

# Compendium Evaluation Tool

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The following environmental education evaluation instrument was used by the project's reviewers to evaluate the curricula. This instrument reflects the recommendations and perspectives of the following documents:

"1992 Science Instructional Materials Evaluation Form," California Department of Education, 1992.

Andrews, Bill, "Background Paper I: Environmental Education Strategy of the California Department of Education," California Department of Education.

Energy Education Evaluation Form—the evaluation tool used for the Water Resources and Energy Resources compendia published in 1992.

Gardella, Ron, Environmental Education Curriculum Inventory (Forms A and B), Northern Kentucky University, Highland Heights, KY, 1992.

Health Framework for California Public Schools (pp.184-195), California Department of Education, 1994.

History-Social Science Framework for California Public Schools (pp. 114-120), California Department of Education, 1988.

Niedermeyer, Fred, "A Checklist for Reviewing Environmental Education Programs" (pp. 46-50), *Journal of Environmental Education*, Vol. 23, 1992.

Olson, Betsy, "Environmental Education Instructional Materials Evaluation Form," California Department of Education (draft).

Science Framework for California Public Schools (Chapter 8, pp. 198-213), California Department of Education, 1990.

Science Resource Center, "Rating System for ME-2," Los Angeles Unified School District.

"The Superintendent's Point of View on Environmental Education," California Department of Education, 1990.

UNESCO, "The Belgrade Charter," UNESCO-UNEP Environmental Education Newsletter, Volume I, Number 1, January 1976.

UNESCO, "The Tbilisi Declaration," October 1977.

## I. Criteria For Instructional Materials

### A. General Content

1. Are ideas expressed through unifying themes and big ideas, not facts?
2. Is content interdisciplinary?
3. Are students challenged to utilize age-appropriate higher level thinking processes?
4. Are ideas presented logically and connected through the curriculum?
5. Is depth of understanding emphasized (rather than encyclopedic breadth)?
6. Are historical, ethical, cultural, geographic, economic, and sociopolitical relationships addressed?
7. Are the learning process and the acquisition of knowledge shown as connected to the students' lives and society?

### B. Presentation

1. Are instructional materials clearly and engagingly written with the main concepts well articulated?

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2. Are the roles of environmental ethics, citizenship, and stewardship explored?
3. Do lessons promote respect and caring for the environment, yet are nondogmatic and open to inquiry and differences of opinion?
4. Are personal and societal values and conflicting points of view explored in context?
5. Are instructional materials easy for students to use and understand?
6. Is learning made accessible to limited English proficiency students?
7. Are writings and concepts developmentally appropriate for the designated grade, yet sensitive to individual differences in educational experience and learning mode?
8. Is environmental responsibility modeled in design, underlying philosophy, and suggested activities by the lessons and materials (e.g., using recycled materials, creating minimal amounts of wastes, and properly disposing of the wastes)?
9. Are there clear linkages between communities of all levels (“thinking globally, acting locally”)?
10. Are vocabulary words defined in context and not dominating of learning goals?
11. Is the layout of instructional materials interesting and appealing?

## C. Pedagogy

1. Does almost half of the curriculum have students engaged in active learning?
2. Is learning based on the students constructing knowledge

through research, discussion, and application to gain conceptual understanding?

3. Are evaluation devices included, appropriate, and aligned with the objectives of outcomes presented? (Highest points for authentic, performance-based assessment devices.)
4. Are instructional materials sensitive to social, economic, and cultural diversity?
5. Do lessons encourage students to develop awareness, knowledge, and strategies for responsible action?
6. Are group/cooperative learning strategies used?
7. Is intergenerational responsibility, linking today’s actions with future consequences, implicit in instructional methods?

## D. Teacher Usability

1. Are instructions for the teacher clear and concise?
2. Are lesson objectives/outcomes clear and appropriate?
3. Are materials easily integrated into an established curriculum?
4. Is background information for the teacher adequate and accurate?
5. Can the materials be adapted to varied learning environments (large/small classes, of mixed levels, from rural/urban settings)?
6. Are consumable instructional materials of good quality, easily duplicated for student use, and in sufficient quantity to support the objectives?

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7. Are equipment/materials listed and reasonably accessible?
8. Do the materials suggest a variety of instructional strategies, expanded learning environments, and resources in the curriculum's design?
9. Is the time required to complete each lesson indicated?
10. Do the materials clearly list the subject discipline(s) integrated into each lesson?

## E. Communities Content Questions

Do the materials provide opportunities for students to:

1. become aware of, and appreciate, the interdependence of all organisms with natural environments, and specifically, their own role in the environment?
2. appreciate the benefits human communities derive from healthy natural environments?
3. recognize that when environments are altered or degraded, there are local and global environmental consequences?
4. understand that all organisms (including humans) interact with each other and their natural environment?
5. understand how social, political, and economic systems influence both natural and built environments?
6. understand the importance of balancing the needs of human communities with those of natural communities?
7. understand how to lead a responsible lifestyle that helps sustain the integrity and health of the environment in which they live?

8. use their knowledge and skills to analyze information and solve problems that have an impact on the health, integrity and sustainability of natural communities?
9. demonstrate responsible, sustainable use of natural resources?
10. use their knowledge, values, and skills to help create healthier environments at home, at school, and in the community?

## II. Narrative/Miscellaneous

In thinking back on the materials you've just evaluated:

- A. Briefly comment on the strengths of the materials.
- B. Briefly comment on the weaknesses of the materials.

C. Put a checkmark next to the topics addressed by the material:

- terrestrial ecosystems
- aquatic ecosystems
- marine ecosystems
- human interactions within ecosystems
- ecological principles
- biological diversity
- endangered species and habitats
- environmental health
- stewardship and ecological "renewal"
- role of social and political systems
- human population dynamics
- land and resource conservation
- consumerism and economics
- community planning and design
- transportation
- urban environmental quality
- sustainable development
- land and resource use

D. Using a percent, estimate how much of the material is specific to natural and built communities: \_\_\_\_\_ %

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E. Other comments

F. Would you use the materials in your class? (Circle one.)

- Absolutely
- Probably
- Maybe
- Not likely
- No chance

G. Besides English, in what other languages are the materials available? If not entirely translated, what parts are?

H. Do the materials contain a listing of resources, such as in an appendix or teacher resource guide?

I. Is there evidence that the curriculum was field tested? Briefly describe the process.

J. Place a checkmark in the appropriate box across from each discipline to indicate the amount of emphasis each is given in the curriculum.

None   Some   A Lot   Major

- Science
- History/Social Science
- Health
- Mathematics
- Visual/Performing Arts
- Language Arts/English
- Industrial Tech/Voc. Ed
- Foreign Language

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