Environmental Education: August 1982-January 1985 A Bibliography

Compiled by Michael C. Bouchard Librarian

March 1985

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The following bibliography on environmental education provides a current, annotated listing of reports and journal articles. These sources are useful for EPA staff, educators, students, and other researchers in the field of environmental education. This bibliography updates "A Bibliography of Environmental Education, January 1978-July 1982," compiled by Carolyn A. Schultze for the EPA Headquarters Library in August 1982.

The entries in this hiblingraphy are organized according to the topics of theory, practical studies, and conferences and case studies. The citations from the original hibliography were obtained from the EPA Library catalog, and from the following publications and databases:

## Publications:

Environment Abstracts.
EIC/Environment Information Center
New York, New York.

Environmental Periodicals Bibliography Environmental Studies Institute International Academy at Santa Barbara Santa Barbara, California

EPA Publications Bibliography Library Systems Staff U.S. Environmental Protection Agency

Reader's Guide to Periodical Literature
H.W. Wilson Company
New York, New York

## Databases:

NTIS (National Technical Information Service)
U.S. Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22161

ERIC (Educational Resources Information Center) National Institute of Education Educational Resources Information Center Washington, DC 20208

In developing the present bibliography, each of the above publications and databases were searched. However, the ERIC database contained all the citations found in the other sources. All the abstracts in this bibliography are from ERIC.

## ENVIRONMENTAL EDUCATION: A BIBLIOGRAPHY

- I. Environmental Education: Theory
- Baldauf, Richard J. "Environmental Education... In Any Subject for Any Age." Nature Study: vol.37, #3-4, March 1984, p31.

Describes 14 slide presentations which demonstrate that environmental education can be approached through any subject at any grade level.

Caduto, Michael. "A Review of Environmental Values Education."

Journal of Environmental Education: vol.14, #3, Spring 1983,
pp13-21.

Describes and evaluates eight strategies for both general values education and environmental education.

Caldwell, Lynton K. "Environmental Studies: Discipline or Metadiscipline?" Environmental Professional: vol.5, #3-4, 1983, pp247-259.

Suggests that academic instruction in environmental studies will fall short of its potential if it comprises no more than multidisciplinary course offerings.

Charles, Cheryl et al. "Project Learning Tree." Nature Study: vol.37, #3-4, March 1984, pp22-23.

Describes an environmental education program that provides activity guides for elementary and secondary grades.

Chiras, Daniel D. "Risk and Risk Assessment in Environmental Education." American Biology Teacher: vol.44, #8, November 1982, pp460-465.

Risk assessment is suggested as a technique to be used to analyze current issues in an objective manner.

Disinger, John F. "What Research Says: Learning in the Environment." School Science and Mathematics: vol.84, #2, February 1984, pp158-163.

Because environmental education may be viewed as education in, about, and for the environment, some choices must be made about the emphasis given to each.

Dolin, Eric J. "Elementary, Secondary, and College Level Environmental Education: An Integrated Approach." Environmental Education and Information: vol.3, #2, April/June 1984, pp167-178.

Suggests that all students should be aware of their environment at precollege levels, and should build upon this awareness.

Goodson, Ivor. "Environmental Education For All: Strategies for Change." Journal of Environmental Education Developments: vol.11, #3, Fall 1983, pp6-7.

Briefly discusses strategies for establishing environmental education in schools, focusing on the relationship between environmental studies and the traditional academic courses.

Hatley, Jan. "The Role of the Soo in Environmental Education Today." Review of Environmental Education Developments: vol.12, #1, 1984, pp3-6.

Discusses issues related to the role of the zoo in environmental education.

Howard, Jeanne. "Environmental Education and the Choice of Technology." Journal of Environmental Education: vol.15, #2, Winter 1984, pp21-26.

Examines the evolution of twentieth century civilization from the period of "technological determinism" to the period of "technological choice".

Imahori, Kozo. "Environmental Education in Japan." Environmental Education and Information: vol.3, #1, Jan-Mar 1984, pp61-72.

Discusses environmental education (EE) in Japan by examining the historical background, the conservation stage, the Kogai stage, the development stage, EE research, and environmental lectures as an effective interdisciplinary subject for undergraduates.

Johnson, Eric, et al. "Acid Rain: Activities for Science Teachers." American Biology Teacher: vol.45, #4, April/May 1983, pp228-238.

Seven complete acid rain activities are provided: background information, major concepts, student objectives, vocabulary lists, procedures, instructional strategies, and questions/discussions.

Johnson, Phillip. "Connecting Patterns through Environmental Education." Educational Leadership: vol.40, #7, April 1983, pp40-44.

Through environmental education, educators can integrate all subject matter into the field of environmental studies.

Knapp, Clifford E. "A Curriculum Model for Environmental Values Education." <u>Journal of Environmental Education</u>: vol.14, #3, Spring 1983, pp22-26.

Describes status/role of education, considering educational approaches to values by highlighting distinctive features of each.

Marion, James I. "Acid Rain: An Educational Opportunity?"
Outdoor Communication: vol.15, #1 Winter-Spring 1984,
pp7-13.

Outlines how educators can handle the subject of acid rain.

Moeller, Robert. "Project E.G.R.E.T." Nature Study: vol.37, #3-4, March 1984, p28.

Project E.G.R.E.T. is designed to help the chapters of the Northeast Region of the National Audubon Society become more involved in environmental education in local areas.

Park, C.C. "Towards a Philosophy of Environmental Education."

Environmental Education and Information: vol.3, #1, Jan-Mar
1984, pp3-15.

Explores the need for a philosophical foundation for environmental education.

Pfortner, Ray. "The Control of Hazardous Wastes and the Role of Environmental Educators." Nature Study: vol.37, #3-4, March 1984, pp43-44.

Discusses legislation aimed at hazardous waste issues which are implemented by the EPA and State Governments.

Sandler, Alan R. "Learning by Design--the AIA Environmental Education Program." Nature Study: vol.36, #3-4, March 1983, pp26-27.

The American Institute of Architects (AIA), recognizing the interrelationship between the human environmental and the natural environment, has prepared materials to help people make wise decisions about the environment. The role of the AIA in environmental education and the <u>Learning</u> by <u>Design</u> materials are described.

Schwaab, Karl E. "Instructional Methods: Their Use and Effectiveness in Environmental Education." <u>Journal of Environmental</u> <u>Education</u>: vol.14, #2, Winter 1982, pp8-12.

Surveyed 296 Illinois environmental educators on effectiveness of instructional strategies in environmental education and how often a given strategy is used. Results of questionnaires indicate that teachers tend to use less effective methods rather than those they consider more effective.

Spencer, Christopher, et al. "Evaluating Environmental Education in Nursery and Primary Schools." Environmental Education and Information: vol.3, #1, Jan-March 1984, ppl6-32.

Demonstrates how young children learn a completely novel route across a city district.

Sherry, Douglas. "The Montpelier Environmental Education Program."
Nature Study: vol.37, #3-4, March 1984, p58.

An introduction to and sample of activities from a unit of the Montpelier Environmental Education Program. Volk, Trudi L. "Recommendations for EE in the United States: Based on a National Needs Assessment." Nature Study: vol.37, #3-4, March 1984, pp16-20.

Assessed environmental educators' perceptions on four environmental education goals--ecological foundations, awareness of issues and human values, investigation and evaluation of issues and solutions.

Weeks, Mary K. "Creative Environmental Education Activities for Young Children." Nature Study: vol.37, #3-4, March 1984, pp62-63.

Describes activities for preschool and kindergarten children that encourage the development of a favorable attitude towards, an interest in, and awareness of the environment.

- II. Environmental Education: Practical Studies
- Gabalski, Anita. "Making A Difference: DEC's Environmental Education (DEC) Camps." Conservationist: vol.37, #5, Mar-April 1983, ppl2-17.

Discusses various program activities at New York State Department of Environmental Conservation camps, including environmental workshops which foster exploration, discovery, and skill development.

Garver, Janice B. "A Survey of Environmental Education in Hamilton County Schools (K-12)." Masters of Secondary Education Project: June 1983, pl10.

Environmental education (EE) courses and programs offered in grades K-12 in Hamilton County (Ohio) public, private and parochial schools were surveyed by means of a questionnaire mailed to 67 district level administrators, principals, and teachers.

Anon. "Using Information Technology for the Benefit of Environmental Education." Review of Environmental Education Developments: vol.12, #1, 1984, pl7.

Describes the development of and services offered by Council for Environmental Education (CEE) Information Center.

Grove, Jim. "Environmental Biology: A Field Experience."

Journal of College Science Teaching: vol.13, #3, Dec-Jan
1984, pp150-153.

Recounts experience of an environmental biology class.

Gupta, Gian C. "An Undergraduate Environmental Science Curriculum." Journal of College Science Teaching: vol.12, #2, November 1982, ppl00-102.

Describes a curriculum in Environmental Sciences adopted by the University of Maryland Eastern Shore.

Howard, Jeanne. "New Strategies for Environmental Education in Developing Countries." <u>Journal of Environmental Education</u>: vol.14, #2, Winter 1982, pp41-44.

Examples of new environmental strategies in developing countries are provided including, among others, programs which stress that properly-conceived development should include respect for the local environment and research projects helping villagers define what is meant by development.

Jaus, Harold H. "The Development and Retention of Environmental Attitudes in Elementary School Children." <u>Journal of</u> Environmental Education: vol.15, #3, Spring 1984, pp33-36.

Effects of two hours of instruction in environmental education on attitudes of third grade students toward the environment.

Knamiller, Gary. "Environmental Education for Relevance in Developing Countries." Environmentalist: vol.3, #3, Fall 1983, ppl73-179.

Reviews attempts to achieve curricular relevance in schools in Third World countries.

LaHart, David E. "Here Comes the Sun." Science and Children: vol.22, #1, September 1984, pp33-35.

By constructing and performing related experiments, students begin to understand some of the major principles of solar energy.

McKinney, C. Warren et al. "Effects of Overt Teacher Enthusiasm on First-Grade Students' Acquisition of Three Concepts."

Theory and Research in Social Education: vol.11, #4, Winter 1984, pp15-24.

When 52 first graders were divided into three groups and taught about environmental pollution by the same teacher exhibiting three degrees of enthusiasm, little difference was found.

Manning, Robert E. et al. "Computer Simulation as a Tool in Teaching Park and Wilderness Management." Journal of Environmental Education: vol.15, #3, Spring 1984, pp3-9.

Describes a Wilderness Travel Simulation Model that reduces the complexity of the outdoor system under study.

Metcalfe, Arnold. "The Work of the Environmental Education Team in Warrington." Bulletin of Environmental Education: #139, December 1982, pp8-9.

Highlights project activities of the environmental education team at the park service in Warrington (England).

Ollason, Robert J. "Interlink--Collaborative Projects in Wild-life, Environmental, and Biological Education in Scotland."

<u>Journal of Biological Education</u>: vol.17, #1, Spring 1983,

pp21-22.

Discusses development/activities of Interlink, a scheme whereby the Edinburgh Zoo works in conjunction with various organizations to develop a particular theme for classes of school children.

Perina, I. "Popularization of Chemistry through Ecological Topics." Journal of Chemical Education: vol.59, #12, December 1982, ppl016-17.

After providing information on elementary schooling, discusses ecological topics and activities used to raise the awareness of elementary school students about the level of pollution in the environment.

Pettus, Alvin M. "A Teacher Survey: Environmental Education in Virginia Schools." Journal of Environmental Education: vol.15, #1, Fall 1983, ppl7-21.

Assessed status and progress of environmental education in Virginia's public schools using classroom teachers' responses to questions concerning their instruction and school's curriculum.

Rago, Paul J. "An Interactive Optimization Game for Examining Tradeoffs between Economic and Ecological Values." <u>Journal of Environmental Education</u>: vol.15, #3, Spring 1984, pp10-16.

Describes an interactive optimization computer game for training resource managers in which the user plays the role of an environmental consultant to an electric utility company.

Rees, Gareth. "Sub-Professional Training in the Field of the Environment. Environmentalist: vol.2, #4, Winter 1982, pp333-338.

Aims, objectives, and structure of a multidisciplinary course designed to train technicians to deal with pollution and its effects are discussed.

Santos, John G. "After-Hours Science." Science Teacher: vol.51, #4, April 1984, pp40-45.

Nature's Classroom provides field experience, academic classes, and activities in the natural sciences.

Simmons, Deborah Anne. "Community Involvement in Hazardous Waste Management: A Comparison of an On-Site Visit and a Simulated Slide Visit." Journal of Environmental Education: vol.15, #3, Spring 1984, pp25-32.

Compared the effectiveness of presenting information on hazardous waste management alternatives during two one-day workshops by using pretest, and follow-up attitude and comprehension guestionnaires.

Switzer, Terry G. "When You're Hot..." Science Teacher: vol.15, #6, September 1984, pp58-61.

Discusses environmental problems resulting from thermal pollution, and experiments which help students develop an awareness and understanding of these problems.

Watson, Robert. "The Island of Terra: A Computer-Aided Simulation of World Resources Problems Designed for Lower-Achieving Secondary School Pupils." Simulation/Games for Learning: vol.13, #2, Summer 1983, pp64-71.

Describes the computer-assisted environmental-educational game TERRA.

Wheatley, Jack. "Saved from the Trash Can. Keep That Recycled Paper in Circulation." Science and Children: vol.20, #5, February 1983, ppll-13.

Lessons on conservation/recycling taught in upper elementary/middle schools feature a paper recycling activity in which students make new paper from old.

Winkeljohn, Dorothy R. et al. "Let's Build a Pond." Science Activities: vol.19, #4, Nov-Dec 1982, pp10-11.

Describes a game for grades three-six designed to demonstrate the interdependence between living things and the physical factors of their environment.

- III. Environmental Education: Conferences and Case Studies
- Anon. "Action for Environmental Education." Outdoor Communicator: vol.15, #1, Winter-Spring 1984, pp14-19.

Discusses the First National Congress for Environmental Education Features: Policies and Practices, including 10 recommendations on political action, information dissemination and cooperation between groups.

Bennett, Dean et al. "Education for the Human Habitat." Nature Study: vol.37, #3, March 1984, pp40-41.

Highlights a workshop exploring the objectives and activities of the Human Habitat Study, Inc., a nonprofit organization dedicated to the maintenance of a healthful and healing global environment.

Cowan, Margaret E. et al. International Case Studies in
Environmental Education in Action V. Columbus, OH, ERIC
Clearinghouse for Science, Mathematics, and Environmental
Education, December 1982.

Provided in this document are case studies of representative and exemplary innovative environmental education programs from various regions of the world. The case studies provide information on the environment and environmental problems and concerns of various countries, insights into that country's attitude toward the environment and education.

Disinger, John F. "What Research Says: A Look at National and International Environmental Education Conferences." School Science and Mathematics: vol.84, #1, January 1984, pp65-70.

Reports on the outcomes of six national and two international conferences attempting to set guidelines for the continuing development of environmental education.

Mann, Lori D. et al. "Global Environmental Education: A Way of Thinking and Acting." Nature Study: vol.37, #3-4, March 1984, pp59-62.

Theme issue with title "Reports of Workshops in Environmental Education Practices Conducted at the First National Congress for Environmental Education Futures.

Sacks, Arthur B. et al. <u>Current Issues in Environmental</u>
<u>Education and Environmental Studies</u>. <u>Columbus</u>, OH, ERIC
<u>Clearinghouse for Science</u>, <u>Mathematics</u>, and <u>Environmental</u>
<u>Education</u>, <u>August 1983</u>.

Provided in three major sections are selected papers presented at the 1982 Conference of the National Association for Environmental Education. The first part contains four invited addresses on environmental issues and two symposium papers related to the Global 2000 Report to the President. The seven essays that follow give the practitioner's perspective on environmental education programs, approaches, and issues. Included in the final section are 14 research and evaluation papers.

omandmoleid i S. EPA Headquarters Library The following bibliogi FEB 16 1995 ation provides a current, annotat journal articles. These sources and ucators, students, and other researd onmental education. This bibliograp of Environmental Education, Ja biled by Carolyn A. Schultze for ry in August 1982. The entries in this bi ccording to the topics of theory, pr ts. The citations from the original d from the EPA Library catalog, an cations and databases: Publications: Environment Abstract

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EIC/Environment Info New York, New York.

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Library Systems Staff
U.S. Environmental Protection Agency

Reader's Guide to Periodical Literature
H.W. Wilson Company
New York, New York

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National Institute of Education
Educational Resources Information Center
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