Workshop Resources

Guidelines for Excellence Early Childhood Environmental Education Programs



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Early Childhood Environmental Education Programs: Guidelines for Excellence

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Early Childhood Environmental Education Programs: Guidelines for Excellence –

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Education We Need for the World We Want

Workshop Resources Early Childhood Environmental Education Programs: Guidelines for Excellence

Workshop Overview

In this workshop, participants will be introduced to environmental education for young learners, focusing on ages three through six. If you follow the module as outlined, the workshop will take approximately 5 hours to complete, not counting breaks.

Workshop Background

This workshop introduces participants to <u>Early Childhood Environmental Education</u> <u>Programs: Guidelines for Excellence</u>. These Guidelines comprise a set of recommendations for developing and administering high-quality, early childhood environmental education programs. These recommendations provide a tool that can be used to ensure a firm foundation for new programs or to trigger improvements in existing ones. The overall goal of these guidelines is to promote a superior educational process leading to the environmental quality that people desire.

Workshop Objectives

- Participants identify key characteristics of high-quality, early childhood environmental education programs
- Participants describe how environmental education can help address early childhood best practices such as those set by Head Start

Materials Needed

- ✓ Projector and PowerPoint presentation (optional)
- ✓ Chart paper, markers, tape (enough for at least six groups)
- ✓ Construction paper, yarn, scissors, glue, markers, crayons, etc. (enough for at least six groups)
- ✓ Copies of Early Childhood Environmental Education Programs: Guidelines for Excellence for each participant
- ✓ Journals for each participant (e.g., blue books, notebooks, sheets of paper stapled together)
- One early childhood environmental education activity guide or copies of at least two early childhood environmental education activities (e.g., Project Learning Tree's Environmental Experiences for Early Childhood, Project Wild's Growing Up Wild, Sharing Nature with Young Children, National Wildlife Federation programs) for each pair of participants
- ✓ Copies of handouts or learning station supplies:
 - Handout #1: Learning Station A—Copies of Activity #1: Focus on Senses—Taste (one for each group and an extra, just in case)
 - Handout #2: Learning Station A—Copies of Activity #2: Sense of Smell (one for each group and an extra, just in case)
 - Scent containers: Gather together at least three old film canisters or other small containers with tight fitting lids. Place a cotton ball in the bottom of each container. Place a few drops of a vanilla abstract on the cotton ball in one

container. Replace the lid on the container. Repeat the process with at least two different scents (e.g., root beer abstract, licorice abstract)

- Handout #3: Learning Station A—Copies of Activity #3: What's in a Question? (one for each group and an extra, just in case)
- Handout #4: Learning Station A—Copies of Activity #4: Sense of Place (one for each group and an extra, just in case)
- Handout #5: Learning Station A—Copies of Activity #5: What's in a Photo? (one for each group and an extra, just in case)
- Handout #6: Learning Station B—Activity: Early Childhood Self-Assessment (one for each group and an extra, just in case)
- Handout #7: Learning Station B—Early Childhood Self-Assessment (one copy for each participant)
- Handout #8: Learning Station C—Activity #1: Young Children, Family Culture, and Nature (one for each group and an extra, just in case)
- Handout #9: Learning Station C—Activity #2: Messages in a Picture (one for each group and an extra, just in case)
- Handout #10: Learning Station D—Activity: Outdoor Play (one for each group and an extra, just in case)
- Handout #11: Learning Station E—Activity: Designing Outdoor Learning Spaces (one for each group and an extra, just in case)
- Handout #12: Learning Station F—Activity: Stephanie, Emma, and Amy Discovered Some Caterpillars in the Garden (one for each group and an extra, just in case)
- Handout #13: Workshop Evaluation Form

Sample Workshop Agenda

Welcome, Introductions, and Logistics Icebreaker Project Background Getting Started—Jumping into Early Childhood Environmental Education A Walk through the Guidelines Diving into the Key Characteristics—Learning Stations Curriculum Comparisons Pulling It All Together Final Thoughts, Questions, and Workshop Evaluation

Welcome, Introductions, and Logistics

10 minutes

Icebreaker

45 minutes

Depending on the audience, use Draw an Environmental Educator as an icebreaker, or pick one of your favorites. If possible, use the icebreaker as both an opportunity for participants to get to know one another and to begin the process of thinking about what environmental education means in early childhood education settings.

Activity: Draw an Environmental Educator

This activity encourages participants to talk about the characteristics of an environmental educator. It can be used as an icebreaker activity or as an engagement activity if workshop

participants already know one another. In small groups, participants are asked to illustrate an environmental educator. As an alternative, ask participants to illustrate the ideal early childhood environmental education program or setting.

Materials

- ✓ Chart paper and a variety of colored markers or crayons for each group
- ✓ Construction paper, yarn, scissors, glue, markers, crayons, etc.

Procedure

- 1. Divide participants into small groups (three to five participants per group).
- 2. Give each group a large piece of chart paper, a variety of colored markers or crayons, and other materials (e.g., construction paper, yarn, scissors, and glue).
- 3. Ask participants to illustrate an environmental educator. As an alternative, ask participants to illustrate the ideal early childhood environmental education program or setting. It is best not to clarify your instructions. You want the group to be as creative as possible.
- 4. Give the participants a time limit (it typically takes about 20 minutes for them to draw their environmental educator) and tell them that they will be asked to share their illustration with the other groups.
- 5. When all of the groups have completed their illustrations, ask each group to describe it to the others. Give each group approximately three minutes for their presentations.

Wrap-Up

What are the common threads across the various illustrations? What are some of the key characteristics of an environmental educator (or early childhood environmental education setting)? What surprised you most? Now that you have seen all of the illustrations, what did you miss or underrepresent?

Reflection—Journaling

Look back at your group's illustration. What are your strengths as an early childhood environmental educator? What would you like to work on most to improve your practice?

Project Background

minutes

Provide a short overview of NAAEE, the National Project for Excellence in Environmental Education, and the purpose behind the *Early Childhood Guidelines*. Discuss: What is NAAEE? What is the National Project for Excellence in EE? Why were the *Guidelines for Excellence* series developed? How were they developed? Why *Early Childhood Guidelines?*

Getting Started—Jumping into Early Childhood EE

Tell the group that in a few minutes they will participate in a number of activities that are set up as learning stations around the room. Build off of the previous activity and engage the participants in a short discussion: What do you think the hallmarks are for good environmental education? Turn their attention to early childhood education. What does early childhood

10

90 minutes

education look like? What are some things we should keep me in mind when we teach young children about their environment?

Activity: Learning Stations

In small groups, participants will visit six learning stations that you set up in advance around the room. The stations include activities that ask participants to consider each of the six key characteristics of early childhood environmental education programs as outlined in the *Guidelines for Excellence*. Note: The participants *will not* be told which key characteristic is associated with which station. That will be discussed later after they complete all six stations.

Materials

✓ See the materials lists included in the directions for each station (below)

Procedure

- 1. Using the directions provided below, set up six stations around the room. Stations should be labelled A–F. Each station includes instructions for the participants and a set of activities and discussion questions.
- 2. Each station focuses on at least one element of one of the key characteristics as outlined in the *Guidelines for Excellence*. However, keep in mind that Station A does not correspond to Key Characteristic #1 and Station B does not necessarily correspond to Key Characteristic #2. Later in the activity, after the participants have visited all six stations, they will be asked to match the stations to the appropriate key characteristic.
- 3. Divide participants into six small groups, one group for each station.
- 4. Tell participants that they will work as a group, visiting each station for approximately 10 minutes.
- 5. Tell them that you will announce when it is time to move to the next station, but that they should keep track of their time and should try to complete the assignment at each station within the 10-minute time period.
- 6. After 10 minutes, ask groups to rotate clockwise to the next station. For example, those at Station A will move to Station B, and Station F will move to Station A.
- 7. Keep track of the time and continue the rotations until all of the groups have visited all six stations.
- 8. After all the stations have been completed, ask the groups to sit down. They should remain in their same small group.

Directions for Setting up the Learning Stations

- Set up six small tables around the room. Create a sign and label each table (learning station) with its appropriate letter (e.g., A, B, C). Do not indicate which key characteristic is associated with the letter or the activities for that station
- ✓ Provide chart paper and markers for each learning station
- ✓ Make at least six copies of the station activities or directions (one for each group) and distribute copies to the appropriate learning station
- ✓ For Station B, make individual copies of the self-assessment for each participant and leave them on the table

Station A

Key Characteristic #4: Curriculum Framework for Environmental Learning

Young children are provided opportunities to explore their environment and develop knowledge and skills. Through the use of an environmental learning curriculum framework, educators intentionally foster growth and development across social-emotional, cognitive, physical, and language domains. This learning will lead, as the child matures into adulthood, to environmental literacy.

At this station, participants explore a number of activities that support the development of an early childhood environmental education curriculum.

Materials

- Chart paper, markers, pens or pencils
- Handout #1: Learning Station A—Copies of Activity #1: Focus on Senses—Taste (one for each group and an extra, just in case)
- Handout #2: Learning Station A—Copies of Activity #2: Sense of Smell (one for each group and an extra, just in case)
- Scent containers: Gather together at least three old film canisters or other small containers with tight fitting lids. Place a cotton ball in the bottom of each container. Place a few drops of a vanilla abstract on the cotton ball in the first container. Replace the lid on the container. Repeat the process with at least two different scents (e.g., root beer abstract, licorice abstract, orange abstract, peppermint abstract)
- Handout #3: Learning Station A—Copies of Activity #3: What's in a Question? (one for each group and an extra, just in case)
- Handout #4: Learning Station A—Copies of Activity #4: Sense of Place (one for each group and an extra, just in case)
- Handout #5: Learning Station A—Copies of Activity #5: What's in a Photo? (one for each group and an extra, just in case)

Station B

Key Characteristic #6: Educator Preparation

Early childhood environmental educators are able to plan and implement high-quality, developmentally appropriate programs for young children.

At this station, participants will reflect on their own understandings, skills, and practices as an early childhood environmental educator.

Materials

- ✓ Chart paper, markers, pens or pencils
- ✓ Handout #6: Learning Station B—Copies of Activity: Early Childhood Self-Assessment (one for each group and an extra, just in case)
- ✓ Handout #7: Learning Station B—Copies of Early Childhood Self-Assessment (one for each participant)

Station C

Key Characteristic #1: Program Philosophy, Purpose, and Development

Early childhood environmental education programs articulate an overarching philosophy that guides all program activities. Goals and objectives state how the program meets the needs of young children and their community.

At this station, participants consider the role of culture and family cultural traditions in early childhood environmental education.

Materials

- ✓ Chart paper, markers, pens, or pencils
- ✓ Handout #8: Learning Station C—Copies of Activity #1: Young Children, Family Culture, and Nature (one for each group and an extra, just in case)
- ✓ Handout #9: Learning Station C—Copies of Activity #2: Messages in a Picture (one for each group and an extra, just in case)

Station D

Key Characteristic #3: Play and Exploration

Early childhood environmental education programs ensure opportunities for nature-based play and exploration, both indoors and outdoors.

At this station, participants consider the benefits and barriers to providing opportunities for outdoor play.

Materials

- ✓ Chart paper, markers, pens, or pencils
- ✓ Handout #10: Learning Station D—Copies of Activity: Outdoor Play (one for each group and an extra, just in case)

Station E

Key Characteristic #5: Places and Spaces

Early childhood environmental education programs provide places and spaces, both indoors and out, that are safe, enticing, comfortable, and enhance learning and development across all learning domains.

At this station, participants will begin the process of designing an outdoor learning space.

Materials

- ✓ Chart paper, markers, pens, or pencils
- ✓ Handout #11: Learning Station E—Copies of Activity: Designing Outdoor Learning Spaces (one for each group and an extra, just in case)

Station F

Key Characteristic #2: Developmentally Appropriate Practices

Early childhood environmental education is designed and implemented using established developmentally appropriate practices.

At this station, participants explore ways of encouraging inquiry and consider learning theories and approaches associated with early childhood education.

Materials

- ✓ Chart paper, markers, pens, or pencils
- ✓ Handout #12: Learning Station F—Copies of Activity: Stephanie, Emma, and Amy Discovered Some Caterpillars in the Garden (one for each group and an extra, just in case)

Wrap-Up

- 1. Lead a short discussion about their experiences with the six learning stations.
- 2. Using a round robin or popcorn method of calling on groups, and as time allows, ask if any groups would like to share their work from any of the stations:
 - a. Station A: Short story using the question bubbles
 - b. Station B: Reflections on their self-assessment
 - c. Station C: Cultural traditions poster or captions for the illustrations (e.g., NAEYC)
 - d. Station D: Lists of benefits and barriers to outdoor play
 - e. Station E: Sketch of an outdoor learning space
 - f. Station F: Poem, comic strip, or short story based on Stephanie, Emma, and Amy discover caterpillars

A Walk through the Guidelines

15 minutes

Take a few minutes to orient participants to the *Early Childhood Environmental Education Programs: Guidelines for Excellence.*

Materials

✓ Copies of *Early Childhood Environmental Education Programs: Guidelines for Excellence* for each participant

Procedure

- 1. Hand out copies of *Early Childhood Environmental Education Programs: Guidelines for Excellence*. If possible, have a copy available for each participant. If that isn't possible, participants can share.
- 2. Walk the participants through the guidelines and how they are organized. Give participants 1–2 minutes to become familiar with the publication.
- 3. Point out that the guidelines are organized around six key characteristics.
- 4. Explain that each of the learning stations they just completed represented one of the six key characteristics.
- 5. Point out that they will find a summary of the *Early Childhood Environmental Education Programs: Guidelines for Excellence* on pages 8–9.
- 6. Remaining in their small groups, ask participants to review each of the six stations and determine which key characteristic matches each station.

Wrap-Up

1. Once all of the small groups have matched all of the stations to their key characteristic, bring the whole group back together again.

- 2. Ask for a volunteer to suggest which key characteristic matches Station A. Ask that group or another to provide their reasoning.
- 3. Continue through the stations until there is consensus regarding which key characteristics match which stations.

Reflection—Journaling

Think about the six learning stations. Which activity did you enjoy the most? What made it enjoyable? Which station was the most thought provoking? Why? Each station focused on a different aspect of early childhood environmental education. Pick one and write a 1–2 sentence summary or takeaway message.

Diving into the Key Characteristics

In this activity, participants will have the opportunity to delve into one of the key characteristics in greater depth and connect its content to their own practice.

Procedure:

- 1. Divide the participants into six new groups.
- 2. Assign each group one of the six key characteristics (#1-6).
- 3. Tell the participants that they will be diving deeper into their assigned key characteristic and that they will be responsible for "teaching" that key characteristic to the others.
- 4. Ask each group to take about 15 minutes to become more familiar with their assigned key characteristic.
- 5. Explain that their task is to prepare a two to three minute summary or overview of their assigned key characteristic for the other participants, focusing on aspects that have not yet been discussed in the learning stations activities. In addition, ask each group to provide at least one illustrative example from their own practice that is tied to their assigned key characteristic.
- 6. Stress key points not mentioned by the group for each key characteristic after each has finished their presentation.

Reflective—Journaling

Using their journals, participants should reflect on the six key characteristics and their own early childhood environmental education programs: What are the strengths of your own early childhood environmental education programs? How might you use the key characteristics in your practice?

Digging into Curriculum Materials

50 minutes

In this activity, participants look at how environmental education can be used to develop an early childhood curriculum.

Materials

✓ One early childhood environmental education activity guide or copies of at least two early childhood environmental education activities (e.g., Project Learning Tree's Environmental Experiences for Early Childhood, Project Wild's Growing Up Wild, Sharing Nature with Young Children, National Wildlife Federation programs) for each small group

45 minutes

Procedure

- 1. Now that they have a greater understanding of the guidelines, tell the participants that they will be turning their attention to curriculum materials.
- 2. Ask the participants to think about the activity guides that they typically use or suggest that others use. Do they use just one guide to build their programs and curriculum or do they select from a variety of sources? When they select activities and activity guides, what are they looking for? You'll want to find out to what extent they think about specific learning objectives, goals, and overall fit with national or state standards or guidelines.
- 3. Turn their attention to the *Guidelines for Excellence* and point out places where early childhood environmental education activities or activity guides are mentioned (e.g., pages 15, 23, 33, 34, and 36). Remind them that Key Characteristic #4 outlines a curriculum framework, but doesn't present specific learning activities other than as examples. Depending on the group, you may want to clarify the difference between learning activities or an activity guide and a curriculum.
- 4. Explain that there are a number of activity guides developed specifically for use with young learners (e.g., Project Learning Tree's Environmental Experiences for Early Childhood, Project Wild's Growing Up Wild, Sharing Nature with Young Children, National Wildlife Federation programs). These instructional materials can be a good source for field-tested environmental education activities that could support the development of an early childhood environmental education curriculum.
- 5. Tell participants that they will be looking at activity guides or sample lessons from activity guides with an eye toward building a strong environmental education program that also addresses early childhood curriculum needs.
- 6. For this activity, they will be using Appendix E Head Start—A Checklist for Early Childhood Curriculum (page 69) as their review guide. Spend a few minutes reviewing the checklist.
- 7. Ask participants to work in pairs (two participants per group).
- 8. Distribute an activity guide (or at least two activities from an activity guide) to each group for review.
- 9. Ask groups to take the next 30 minutes to review their assigned activity guide, looking for specific ways that lessons support a quality early childhood curriculum.
- 10. They should take notes and prepare to share their findings.

Wrap-Up

- 1. Ask each group to introduce their assigned activity guide to the rest of the participants and to share some of their findings.
- 2. As different groups share what they found, ask them to reflect on which components of the Head Start checklist are most often represented in the activities they reviewed. What seems to be missing?

Reflective—Journaling

Using their journals, participants should reflect on what it means to create an environmental education curriculum for early learners. How might you use the activity guide or activities you reviewed? If you wanted to create an early childhood curriculum that addressed both the Head Start checklist and environmental education, what seems most important? What seems most challenging? What seems most rewarding?

Pulling It All Together

15 minutes

In this final section of the workshop, participants participate in a Think-Pair-Share activity.

Procedure

- 1. Take a few minutes to summarize the day and go back over the workshop objectives with the participants.
- 2. Ask participants to find a partner and explain that they will be participating in a Think-Pair-Share activity (they will think about the answer to a specific question, share their response with their partner, and then participate in a more general discussion with the whole group).
- 3. Using their journal, ask participants to quietly think about the workshop and answer the following questions:
 - What was your biggest takeaway from the day? What makes it meaningful for your practice?
 - Thinking about the guidelines broadly or collectively, imagine a rating scale of zero to seven—zero would be not developed at all, the middle of the scale would be partially developed, and a seven on the scale would be fully developed and meeting all the guidelines. Where do you think your program or center falls at this point in time? Why do you give yourself that rating? What is one concrete action you could take in the next six months to more fully address the guidelines?
- 4. After a few minutes, ask participants to share their reflections with a partner.
- 5. Bring the group back together again as a whole and ask for volunteers to share any of their reflections.
- 6. Thank the participants for their attention and energy. Ask if there are any final thoughts.

Final Thoughts, Questions, and Workshop Evaluation

20 minutes

Materials:

✓ Handout #13: Workshop Evaluation



LEARNING STATION A

Handout #1—Activity #1: Focus on Senses—Taste

- 1. We understand the world through our senses. Obviously, our sense of taste is important.
- 2. Look at the four pictures. Imagine biting into each, one at a time.
- 3. How do they taste? What words do you use to describe tastes? How are the tastes similar? How are they different?
- 4. Compare your descriptions with the others in your group.











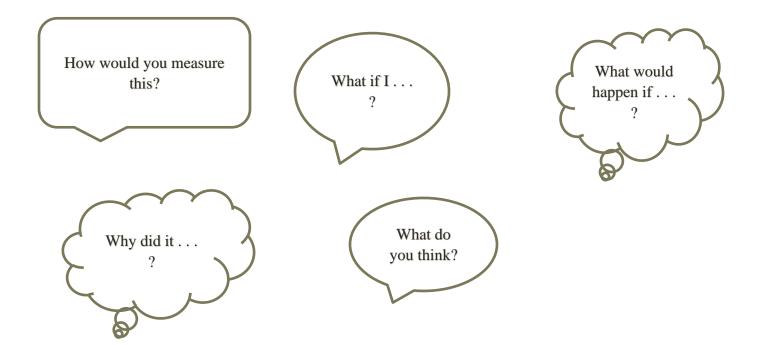
Handout #2—Activity #2: Focus on Senses—Sense of Smell

- 1. On the table there are several containers with lids.
- 2. One-by-one, open the lid and take a whiff.
- 3. Describe the smell without naming it. Does the smell remind you of anything in particular?
- 4. Compare notes with the other members of your group.
- 5. Would you do this activity with young children? Why or why not? How would you modify the activity for young children?
- 6. What are the other senses? How could you provide opportunities for young children to explore each of their senses?



Handout #3—Activity #3: What's in a Question?

- 1. Look at each of the thought bubbles.
- 2. How do they relate to early childhood environmental education?
- 3. Go back through each bubble. Who is speaking or thinking? What type of activities are taking place?
- 4. Using at least three of the bubbles, create a short story that involves two people (two children, a child and an adult, or two adults).
- 5. Sketch your story on your chart paper. Don't forget to take it with you when you move to your next station.





Handout #4—Activity #4: Sense of Place

- 1. Read the following passage.
- 2. What does home mean to you?
- 3. What does sense of place mean to you?
- 4. What are some ways you could support children's development of a sense of place?
- 5. Jot down some of your ideas to share with the rest of the group later.

What does "home" mean to you? Children need to have a sense of belonging in their world. This sense of belonging is first rooted within attachment relationships and family, but extends to a sense of place in the world when children develop an intimate connection with the natural and built environment. When children come to love a place, they want to learn about it and protect it. This love can extend, as children grow, to finding a sense of place within our Earth home.

"Home" takes many different forms for children in the US: urban, rural, suburban, desert, forest, prairie, mountains, wetlands, watershed, or seaside. Educators in different regions can support children's developing sense of place by bringing their bioregion into the classroom or program and by providing as much contact as possible with local nature outside the classroom, in the schoolyard, and beyond.



Handout #5—Activity #5: What's in a Photo?

- 1. Take a look at the photo. What are the children doing?
- 2. Would you include stumps in your outdoor learning area? Why? Why not?
- 3. How might this activity foster growth?





LEARNING STATION B

Handout #6—Activity: Early Childhood Self-Assessment

- 1. Individually, complete the Early Childhood Self-Assessment.
- 2. Once everyone in the group has finished, discuss your self-assessment.
- 3. Were you surprised by any of your responses?
- 4. What do see as personal strengths? What understandings, skills or practices would you like to develop more?
- 5. What qualities—understandings, skills, and practices of an early childhood environmental educator—would you add to this self-assessment?
- 6. Don't forget to take your self-assessment with you when you move to the next station.



Handout #7

Early Childhood Self-Assessment: Early Childhood Environmental Education Programs: Guidelines for Excellence

Carefully reflect on your own understandings, skills, and practices as an early childhood environmental educator. When designing and implementing your early childhood programs, to what extent do you:

childhood programs, to what extent do your	Always	Most of the time	Rarely	Never
Understand that early childhood education and environmental education share an interdisciplinary perspective.				
Support the notion that environmental education takes place in a variety of settings (i.e., schoolyards, laboratory, and field settings, within communities, museums, zoos, demonstration sites or libraries).				
Identify ways in which environmental education can enhance the development of a young learner.				
Respect the process of inquiry and the application of environmental investigations in instruction.				
Seek opportunities to learn essential content and skills in real-world environmental settings or contexts, especially within the communities in which I live.				
Practice questioning, analysis, and interpretation skills.				
Possess the knowledge of environmental processes and systems needed to accurately teach children.				
Apply the necessary skills for understanding and addressing environmental issues.				
Practice personal and civic responsibility.				
Select environmental education materials and strategies that are developmentally appropriate.				
Produce a plan for environmental education instruction that enhances coordination or				



	Always	Most of the time	Rarely	Never
integration across disciplines.				
Identify and use sources of information about instructional materials and other resources including training offered by national, state, and local environmental education and early childhood programs and professional organizations.				
Create safe and conductive learning environments both in and outside the classroom.				
Plan and implement instruction that first links content to the children's immediate surrounds and experience, then expands learners' horizons as appropriate.				
Create a climate for exploring and learning about the environment.				
Create an inclusive and collaborative learning environment.				
Acknowledge the value of diverse cultures, races, genders, social groups, ages, and perspectives.				
Practice flexible and responsive instruction inside and outside.				
Assess a variety of education outcomes, including attitudes, beliefs, actions, and engagement in learning as well as knowledge about the environment.				
Use a variety of assessment tools to evaluate instructional programs, including journaling, data collection, and reflection with colleagues to improve future instruction.				
Engage in a variety of developmentally appropriate assessments such as observation of students, asking clarifying questions, keeping anecdotal records, and keeping student portfolios.				



Carefully reflect on your own understandings, skills, and practices as an early childhood environmental educator. When designing and implementing your early childhood programs, to what extent do you:							
	Always	Most of the time	Rarely	Never			
	-						



LEARNING STATION C

Handout #8—Activity #1: Young Children, Family Culture, and Nature

- 1. Read the following passage as a group and respond to the questions.
- 2. What are some nature-oriented cultural traditions you might encounter in your early childhood programs?
- 3. How have these cultural traditions been honored? What are some other ways these cultural traditions or similar cultural traditions can be honored?
- 4. How might you learn more about the cultural traditions of the children you serve?
- 5. Create a poster that illustrates the role of culture in early childhood environmental education.
- 6. Don't forget to take your poster with you when you move to the next station.

Young Children, Family Culture, and Nature

Young children are embedded in their family culture. The child's cultural background includes the beliefs and practices related to daily life and child rearing (e.g., eating, sleeping, clothing, guidance and discipline, routines, relationships with others) as well as the family's home language and religious, ethnic, political, and geographic characteristics.

Respect a child's culture when planning a program. The goals and objectives of environmental education are shared by most cultures of the world, although some issues can raise controversy. Because many early environmental education activities involve living things and learning through concrete, firsthand experiences, it is important to recognize differences in families regarding attitudes toward their child's handling certain insects or creatures and their reverence toward some animals or plants in nature. Corn or maize is revered in traditional Mexican culture. Similarly, in certain cultural groups—especially in West Africa—using foods such as rice, beans, or other vegetables in art projects is viewed as wasteful. Using alternative materials to food is advisable. Some religions fear snakes and others use snakes in worship. Educators in a classroom with a pet snake should be aware of the child's family's relationship to snakes.

One nature-based preschool allows food for play only if it ends up as food for the school animals or outdoor wildlife. Dried corn in the sensory table feeds the chickens, for instance. Potatoes are not used for prints because they cannot be eaten afterwards. Such respect for food is part of this school's cultural value and reflects the values of the families they serve.

Educators need to inform all families of the proposed activities and valuable outcomes of their child's environmental education programming and encourage their participation. Family members can share stories of their own experiences cultivating plants and taking care of animals. Their participation is valuable during outdoor activities and with small groups indoors. Giving parents suggestions for things to do with their children at home and in their communities enables the whole family to become better observers of nature phenomena.



Handout #9—Activity #2: Messages in a Picture

- 1. Putting on your early childhood environmental educator hat, look at each of the following illustrations.
- 2. As a group, discuss what each picture represents? How might it relate to early childhood environmental education?
- 3. Imagine that each picture is going to be made into a poster. Write a descriptive caption for each picture.
- 4. Don't forget to take your posters and their captions with you when you move to the next station.













LEARNING STATION D

Handout #10—Activity: Outdoor Play

- 1. Play is an essential part of early childhood education. As a group, describe some of the benefits of outdoor play. List them on your chart paper.
- 2. Think about how play is facilitated. As adults, what are some ways you can create opportunities for play, especially play with natural objects and play in the outdoors?
- 3. Exploration outdoors can be seen as messy and dirty and potentially dangerous. Imagine that some of the parents on your advisory board resist the idea of taking children outside to play. Using your chart paper, make a list of the barriers they might express.
- 4. Now, describe ways of reducing or eliminating those barriers or risks. Be as specific as possible.
- 5. Don't forget to take your list of benefits, barriers, and solutions with you when you move to the next station.





LEARNING STATION E

Handout #11—Activity: Designing Outdoor Learning Spaces

- 1. Outdoor spaces come in a variety shapes and sizes. Some are well developed for outdoor learning and play and some are not. Nature Explore has developed guiding principles for the development of outdoor spaces.
- 2. As a group, read through the "Ten Guiding Principles" from Nature Explore.
- 3. What are your reactions to the guideline's principles? Which principles seem most important to you? Are there principles that seem unnecessary?
- 4. What principles would you add?
- 5. Look at the two pictures. Each illustrates an undeveloped outdoor space that could benefit from improvements. Select one and discuss how it could be improved to provide opportunities for outdoor learning and play.
- 6. On your chart paper, sketch the improvements that could be made to the selected outdoor learning space.

Ten Guiding Principles from Nature Explore

Arbor Day Foundation. 2008. *Learning with Nature Idea Book: Creating Nurturing Outdoor Spaces for Children*. Nebraska City: Nebraska (www.natureexplore.org)

- 1. Divide the space into clearly delineated areas
- 2. Include a mix of activity areas
- 3. Give areas simple names
- 4. Identify each area with signs or visual clues
- 5. Be sure every area is visible at all times
- 6. Use a variety of natural materials
- 7. Choose elements for durability and low maintenance
- 8. Maximize beauty and visual clarity
- 9. Personalize the design with regional materials
- 10. Be sure space meets all regulatory standards for your region







LEARNING STATION F

 $26\,|\,{\sf Early}$ Childhood EE Programs: Guidelines for Excellence Workshop Resources



Handout #12—Activity: *Stephanie, Emma, and Amy Discovered Some Caterpillars in the Garden*

- 1. Read the following story as a group and respond to the questions.
- 2. Have you ever encountered a similar scene when outdoors with young children? What were the children doing? What did you do?
- 3. How did the teacher in this story encourage the children's learning? What else might the teacher do to encourage the children's learning?
- 4. How can adults enhance children's opportunities to discover their environment both indoors and outdoors?
- 5. What learning theories or approaches relate to this story? Be as specific as possible.
- 6. Write a poem, draw a comic strip, draft a new story, or find some other way to creatively illustrate the messages learned from Stephanie, Emma, Amy, and their teacher. Be sure to take your creation with you when you move to the next station.

Stephanie, Emma, and Amy Discovered Some Caterpillars in the Garden. They took turns holding them gently and then put them in a small jar. "What do they eat?" they asked a teacher. "We have a book in the classroom that will tell us. I'll go get it," she responded. When the teacher returned, the children had given the caterpillars a big drink—so big that they were floating and not moving. Alarmed, the children thought the caterpillars had died. The teacher helped them pour off the water and the caterpillars began to move again. The teacher explained that caterpillars only need little drinks because they are very little. Together, they looked in a field guide and found that caterpillars are vegetarians—a word the children immediately understood because one of their classmates was a vegetarian. The children gathered bits of leaves to put in the jar. The teacher in this example was responsive to children's interests and questions, and assisted them in finding information they wanted. The teacher helped them solve their floating caterpillar problem, using it as a teachable moment.



Handout #13 Workshop Evaluation

Thank you for your interest in the National Project for Excellence in Environmental Education! Your responses will be used to improve this and other programs supported by NAAEE.

What grade do you give this workshop?	A	1	В	C	2	D)	F	
Why did you give it that grade?									

How strongly do you disagree or agree with the following? Circle one for each.

		rongly Unsure sagree				Strongly Agree			
I will recommend this workshop to colleagues or other professionals.	1	2	3	4	5	6	7	NA	
This workshop was much better than other workshop I have participated in.	s 1	2	3	4	5	6	7	NA	
Within the next year, I intend to									
improve my EE efforts by using the <i>Guidelines</i>	1	2	3	4	5	6	7	NA	
share what I learned with colleagues and other professionals.	1	2	3	4	5	6	7	NA	

Describe three ways you can use the *Guidelines* to improve your own or others' EE efforts:



How can this workshop be improved to better meet your EE, professional, or other needs?

What is your curre	ent profes	sion? Check	all	that apply.					
□ Pre-K–12 teacher		College or university Instructor			Conservation or natural resource professional				
Preservice teacher	ce 🛛 Resource developer 🗆 Othe			Other					
Nonformal educator		Program d	lirec	rector					
Who do or will you	i teach?	Check all that	ар	oly.					
Preschool 9–12			Nonform		nal educators		Conservation or natural resource professionals		
□ K-2	□ Teache	Teachers		College or university Instructors			Families		
□ 3–5	Presert teacher			Program directors	gram directors		Other		
□ 6-8		college or sity		Resource developers			Not applicable		
Number of years y	ou have	been an env	viro	nmental educato	or: Al	oout	years		
Number of student	ts or part		ı ty	pically teach or	reac	h per y	year: About		
The students or pa	rticipant	s you prima	rily	work with com	e fro	m: Ch	eck one.		
Urban	Suburban	🖵 Rura	I	Tribal		Mix of	areas		
		ТНА	NK	YOU!					