Workshop Resources

Guidelines for Excellence Environmental Education Materials



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Environmental Education Materials: Guidelines for Excellence

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Environmental Education Materials: Guidelines for Excellence–Workshop Resources is part

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Education We Need for the World We Want

Workshop Resources

Environmental Education Materials: Guidelines for Excellence

Workshop Overview

In this workshop, participants will be introduced to a set of recommendations for developing and selecting environmental education materials. They will have the opportunity to evaluate instructional materials against these recommendations. If you follow the module as outlined, the workshop will take approximately 6.5 hours to complete, not counting breaks and lunch.

Workshop Background

This workshop introduces participants to <u>Environmental Education Materials: Guidelines for Excellence</u>. These guidelines outline a set of recommendations about selecting and developing quality environmental education instructional materials.

Workshop Objectives

Upon completion of the workshop, participants will be able to

- describe the key characteristics of quality environmental education materials
- apply the *Environmental Education Materials: Guidelines for Excellence* to instructional materials

Materials Needed

- ✓ Projector and PowerPoint presentation (optional)
- ✓ Chart paper, markers, tape
- ✓ Copies of *Environmental Education Materials: Guidelines for Excellence* for each participant
- ✓ Journals for each participant (e.g., blue books, notebooks, sheets of paper stapled together)
- ✓ Copies of activity guides (e.g., PLT, Project WILD, Project WET) for each participant to review
- ✓ Copies of handouts:
 - Handout #1: Summary of the Environmental Education Materials: Guidelines for Excellence
 - Handout #2: Going to the Source's Mouth Worksheet
 - Handout #3: Going to the Source's Mouth Answer Sheet
 - Handout #4: Issue Investigation and Action Taking
 - Handout #5: Building a House of Depth for EE Materials
 - Handout #6: Materials Guidelines Rubric
 - Handout #7: Workshop Evaluation

Sample Workshop Agenda

Welcome, Introductions, and Logistics Icebreaker Project Background Getting Started—Jumping into the Materials Guidelines Getting into the Six Key Characteristics Going to the Source's Mouth To Skew or Not to Skew Investigating an Environmental Issue (Part I) Building a House of Depth Investigating an Environmental Issue (Part II)

Investigating an Environmental Issue (Part III)

Creating a Checklist for Usability Pulling It All Together Wrap-Up, Questions, and Workshop Evaluation

Welcome, Introductions, and Logistics

Icebreaker

15 minutes

30 minutes

Depending on the audience, use a circle map (below) 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 the key characteristics of quality environmental education instructional materials are.

Activity: Circle Map

This activity gets participants talking about the key characteristics of environmental education instructional materials. Participants will create a circle map (see procedure) using the prompt: What should good environmental education instructional materials include?

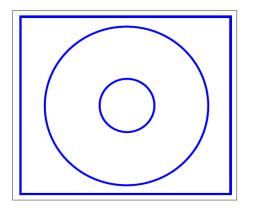
Materials

- ✓ Journals or blank sheets of paper for each participant
- ✓ White board or large piece of chart paper and markers

- 1. Guide the participants through the creation of a circle map template in their journals or on a blank sheet of paper (see illustration below). If possible, demonstrate how to create a circle map by drawing on a white board or on a large piece of chart paper.
- 2. Tell participants that they will be creating a circle map. On a blank piece of paper, they should draw a square (or frame) around the edge of the paper. In the center of the square or frame, they should draw a circle (approximately two to three inches in diameter). Finally, they should draw another, larger circle around the one in the middle. The larger circle should take up the majority of the square or frame.
- 3. In the center of the small circle (center of the frame), they should write the following: *What should good EE teaching materials include?* This is their prompt.
- 4. Ask the participants to spend a few minutes thinking about the prompt: *What should good EE teaching materials include?*
- 5. Direct them to write their answers inside the larger circle.
- 6. In the blank corners (inside the frame, but outside the circle), they should list where they learned or acquired the information they included in the large circle. Examples here might include: colleague, textbook, college class, professional development workshop.
- 7. Give them a few minutes to complete their circle map.
- 8. Once most participants have written several ideas on their circle maps, tell them that their next task will be to compare their maps with others.
- 9. Ask the participants to get up, move around the room, and share their circle map with other participants. This is an opportunity to meet someone new.
- 10. As they meet other participants and compare their circle maps, each participant should try to find at least two instances where other participants included ideas on their circle map that were not included on their own.

- 11. Participants should add these new items to their circle map (assuming they agree with the criteria). They should also write the author's name in the corner, indicating that this is where the idea was acquired.
- 12. Ask the participants to sit down once they have met at least two other participants and added at least two ideas to their circle map.

Circle Map Template



Wrap-Up

- 1. Distribute a one-page *Summary of the Environmental Education Materials: Guidelines for Excellence* to each participant (Handout #1).
- 2. Ask participants to read through Handout #1 and mark which elements of the *Summary of the Environmental Education Materials: Guidelines for Excellence* were illustrated by their Circle Map. What was missed?

Project Background

15 minutes

Provide a short overview of NAAEE, the National Project for Excellence in Environmental Education, and the purpose behind the *Environmental Education Materials: Guidelines for Excellence*. Be sure to include information that addresses these questions: What is NAAEE? What is the National Project for Excellence in EE? Why were the *Guidelines for Excellence* publications developed? How were they developed? Why were the *Environmental Education Materials: Guidelines for Excellence* written?

Getting Started—Jumping into the Materials Guidelines

5 minutes

Activity: A Walk through the Guidelines

In this activity, take a few minutes to orient participants to the *Environmental Education Materials: Guidelines for Excellence* and how they are organized.

Materials

✓ Copies of *Environmental Education Materials: Guidelines for Excellence* for each participant

- 1. Hand out copies of Environmental Education Materials: Guidelines for Excellence (2021).
- 2. Walk the participants through the *Guidelines* and how they are organized. Give participants one to two minutes to become familiar with the publication.

3. Tell the participants that the guidelines include six key characteristics with essential guidelines and indicators articulated for each key characteristic. Today we will spend time exploring each key characteristic.

Getting into the Six Key Characteristics

Key Characteristic #1

50 minutes

Accurate and Inclusive. Environmental education materials are accurate and inclusive in describing environmental conditions, concepts, attitudes, processes, challenges, and decisions, and in reflecting the diversity of perspectives on them.

Lead a short discussion of the notions behind accuracy and inclusion. When they think about environmental education and instructional materials, what does it mean for materials to be accurate? How would they describe "inclusion?" If they haven't brought up the idea of balance, ask them how balance might play out in instruction and instructional materials? Is balance the same thing as equal time? What is the relationship between accuracy, inclusion, and balance? Turn your attention back to accuracy. Ask the participants how they might determine if instructional materials are accurate? What are some of the criteria?

Activity: Going to the Source's Mouth

Working in small groups (2–3 people per group), participants analyze a series of statements that might be included in instructional materials about air pollution. They will determine whether they would use this information as is and explain their thinking.

Materials

- ✓ Handout #2: Going to the Source's Mouth worksheet
- ✓ Handout #3: Going to the Source's Mouth answer sheet

Procedure

- 1. Divide participants into small groups (two to three participants per group).
- 2. Tell the participants that they will be analyzing a series of statements that might be included in an activity guide focusing on air pollution. Their task, as outlined in the worksheet instructions, is to determine if they would use the information as is and to explain their thinking.
- 3. Give each group a copy of Handout #2: Going to the Source's Mouth.
- 4. Ask participants to complete the worksheet as a group.
- 5. After most of the groups have completed their analysis, give each group a copy of Handout #3 or project it on a screen.
- 6. Ask them to look over the answer sheet. Were there any surprises?

Wrap-Up

Ask participants to refer to the bullet points for Guideline 1.1. Would any of their considerations change? When might you use factually inaccurate information? If the activity guide includes factually inaccurate information, perhaps in the Teacher Background section or in graphs or data sheets, would that keep you from using that activity guide?

Activity: To Skew or Not to Skew

As a large group activity, participants analyze a short passage relating to population and identify words that they believe skew or slant the information.

Materials

✓ Sample passage, Lesser Tribble, projected on the screen so that all can see it

Procedure

- 1. Tell the participants that they will be analyzing a short passage relating to population and identifying words or phrases that they believe skew or slant the information.
- 2. Project the passage (see below) on the screen and read it aloud to the participants.
- 3. Take each sentence one at a time and ask participants to identify any words or phrases they believe skew or slant the information presented.
- 4. Ask participants to explain their thinking.

Lesser Tribble

Experts are divided on the consequences of the recent decline in the population of the lesser tribble. Although this obnoxious and invasive animal has been the bane of farmers and ranchers since its introduction 25 years ago, the 40 percent population drop in the last year has even some tribble-haters worried. It is feared that this decline could foreshadow the extinction of this irresistibly cute, yet horribly destructive species. This would be disastrous for manufacturers of tribble houses and designer tribble food. In addition, precious red-tailed hawks and struggling feral cats have come to depend on wild tribbles for their food supplies in recent years; their unfortunate decline could spell doom for these predators.

Lesser Tribble [Words and phrases that skew the information are underlined.]

Experts are divided on the consequences of the recent decline in the population of the lesser tribble. Although this <u>obnoxious</u> and invasive animal has been the <u>bane</u> of farmers and ranchers since its introduction 25 years ago, the 40 percent population drop in the last year has even some tribble-haters worried. It is feared that this decline could foreshadow the extinction of this <u>irresistibly cute</u>, <u>yet horribly</u> <u>destructive</u> species. This would be <u>disastrous</u> for manufacturers of tribble houses and designer tribble food. In addition, precious red-tailed hawks and struggling feral cats have come to depend on wild tribbles for their food supplies in recent years; their unfortunate decline could spell <u>doom</u> for these predators.

Reflection—Journaling

Using their journals, participants should reflect on their own programs and the instructional materials they use: How do you know that the materials you use are accurate and inclusive? To what extent do you think that lack of accuracy, inclusion, and balance are a concern in environmental education materials and instruction?

Key Characteristic #2

50 minutes

Emphasis on Skills-Building. Environmental education materials build lifelong skills that enable learners to arrive at their own conclusions and make reasoned decisions about environmental challenges and opportunities.

Activity: Investigating an Environmental Issue (Part I)

In this activity, participants will think about how they would involve learners in skill development, particularly the development of skills related to issue investigation and action taking.

Materials

- ✓ Chart paper and markers for each group.
- ✓ Handout #4 Issue Investigation and Action-Taking

Procedure

- 1. Introduce the topic of skills by leading a short discussion. Ask the participants what types of skills are most important for environmental education? Record their answers on a white board or a large piece of chart paper.
- 2. After a few minutes, tell them they will be designing an activity, like one that might be found in an activity guide. Their activity should focus on water quality.
- 3. Tell the participants that their activity should focus on skills development, including the skills needed for issue investigation and action taking.
- 4. Form small groups (three to five participants per group) and give each group a copy of Handout #5.
- 5. Using Handout #4, ask participants to outline an activity that develops skills, especially issue investigation and action-taking skills. Remember, the activity should relate to water quality. Tell them that they should be sure to indicate the audience and setting. They should also list or highlight each skill that is being addressed.
- 6. After about 20 minutes, ask groups to share their work with the other groups. Presentations should be short, approximately two minutes each.

Wrap-Up

After all the groups have presented, give participants a few minutes to compare their activities to the skills outlined in the guidelines (Key Characteristic #2, pages 31-44). How well did their activities reflect these guidelines? Were there any surprises? What did they include that isn't addressed in the guidelines?

Key Characteristic #3

40 minutes

Depth of Understanding. Environmental education materials aim to foster the development of the personal awareness and deep conceptual understandings necessary for environmental literacy.

Introduce the idea of "depth." Lead a short discussion about why depth and breadth are both important.

Activity: Building a House of Depth

In this activity, participants consider the importance of depth. Participants will follow the directions on Handout #5: Building a House of Depth to look at the relationships among the supporting components of depth. They will draw a house, labelling each major component (e.g., walls, windows, foundation) with the supporting words for Key Characteristic #3: Depth of Understanding.

Materials

- ✓ Chart paper and markers
- ✓ Sticky notes
- ✓ Handout #5: Building a House of Depth for EE Materials

- 1. Tell the participants that they will be drawing a house using the main topics outlined in Key Characteristic #3: Depth of Understanding.
- 2. Form small groups (three to four participants per group).
- 3. Distribute one copy of Handout #5 to each group.

- 4. Ask them to look at Key Characteristic #3 and its guidelines (pages 46-55). Quickly walk them through the guidelines.
- 5. Review the instructions of Handout #5 with the groups and clarify any questions. Reinforce the idea that they should use their "house" as a way of illustrating the relationships among the various component parts.
- 6. Make sure each group has a piece of chart paper and some markers.
- 7. Once groups have finished sketching their houses, they should display their illustrations around the room in preparation for a gallery walk.
- 8. Make sure each group has a supply of sticky notes and pens or pencils.
- 9. Ask groups to walk around the room, visiting all the sketches. As groups explore the sketches, they should use their sticky notes to make comments and to ask questions. Sticky notes should be posted on the appropriate sketches.
- 10. After all groups have visited all the sketches, group members should return to their own sketch and read the comments or questions left by the other groups. Give them a few minutes to discuss.

Wrap-Up

Ask participants to refer to Key Characteristic #3: Depth of Understanding. How do their houses reflect these guidelines? What could have been strengthened? What did you include that is not addressed in the guidelines?

Reflective—Journaling

Using their journals, participants should reflect on their own programs and the instructional materials they use: Given that instructional time is limited, what is the appropriate balance between depth and breadth?

Key Characteristic #4

40 minutes

Personal and Civic Responsibility. Environmental education materials promote civic responsibility, encouraging learners to use their knowledge, skills, and assessments of environmental, social, political, cultural, and economic systems as a basis for environmental decision-making and action.

Activity: Investigating an Environmental Issue (Part II)

Participants will build on the activities they developed for Key Characteristic #2. Now, they will think about personal and civic responsibility.

Materials

- ✓ Chart paper and markers for each group
- ✓ Activity outline created with Handout #4: Issue Investigation and Action-Taking

- 1. Start the discussion by asking participants to describe what, if any, role the development of a sense of personal stake and responsibility has in environmental education?
- 2. Ask the participants to explore Key Characteristic #4 and review the activity they created on water quality.
- 3. To what extent did you address the ideas outlined in Key Characteristic #4? How could you expand your activity?

Reflective—Journaling

Using their journals, participants should reflect on their own programs and the instructional materials they use. Think about Key Characteristics #2 and #4. To what extent does the age of the audience impact or change how these key characteristics are addressed?

Key Characteristic #5

40 minutes

Instructional Effectiveness. Environmental education materials rely on instructional principles and techniques that create effective, culturally responsive, and inclusive learning environments for all learners.

Activity: Investigating an Environmental Issue (Part III)

Participants will continue to build on the activities they developed for Key Characteristic #2 and #4. Now, they will think about instructional effectiveness.

Materials

- ✓ Chart paper and markers for each group
- ✓ Activity outline created with Handout #4: Issue Investigation and Action-Taking

Procedure

- 1. Tell the participants that you will be moving on to an exploration of Instructional Effectiveness.
- 2. On the white board or on a large sheet of chart paper, draw a circle and label it "Instructional Effectiveness."
- 3. Read aloud the description of Key Characteristic #5: Environmental education materials rely on instructional techniques that create effective, culturally responsive, and inclusive learning environments for all learners.
- 4. Ask them what types of techniques create an effective learning environment? Using the participants ideas, draw a word map.
- 5. After a few minutes, if they have not mentioned some of the ideas outlined in the guidelines, prompt them (Note: specific wording isn't as important as the ideas):
 - a. Learner-centered
 - b. Different ways of learning
 - c. Connection to learners' everyday lives
 - d. Expanded learning environment
 - e. Equitable and inclusive learning environments
 - f. Interdisciplinary
 - g. Goals and objectives
 - h. Appropriateness for specific learning settings
 - i. Assessment
- 6. Once the word map is completed, ask the participants to review Key Characteristic #5.
- 7. Ask them to select two of the nine guidelines and apply those selected guidelines to their water quality activity outline. How are those two guidelines addressed? If they were not addressed, how could they be addressed?

Wrap-Up

Ask a few of the groups to describe how they adapted their water quality activity to address a selected guideline.

Key Characteristic #6

Usability. Environmental education materials are well designed and easy to use.

Activity: Creating a Usability Checklist

Participants will examine the guidelines and indicators outlined in Key Characteristic #6 and create their own usability checklist or cheat sheet.

Materials

✓ Chart paper and markers for each group

Procedure

- 1. Tell the participants that you will be moving on to an exploration of usability.
- 2. Ask the participants to think about activity guides they have used in the past. In terms of making the activities easy to use, what characteristics come to mind? What are some of their pet peeves?
- 3. Form small groups (three to five participants per group).
- 4. Ask participants to read through Key Characteristic #6. When they are finished, they should create a checklist or cheat sheet that could be used by others to score a set of instructional materials for usability.
- 5. Groups should record their work on chart paper.

Wrap-Up

Once groups have completed their checklists or cheat sheets, ask them to share one or two items. What did they include that isn't addressed in the guidelines?

Reflective—Journaling

Using their journals, participants should reflect on their own programs and the instructional materials they use. Think about Key Characteristics #5 and #6. To what extent do these factors impact whether you use an activity guide or not? When you develop instructional activities for others to use, how do you build in Instructional Effectiveness and Usability?

Pulling It All Together

60 minutes

Activity: Reviewing Curriculum Materials

In this culminating activity, participants will apply the guidelines against published sets of instructional materials.

Materials

- ✓ At least one copy of an instructional activity guide (e.g., Project Learning Tree, Project Wild, Project Wet) for each small group. Note that you can use a variety of different activity guides for comparison or you can assign each group the same guide
- ✓ Handout #6: Materials Guidelines Rubric

- 1. Tell the participants that as a culminating activity they will have a chance to apply the guidelines to published materials.
- 2. Form small groups (two to three participants per group).

- 3. Distribute an activity guide for review and a copy of Handout #6: Materials Guidelines Rubric to each group.
- 4. Ask groups to take the next 30–40 minutes to review their assigned activity guide and complete the rubric.

Wrap-Up

When most of the groups have finished, ask each group to share their findings.

Final Thoughts, Questions, and Workshop Evaluation

15 minutes

Materials

✓ Handout #7: Workshop Evaluation



Workshop Handout #1 *Summary of the Environmental Education Materials:* Guidelines for Excellence

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1. Accurate and Inclusive: EE materials are accurate and inclusive in describing environmental
conditions, concepts, attitudes, processes, challenges, and decisions, and in reflecting the diversity of
perspectives on them.
1.1 Accuracy
1.2 Centers on equity and inclusion
1.3 Balanced presentation of differing viewpoints and theories
Emphasis on Skills-Building: EE materials build lifelong skills that enable learners to
arrive at their own conclusions and make reasoned decisions about environmental challenges
and opportunities.
2.1 Thinking and process skills
2.2 Skills for asking questions and exploring different perspectives
2.3 Skills for decision-making
2.4 Skills for addressing environmental challenges and opportunities
3. Depth of Understanding: EE materials aim to foster the development of the personal
awareness and deep conceptual understandings necessary for environmental literacy.
3.1 Awareness
3.2 Focus on concepts
3.3 Concepts in context
3.4 Attention to different scales
4. Personal and Civic Responsibility: EE materials promote personal and civic responsibility,
encouraging learners to use their knowledge, skills, and assessments of environmental, social, political,
cultural, and economic systems as a basis for environmental decision-making and action.
4.1 Sense of personal stake and responsibility
4.2 Self-efficacy and personal agency
5. Instructional Effectiveness: EE materials rely on instructional principles and techniques
that create effective, culturally responsive, and inclusive learning environmental for all learners.
5.1 Learner-centered instruction
5.2 Different ways of learning 5.3 Connection to learners' everyday lives
5.4 Expanded learning environment
5.5 Equitable and inclusive learning environments
5.6 Interdisciplinary
5.7 Goals and objectives
5.8 Appropriateness for specific learning settings
5.9 Assessment
6. Usability: EE materials are well-designed and easy to use.
6.1 Clarity and logic
6.2 Easy to use
6.3 Long lived
6.4 Adaptable
6.5 Accompanied by instruction and support
6.6 Make substantiated claims
6.7 Support accepted recommendations and requirements



Handout #2 Going to the Source's Mouth Worksheet

Instructions: Review the selections and indicate if you would use the information in teaching about air pollution. In the space provided, explain your reasoning. Be attentive to whether the information is accurate, well referenced, current, and objective or propagandistic. Would you use this information as is? What are your observations or concerns?

EXAMPLE

"A study funded by the National Indoor Plan Association showed that house plants improve indoor air quality."

Observations or concerns: Referenced, but source may not be objective and no date is given.

1. "Steps to curb air pollution were incorporated in a law called the Clean Air Act in the 1970s." <u>Observations or concerns</u>:

2. "Science has confirmed that Mr. Ford's new internal combustion horseless carriage produces gases which may be unpleasant to some gentlemen, and distasteful to cultured ladies." *Car and Chauffeur*, 1914 <u>Observations or concerns</u>:

3. "A double-blind study (Residential Toxicity of Nicotine Exposure in Dieffenbachia amoena, *Botanica Domestica*, volume 4) has shown that second-hand smoke is actually good for house plants. From this we can conclude, it must be okay for humans." Observations or concerns:

4. "Electric cars are preferable to all other modes of transportation. They are inexpensive and don't pollute the air in any way, shape, or form." Observations or concerns:

5. "Electric cars are expensive playthings for wealthy celebrities that want to be known for their proenvironmental stance. They will never be of any value to average working-class Americans." <u>Observations or concerns</u>:

6. "Technological innovations in the last 30 years have reduced, but not eliminated sulfur emissions from coal burning power plants." *Journal of Amps and Volts*, 1996 <u>Observations or concerns</u>:



Handout #3 Going to the Source's Mouth <u>Sample Answers</u>

Instructions: Review the selections and indicate if you would use the information in teaching about air pollution. In the space provided, explain your reasoning. Be attentive to whether the information is accurate, well referenced, current, and objective or propagandistic.

1. "Steps to curb air pollution were incorporated in a law called the Clean Air Act in the 1970s."

<u>Observations or concerns</u>: Objective but lacks source. The statement does not pass judgment on the Clean air Act, but the source of the information is not identified.

2. "Science has confirmed that Mr. Ford's new internal combustion horseless carriage produces gases which may be unpleasant to some gentlemen, and distasteful to cultured ladies." *Car and Chauffeur,* 1914

<u>Observations or concerns</u>: Data dated, but objective. Here the source is identified, but the information is quite old. It would still be useful in teaching about the history of the issue.

3. "A double-blind study (Residential Toxicity of Nicotine Exposure in Dieffenbachia amoena, *Botanica Domestica*, volume 4) has shown that second-hand smoke is actually good for house plants. From this we can conclude, it must be okay for humans."

<u>Observations or concerns</u>: Propagandistic, but well referenced. Again, the source is cited, but the intent is clearly to support a particular point of view.

4. "Electric cars are preferable to all other modes of transportation. They are inexpensive and don't pollute the air in any way, shape, or form."

<u>Observations or concerns</u>: Propagandistic and not well referenced. This is a statement of personal opinion without supporting evidence or references. The author uses language that directs the reader to a particular perspective.

5. "Electric cars are expensive playthings for wealthy celebrities that want to be known for their pro-environmental stance. They will never be of any value to average working-class Americans."

<u>Observations or concerns</u>: Propagandistic and not well referenced. Another statement of personal opinion without supporting evidence or references.

6. "Technological innovations in the last 30 years have reduced, but not eliminated sulfur emissions from coal burning power plants." *Journal of Amps and Volts*, 1996

<u>Observations or concerns</u>: Accurate, well referenced. Source of the information is cited. Information is presented in a balanced, unemotional manner.



Handout #4 Issue Investigation and Action Taking

As a group, outline an activity that focuses on skills development and uses water quality as the topic. Record your work on chart paper and prepare a short (two minute) presentation to the rest of the group.

Make sure you do the following:

- Identify the audience
- Describe the setting (e.g., classroom, near a pond, lab, nearby park)
- State the timeframe
- Outline instructional steps or procedures (these should be general)
- List or highlight the specific skills addressed in the activity
- Display your work on chart paper



Handout #5 Building a House of Depth for EE Materials

In the space below, draw the frame of a house (the design is up to your team). Use your house to illustrate the notions embedded in Key Characteristic #3: Depth of Understanding. Label parts of the house (e.g., foundation, roof, walls, windows), using the building blocks (indicator words) listed below. If desired, you may include additional labels or ideas related to depth.

Your house must include the following:

A solid foundationAt least one door and window to openAn encompassing roofSide support walls

Building blocks (indicator words to use)

Critical thinking Conceptual framework Environmental awareness Breadth Concepts in context Focus on concepts Environmental issues Depth Environmental literacy (questioning skills, issue analysis and decision-making skills, action skills, understanding of environmental systems)



Handout #6:	
Materials Guidelines	Rubric

Key Characteristic and Description	Notes	Rating
ACCURATE AND INCLUSIVE		Not addressed
1.1 Accurate		Partially addressed
1.2 Centers on equity and inclusion		Fully addressed
1.3 Balanced presentation of differing		i any addressed
viewpoints and theories		
EMPHASIS ON SKILLS BUILDING		Not addressed
2.1 Thinking and process skills		Partially addressed
2.2 Skills for asking questions and exploring		Fully addressed
different perspectives		,
2.3 Skills for decision-making		
2.4 Skills for addressing environmental		
challenges and opportunities		
DEPTH OF UNDERSTANDING		Not addressed
3.1 Awareness		Partially addressed
3.2 Focus on concepts		Fully addressed
3.3 Concepts in context		,
3.4 Attention to different scales		
PERSONAL AND CIVIC		Not addressed
RESPONSIBILITY		Partially addressed
4.1 Sense of personal stake and responsibility		Fully addressed
4.2 Self-efficacy and personal agency		
INSTRUCTIONAL EFFECTIVENESS		Not addressed
5.1 Learner-centered instruction		Partially addressed
5.2 Different ways of learning		Fully addressed
5.3 Connection to learners' everyday lives		,
5.4 Expanded learning environment		
5.5 Equitable and inclusive learning		
environments		
5.5 Interdisciplinary		
5.6 Goals and objectives		
5.7 Appropriateness for specific learning		
settings		
5.8 Assessment		
USABILITY		Not addressed
6.1 Clarity and logic		Partially addressed
6.2 Easy to use		Fully addressed
6.3 Long-lived		
6.4 Adaptable		
6.5 Accompanied by instruction and support		
6.6 Make substantiated claims		
6.7 Support accepted recommendations and		
requirements		



Handout #7 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?	Α	В	С	D	F
Why did you give it that grade?					

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

	trongl •isagre	-	ι	lingiire		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 workshops I have participated in.	ⁱ 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 c	urrent professio	on? Check all th	nat apply.		
Pre-K–12 tea	cher 🛛	College or unive Instructor	ersity	Conserv professi	ration or natural resource onal
Preservice teacher		Resource develo	oper	□ Other _	
Nonformal educator		Program directo	or		
Who do or will	you teach? Che	ck all that apply	<i>v.</i>		
Preschool	□ 9–12		Nonformal educa	ators 🗆	Conservation or natural resource professionals
□ K-2	Teachers		College or univer	rsity 🗆	Families
□ 3–5	Preservice teachers	e 🗆 P	Program director	rs 🗆	Other
□ 6-8	Other col university students	-	Resource develo	pers 🗆	Not applicable
Number of yea	rs you have be	en an environi	mental educat	or: About _	years
	dents or partici		ically teach or	reach per	year:
The students o	r participants y	ou primarily v	work with com	e from: <i>Ch</i>	neck one.
🖵 Urban	Suburban	Rural	🛛 Tribal	🛛 Mix o	f areas

THANK YOU!