

Integrating Environmental Sustainability Education into Adventure Education Programs

Association for Experiential Education—Asia Pacific Regional Conference
June 14, 2023: Part I of II

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Outline of Session

Principles & Concepts



Defining Environmental Education (EE)



Effective EE: Research Findings



EE Standards

Application



Curriculum:

- Goals
- Lesson/activity plans
- Assessments
- Methodologies
- Syllabus



Limitations

Environmental Education Defined

“The goal of environmental education is to develop a world population that is aware of, and concerned about, the environment and its associated problems, and which has the **knowledge, skills, attitudes, motivations** and **commitment** to work individually and collectively toward solutions of current problems and the prevention of new ones.”

Belgrade Charter: United Nations International Environmental Education Workshop, Belgrade Yugoslavia, 1975



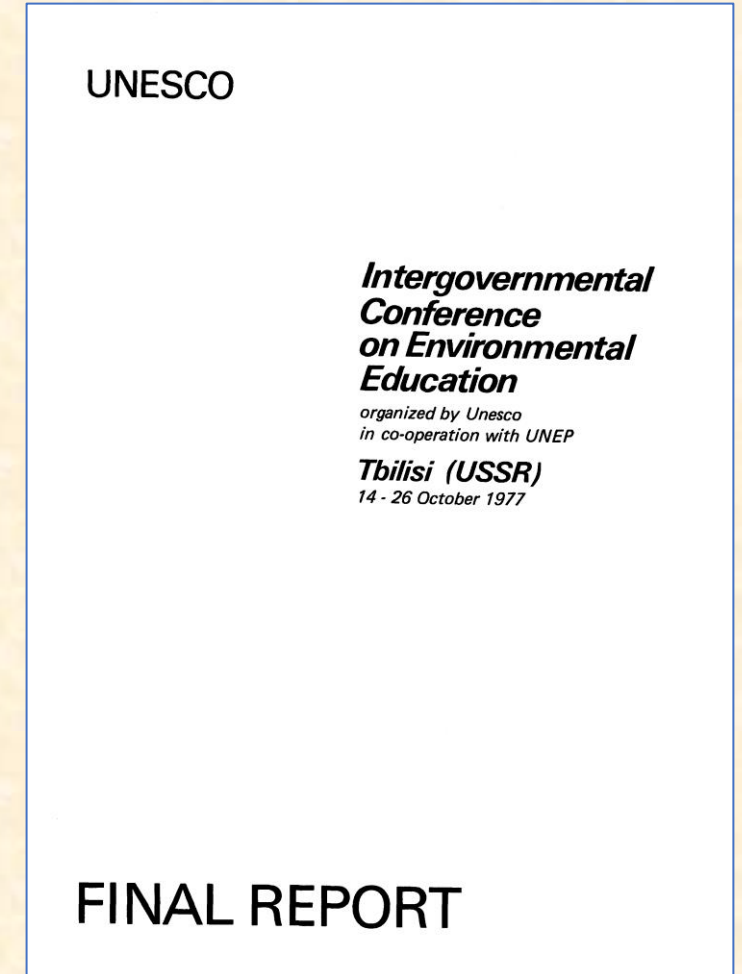
Environmental Education Defined

Goals of environmental education:

1. To foster clear **awareness** of, and **concern** about, economic, social, political and ecological interdependence in urban and rural areas;
2. To provide every person with opportunities to acquire the **knowledge**, **values**, **attitudes**, **commitment**, and **skills** needed to protect and improve the environment;
3. To create new patterns of **behavior** of individuals, groups, and society as a whole toward the environment.

Categories of environmental education objectives:

1. Awareness
2. Knowledge
3. **Attitudes**
4. **Skills**
5. **Participation**



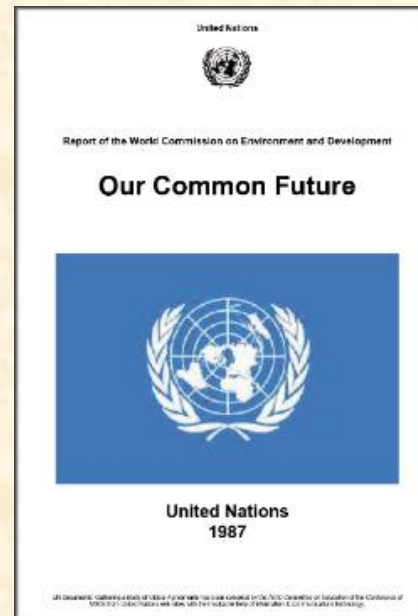
Tbilisi Declaration, Tbilisi USSR, 1977

Environmental Education Defined

Environmental Sustainability:

Meeting the needs of current generations without compromising the ability of future generations to meet their own needs.

Brundtland Commission (UN), 1987



Gro Harlem Brundtland

Environmental Education Defined

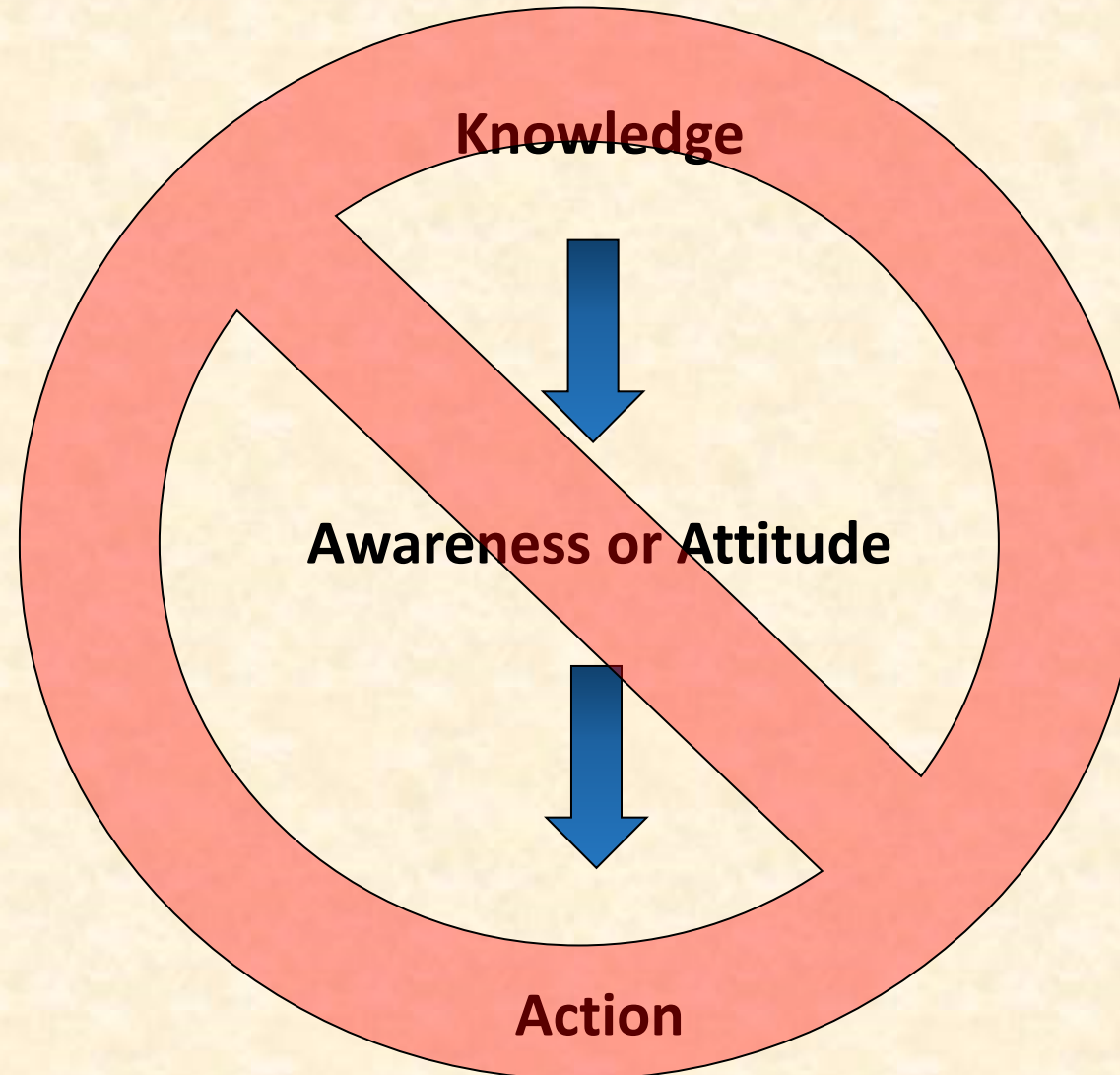
Environmental Sustainability:

1. In a sustainable society, **nature is not subject to systematically increasing...**
 - a. **Concentrations of substances from the earth's crust** (such as fossil CO₂, heavy metals and minerals)
 - b. **Concentrations of substances produced by society** (such as antibiotics and endocrine disruptors)
 - c. **Degradation by physical means** (such as deforestation and draining of groundwater tables).
2. And in that society there are no structural obstacles to **people's health, influence, competence, impartiality and meaning.**



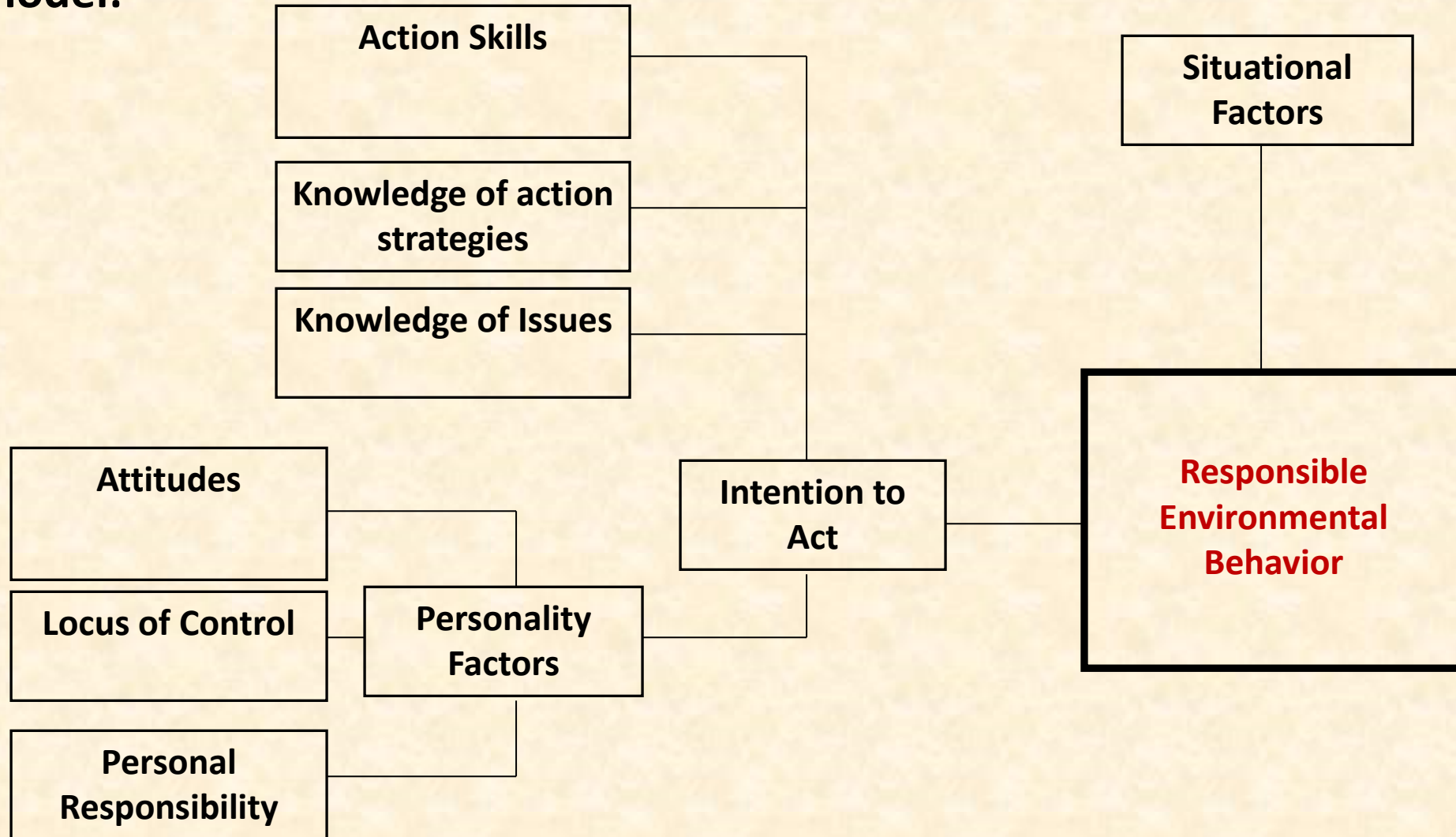
 The Natural Step

Evidence-Based Best Practice



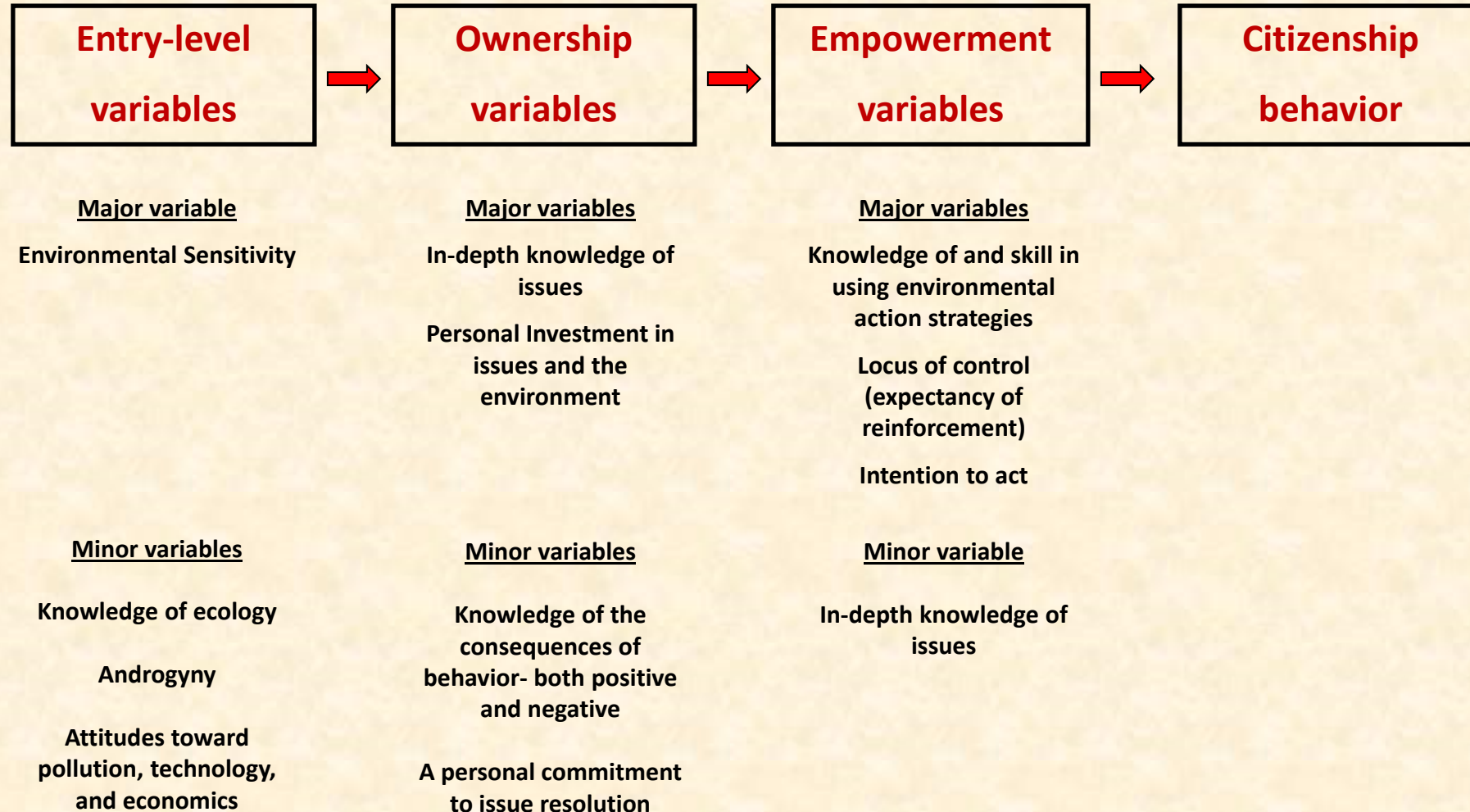
Evidence-Based Best Practice

Hines model:



Evidence-Based Best Practice

Hungerford/Volk model: Major and Minor Variables Involved In Environmental Citizenship Behavior



Evidence-Based Best Practice

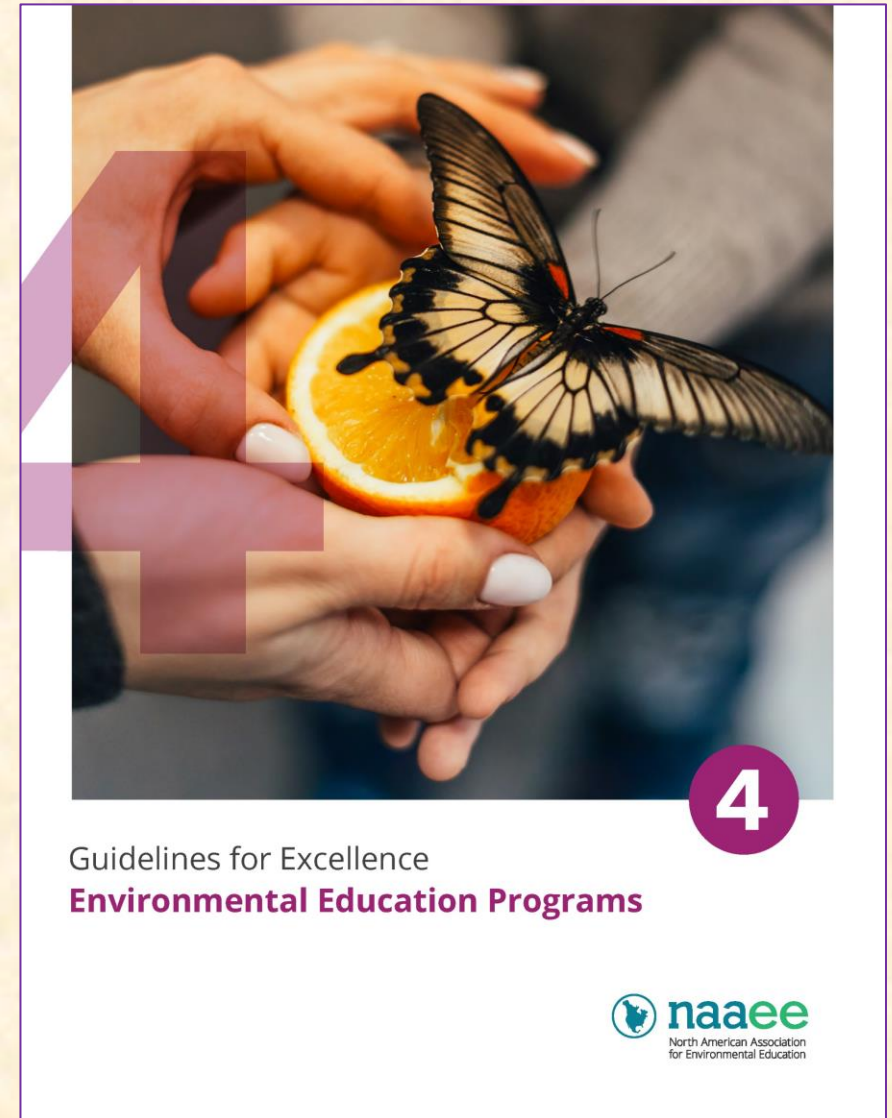
**Responsible
Environmental
Behavior**



Evidence-Based Best Practice

NAAEE 4 Thematic Strands:

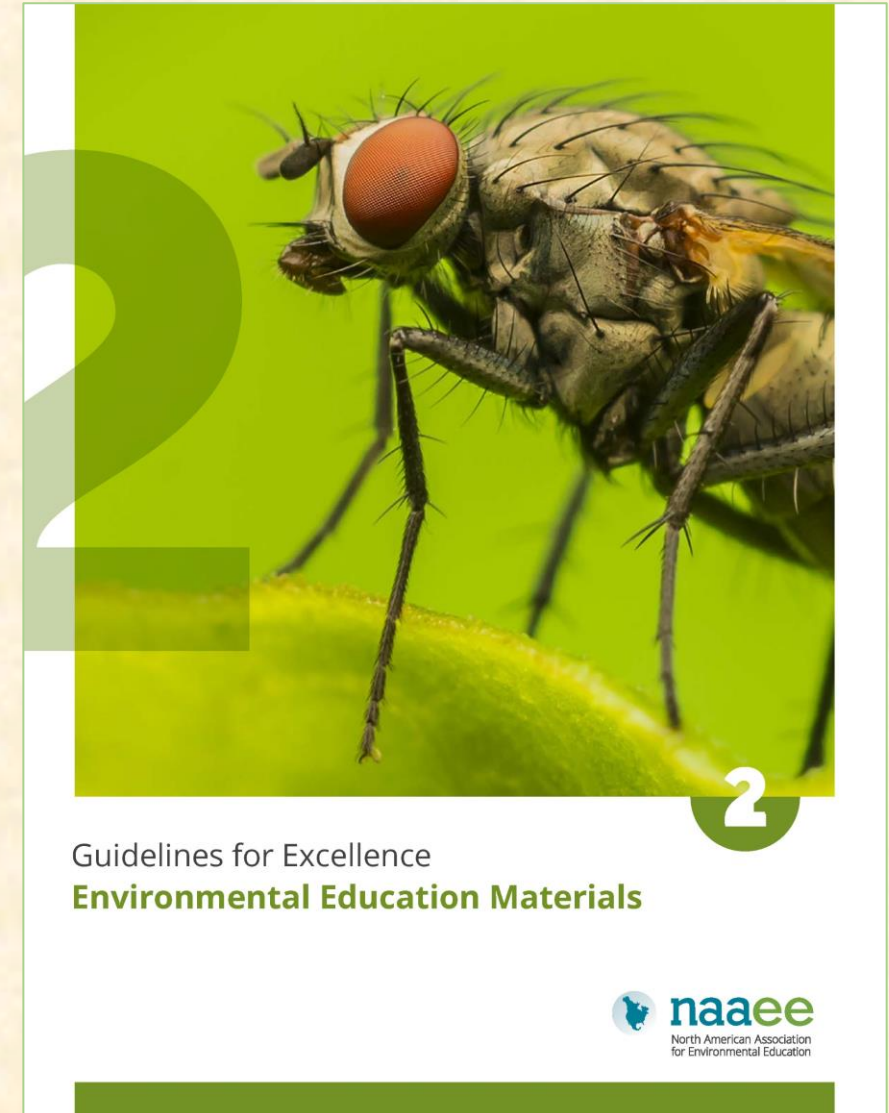
- 1 Questioning, Analysis, and Interpretation Skills
- 2 Understanding Environmental Processes and Systems
 - Earth's physical and living systems
 - Human systems
 - Environment and society
- 3 Skills for Understanding and Addressing Environmental Issues
 - Skills for analyzing and investigating environmental issues
 - Decision-making and action skills
- 4 Personal and Civic Responsibility



Evidence-Based Best Practice

Characteristics of Environmental Education Materials

- 1 Accurate and Inclusive
- 2 Emphasis on Skills Building
- 3 Depth of Understanding
- 4 Personal and Civic Responsibility
- 5 Instructional Effectiveness
- 6 Usability



Summary

Environmental education objectives:

- Awareness
- Knowledge
- Attitudes
- Skills
- Participation

Environmental education goal: sustainability

Nature not subject to systematically increasing concentrations of substances (e.g. fossil CO₂), physical degradation; human needs met

Environmental education addresses:

1. Ecological Concepts
2. Environmental Sensitivity
3. Knowledge Of Issues
4. Beliefs, Values
5. Locus Of Control
6. Knowledge Of Action Strategies
7. Skill In Using Action Strategies



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