time allows, make a quick chart to show the results of your impromptu shoe investigation.

- **Integrate color learning throughout the day.** Everyday routines offer an easy way to introduce colors.  
  **Example:** During snack time, discuss the colors on each plate. As you line up, do so by the color of children’s shirts.

- **Use the whole space as a palette for learning.** Even the walls, doors, and floors around you offer opportunities for learning about color.
Example: Try color explorations that center on the room children are in. Have them hunt for colors on the walls, use colored tape to make patterns on the floor, and put colored transparencies over the window to create a collage of color and light.

Checklist of Major Points
Before moving on, make sure your discussion has touched upon these points:

- As you investigate colors, make sure that some of your learning environments support open-ended exploration, so children can follow their own interests.
- Let children drive the learning. If the group is interested in rainbows, for instance, let rainbows be a focus.
- Integrate learning into your everyday routines, such as when children are lining up or during snack time.

Pairs Share Experiences
With their partners, ask participants to reflect on their own experiences, answering the following questions in their Workshop Notebook. After 3 or 4 minutes, ask for a few volunteers to share their thoughts with the group.

- Can you share a time when you followed a child's lead and a spontaneous learning moment occurred?
- In what surprising places have learning moments happened in your program?
- How do you encourage learning and discovery during your daily routines—while taking a walk, for example, washing dishes, or setting the table for lunch?

Watch the Video Again (15 min.)
Before watching, have participants turn to the Video Viewing section of the Workshop Notebook, where they can take notes and respond to the following questions. After viewing, go over the questions from the Workshop Notebook, which are also listed below:

Teaching Strategy: Planning a Learning Environment

- What were some of the different learning environments featured in the video?
- How did Kathy make these environments welcoming and accessible to children?
Teaching Strategy: Offering Choices

- Which learning centers seemed to generate the most excitement among children?
- Can you think of any other ways Kathy could use her existing learning centers to explore color?

Teaching Strategy: Encourage Exploration Throughout the Day

- What learning moments seemed spontaneously driven by children, if any?
- Were there examples of Kathy integrating color exploration throughout the day?

Try It! Exercise (10 min.)

Have participants turn to the "Try It!" section of the Workshop Notebook. Tell them that, with their partners, they'll brainstorm a stimulating and varied learning environment in which to explore color.

Wrap-Up (5 min.)

- Invite participants to jot down three things that they want to try from today’s workshop. Ask volunteers to share what they wrote down.
- Pass out the Teaching Strategies handout, which summarizes today’s learning.
- Note that the Explore Color curriculum for family child care educators is on the PEEP Web site (www.peepandthebigwideworld.org). (This information also appears at the end of the Teaching Strategies handout.)
- Thank participants for attending, pass out the evaluation form, and encourage them to fill it out.

For more information on learning environments
There are additional Teaching Strategy PDFs on the PEEP Web site along with instructional videos. These illustrate learning environments related to the other PEEP science units: Plants, Water, Shadows, Ramps, and Sound.

For more videos and information on other topics
In addition, the Web site offers Teaching Strategies and videos on other professional development topics: Learning Environments, Documentation and Reflection and Science Talk.
Workshop Notebook

Learning Environments

Pairs Share Experiences

Think about your own experiences and jot down answers to the following questions. Discuss them with your partner.

Teaching Strategy: Planning a Learning Environment

- What types of permanent indoor learning environments exist in your home child care?

- What is your outdoor space like? What activities seem to work best outdoors?

- What kinds of temporary learning centers have you created—indoors and outdoors?

- Does your space present any challenges? How have you overcome them?
Teaching Strategy: Offering Choices

- What types of learning centers have been most effective in your setting?

- What have you done with your space to make it varied and to stimulate the curiosity of children with different interests and abilities?

Teaching Strategy: Encouraging Exploration Throughout the Day

- Can you share a time when you followed a child's lead and a spontaneous learning moment occurred?

- In what surprising places have learning moments happened in your program?

- How do you encourage learning and discovery during your daily routines—while taking a walk, for example, washing dishes, or setting the table for lunch?
Video Viewing Questions

Once you’ve watched the video a second time, jot down your responses to the following questions, and discuss with your partner.

Teaching Strategy: Planning a Learning Environment

- What were some of the different learning environments featured in the video?

- How did Kathy make these environments welcoming and accessible to children?

Teaching Strategy: Offering Choices

- Which learning centers seemed to generate the most excitement among children?

- Can you think of any other ways Kathy could use her existing learning centers to explore color?

Teaching Strategy: Encouraging Exploration Throughout the Day

- What learning moments seemed spontaneously driven by children, if any?

- What are some examples of Kathy integrating color exploration throughout the day?
Try It!

With your partner, brainstorm ideas about what would make a varied and stimulating learning environment for exploring color:

- How would you set up and design your permanent learning centers to double as color-learning centers?
- What temporary centers could you create, indoors and outdoors, to spark children’s interest and exploration of color?

Sketch out and label your learning environment below (or write down your learning centers as a list). What activities and materials would you feature to encourage free exploration of color?
Workshop Evaluation
Thanks for your participation. Please share your impressions below.

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<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
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<td>I will be able to apply what I have learned.</td>
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<td>The workshop leader was knowledgeable.</td>
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<td>Participation and interaction was encouraged</td>
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How would you rate this workshop overall?
Excellent  Good  Average  Poor

What was most helpful about this workshop? Why was it helpful?

What suggestions do you have to improve this workshop?