

# The Problem with Environmental Education Today: Is the Tail Wagging the Dog?

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## **Introduction**

It is widely accepted that when K-12 students learn about the environment, the information they receive is biased and misleading. Lessons are heavily weighted toward views espoused by the environmental community. As numerous critiques and studies, some of which have come from inside the environmental movement,<sup>1</sup> have demonstrated this bias, that point will not be belabored here. This paper explores why environmental education (EE) is so biased and one-sided.

Perhaps it is because the teachers are environmentalists who want to promote the environmentalist agenda. Or perhaps the environmentalist textbook authors write biased textbooks. Perhaps publishers calculate that they can sell more textbooks by publishing texts that present only one side of important environmental issues — especially if the

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<sup>1</sup> Michael Sanera, “Environmental Education in Wisconsin: What the Textbooks Teach,” Wisconsin Policy Research Institute, June 1996. Michael Sanera, “Teaching Environmental Education to Wisconsin Teachers: A Review of University Course Materials,” Wisconsin Policy Research Institute, November 1997. Jonathan H. Adler, “Little Green Lies: The Environmental Miseducation of American’s Children,” *Policy Review*, Summer 1992. “Are We Building Environmental Literacy?,” Independent Commission on Environmental Education, April 1997. Jo Kwong, “Environmental Education: Getting Beyond Advocacy,” Center for the Study of American Business, Washington University, December 1995. Nancy Bray Cardozo, “Reading, Writing & Ruin,” *Audubon*, January/February 1994.

textbook market comprises biased teachers seeking biased textbooks. Or perhaps environmental organizations simply have been more effective at placing their materials in schools.

While those factors undoubtedly play a role, I will argue here that the founders of the environmental education movement made a strategic decision to use the definition of EE to control the implementation of the field. Environmentalists who founded the field sought not to educate children about the environment, but instead worked to instill in children the desire to "save" the environment through personal choices and political activism. They designed the presentation of environmental information to serve that end and jettisoned normal educational standards in favor of indoctrinating children so that they would engage in an "environmental children crusade."

### **Origins and Bias in Environmental Education**

While environmental education has shallow roots in conservation and outdoor education, its taproot runs deep into the environmental movement. Inspired by Rachel Carson's *Silent Spring* of 1962 and revolted by the toxic Love Canal incident, the environmental movement grew like wildfire in the 1970s and '80s. In those early years, environmentalists found that many adults, including middle- and lower-income workers, quickly realized that many environmental regulations threatened their economic well-being. So environmentalists developed environmental education as a long-range strategy to reach children who, after all, would become the next generation of voters.

The 1990s saw the beginning of serious concern and criticism about the bias in EE teaching and materials. In 1992, *Policy Review* published Jonathan Adler's "Little

Green Lies: the Environmental Miseducation of America's Children," which documented the bias in many EE materials and exposed ten environmental myths commonly taught children.<sup>2</sup> Adler exposed such myths as "Recycling is always good," "Pesticides are always bad" and "There are too many people." Such myths exist because EE's educational goal is not to develop independent thinkers, but to present information selectively in order to lead children into predetermined conclusions. Therefore, the myth that "Recycling is always good" is created to motivate children to recycle regardless of the costs and to heckle their parents to do the same.

EE's action goal goes well beyond personal behavior. Political action is also a critical part of environmental education. After teaching students an environmental myth, environmental educators urge them to write letters to the editor, local city council member and even the president. Sometimes they even urge them to raise money for and join environmental groups.

Jo Kwong gets at the heart of this issue in her monograph "Environmental Education: Getting Beyond Advocacy."<sup>3</sup> She argues that the root problem with the field is that "professional environmentalists are largely responsible for current environmental education." Activism and advocacy directly flows from that, and "professional environmentalists are advocates and make the worst teachers if the goal is to provide knowledge for informed decisions."<sup>4</sup>

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<sup>2</sup> Jonathan Adler, "Little Green Lies: The Environmental Miseducation of America's Children," *Policy Review*, Summer 1992.

<sup>3</sup> Jo Kwong, "Environmental Education: Getting Beyond Advocacy," Center for the Study of American Business, Washington University, *Contemporary Issues Series #76*, December 1995.

<sup>4</sup> *Ibid*, p. 2.

## **EE Definition As a Strategic Decision**

The strength and persistence of the field of EE goes beyond the vast influence environmentalists have over the teachers and classroom materials. At the beginning, environmentalists made a strategic decision to control the field by defining it in ways favorable to their goals. Their efforts to motivate children into taking environmental action, both personal and political, became an essential part of their definition of environmental education. Having settled on that definition, they sought to legitimize it and defend it from criticism.

Environmentalists start with the assumption that the environment is in grave danger and must be saved. They furthermore assume that only their prescribed solutions will save it. With those two important questions sidestepped, their task becomes how to “educate” children to become "part of the solution" by taking action to save the planet. Environmental education’s primary goal is therefore to present environmental information selectively in order to motivate children to action. This goal inverts the normal educational process, which places highest priority on students receiving accurate information and learning a full understanding of a subject — specifically for EE, that would involve students gaining accurate scientific and economic knowledge about the environment. But with EE, the tail is wagging the dog.

Beyond that, the definition of the field is important for practical reasons. EE teacher-training programs start with defining the field. New teachers, who may not be environmentalists, learn that student action is an essential part of their curriculum. When teachers develop their lesson plans and select teaching materials, they are looking for that action element because their training holds that they cannot be teaching EE properly

without it. The action component is also present at the state level because it is included in their EE curriculum standards.

A review of the definitional development of the field shows that the action orientation has always been a core component of the field. University of Michigan Professor William Stapp offered one of the first definitions of the field in 1969:

Environmental education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to help solve these problems, *and motivated to work toward their solution.*<sup>5</sup> (Emphasis added.)

In the 1970s, EE educators turned to the United Nations Educational, Scientific and Cultural Organization and the UN Environmental Programme for assistance in advancing the field. The UN sponsored EE conferences in Belgrade, Yugoslavia in 1975 and in Tbilisi, the Soviet Republic of Georgia in 1977.<sup>6</sup> The definitions produced in the Belgrade Charter and Tbilisi Declaration were consistent with the emphasis on action, but they were not sufficiently clear for American EE practitioners. Therefore, in 1980, Professor Harold Hungerford and his colleagues published "Goals for Curriculum Development in Environmental Education" in the *Journal of Environmental Education*. Their definition eliminated the confusion over the priority given to action:

... to aid citizens in becoming environmentally knowledgeable and, *above all, skilled and dedicated citizens who are willing to work, individually and collectively,* toward achieving and/or maintaining a dynamic

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<sup>5</sup> Stapp, W.B. et al., "The Concept of Environmental Education," *Journal of Environmental Education*, 1(1), 1969.

<sup>6</sup> It is probably more than a coincidence that EE educators chose centrally planned economies in which to hold their conferences. They also turned a blind eye to the environmental destruction produced by those centrally planned economies.

equilibrium between quality of life and quality of the environment.<sup>7</sup>  
(Emphasis added.)

### **Current Definitions**

After a barrage of criticism aimed at EE in the 1990s, some in the environmental education movement began to dress up their definitions with euphemisms. In some places environmental education has changed to “environmental literacy” and action has been softened to “participation.”

But the Environmental Education & Training Partnership (EETAP), which is funded by the Environmental Protection Agency (EPA), still states the goal of EE with clarity: “The ultimate outcome of environmental education is *promoting citizen action*; in other words, to be environmental [sic] literate, *a person must possess citizen action skills.*”<sup>8</sup> (Emphasis added.)

EETAP’s definition of EE includes seven variables said to foster environmental literacy:

1. Knowledge of issues
2. Beliefs concerning issues
3. Individual values
4. Individual attitude
5. Locus of control
6. Environmental sensitivity
7. Knowledge and skill of *environmental action strategies*<sup>9</sup> (Emphasis added.)

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<sup>7</sup> Harold Hungerford et al., “Goals for Curriculum Development in Environmental Education,” *Journal of Environmental Education*, 11:3, 1980, p. 44.

<sup>8</sup> “Impact of Environmental Education Activities on Environmental Literacy of Learners,” EETAP Resource Library, Number 93, November 2000, p. 1.

<sup>9</sup> Ibid.

In defensive language, EETAP notes that K-12 teachers “should focus on helping students learn how to think not what to think [sic].”<sup>10</sup>

The EPA’s Office of Environmental Education is also clear about the goal of EE:

[E]nvironmental education provides the capability and skills over time to analyze environmental issues, engage in problem solving, and *take action* to sustain and improve the environment.<sup>11</sup> (Emphasis added.)

EPA’s definition has five carefully worded parts, including the use of “participation” not action (boldfaced text in original):

- **Awareness and sensitivity** to the environment and environmental challenges
- **Knowledge and understanding** of the environment and environmental challenges
- **Attitudes** of concern for the environment and motivation to improve or maintain environmental quality
- **Skills** to identify and help resolve environmental challenges
- **Participation** in activities that lead to the resolution of environmental challenges<sup>12</sup>

Regardless of the new verbiage designed to cover their much-criticized activities, the core values of the movement remain intact.

### **Legitimizing the definition**

Creating a definition designed to motivate children to change their personal behavior and engage in political activities in ways dictated by the environmental movement was only half of the battle. Securing legitimacy for the definition was the other. The environmental movement needed the academic community to recognize as

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<sup>10</sup> Ibid.

<sup>11</sup> “Basic Information,” EPA, Office of Environmental Education, <http://www.epa.gov/enviroed/balic.html>, updated June 3, 2008.

<sup>12</sup> Ibid.

legitimate its self-serving definition of the field, as well as government educational communities at the local, state and federal levels.

One of their first major achievements in their pursuit of legitimacy was President Richard M. Nixon's signing of the National Environmental Education Act of 1970, which created the Office of Environmental Education in the Department of Health, Education and Welfare (it was transferred in 1979 to the newly created Department of Education), the National Advisory Council for Environmental Education and several grant programs. Environmentalists leveraged this national recognition to achieve recognition at the state and local levels. The downside of this act, from the environmentalists' point of view, was that it housed the program with other educational programs — it may have provided some degree of legitimacy, but it also highlighted the contrast between science education, which transmits knowledge, and environmental education, which is designed to make activists of students. This national recognition experienced a setback in 1981 when, at the urging of the Reagan administration, Congress eliminated the EE office and programs as part of its effort to consolidate programs and offer block grants to the states.

The next major advance toward legitimacy came with the passage of the Environmental Education Act of 1990. Signed by President George H.W. Bush, this act reestablished the Office of Environmental Education, housed this time in a much friendlier environment: the Environmental Protection Agency. EE was to play a supporting role in the EPA's quest to implement environmental command-and-control regulatory policies. Many educators would regard location in the EPA as antithetical to proper education.



The 1990 act created the following network that currently implements the definition of environmental education: the Office of Environmental Education in the EPA, the EE Advisory Council and Federal Task Force on EE, the National Environmental Education and Training Foundation, and the Environmental Education and Training Program.<sup>13</sup>

**Office of Environmental Education in the EPA:** This office (later reorganized to a division) administers the act's programs and funding. It directly administers the EE grant program that awards mostly small grants to teachers, schools and nonprofits. It also bestows Presidential Environmental Youth Awards and Environmental Fellowships for college student who pursue environmental careers.<sup>14</sup>

**EE Advisory Council and Federal Task Force on EE:** The advisory council is a group of public and private EE experts. It reports to Congress on the quality of EE and the status of the implementation of the act. The task force comprises representatives from five federal departments and the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA) and the National Science Foundation (NSF). This task force coordinates EPA's EE efforts with the EE activities in those departments and agencies.

**National Environmental Education and Training Foundation:** This foundation is a private, nonprofit organization that encourages cooperation between the public and private sectors. Its mission is larger than K-12 EE. It also includes public-

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<sup>13</sup> David M Bearden, "National Environmental Education Act of 1990: Overview, Implementation and Issues for Congress, Congressional Research Service Report to Congress, (Order Code 97-97), August 24, 2007.

<sup>14</sup> Bearden, CRS, p. 4.

health aspects of the environment, “green” business and weather.<sup>15</sup> The NEETF attempts to influence the climate change debate by lobbying the nation’s television and radio weathermen to include more catastrophic global warming information in their weather reports.<sup>16</sup>

**The Environmental Education and Training Program:** While all of these organizations are important in spreading the EE definition, the EETAP is guaranteed 25 percent of the EE budget to promote the EE definition to teachers, schools and states. Since 1995 EETAP has trained more than 75,000 teachers and educators.

Since education policy is set primarily at the state level, EETAP funds the National EE Advancement Project (NEEAP) that works with local organizations to pass state laws that institutionalize EE in the schools. At last count, 32 states have created state funding for EE, 34 states have included EE in their assessment strategies, 34 states have established in-service EE training programs for teachers and 30 states have incorporated EE learning objectives into their curriculum guidelines.<sup>17</sup>

The NEEAP also works to have states require certification for EE teachers. Certification programs have been established in Utah, Kentucky and Texas.<sup>18</sup> This effort dovetails with another NEEAP project that is attempting to require schools of education to teach EE. By working with the National Council for Accreditation of Teacher Education, NEEAP is writing “Environmental Education Program Standards for the

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<sup>15</sup> Bearden, CRS, p. 5.

<sup>16</sup> “Earth Gauge,” National Environmental Education Foundation. Earth Gauge boasts that its information reaches 200 million television weather viewers, 91 million more viewers through its partnership with “The Weather Channel” and 1.7 million radio listeners.

<sup>17</sup> A. Ruskey, R. Wilke, and T. Beasley, “A Survey of the Status of State-level Environmental Education in the United States—1998 Update,” *Journal of Environmental Education*, Spring 2001.

<sup>18</sup> Abby Ruskey, “EE Certification Takes Leaps and Bounds,” *The Environmental Education Advocate*, NEEAP, Winter 2004.

Preparation of Teachers” which, if adopted by the NCATE, would require schools of education to meet EE standards before they would be accredited.<sup>19</sup>

Through its grant to the University of Wisconsin at Stevens Point, NEEAP offers the three-credit online course “Fundamentals of Environmental Education.” This course is intended to provide easy access for interested teachers to an introduction to EE. The first of the six units in this course focuses on the definition of EE, favoring the definition from the 1978 UNESCO Tbilisi Declaration:

Environmental education is a learning process that increases people’s knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and *take responsible action*.<sup>20</sup> (Emphasis added.)

### ***National Science Teachers Association***

One of the most important goals for EE educators for gaining legitimacy was recognition by the National Science Teachers Association (NSTA). Advocates always argued that EE was more than just environmental science. As shown by the definitions, EE includes environmental science but also involves a range of environmental concerns, including economic, social and political aspects. Science teachers, however, were cautious about endorsing EE as a legitimate part of the science teachers’ community. Many of them viewed the action aspect of the EE definition with skepticism.

Not until 2003 did the NSTA issue an official position statement on environmental education. While that was a significant victory for the EE community, the

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<sup>19</sup> Bora Simmons, “NCATE Writing Team Meets,” *The Environmental Education Advocate*, NEEAP, Winter 2004.

<sup>20</sup> Syllabus for “Fundamentals of Environmental Education,” NEEAP, and “Working to build the infrastructure for environmental literacy,” NEEAP brochure.

statement did not fully endorse the EE definition. NSTA recognized the controversy surrounding EE and wanted to avoid being dragged into the debate. It minimized the controversy created by the action orientation of EE by stating “student knowledge of environmental concepts establishes a foundation for their *future* understandings and actions as citizens.”<sup>21</sup>(Emphasis added.)

NSTA also emphasized that EE “should strive to present a balance of environmental, economic and social perspectives.” Additionally, and perhaps most importantly, students “should be taught how to think through an issue using critical-thinking skills, while avoiding instructor or media bias regarding what to think about the issue.”<sup>22</sup>

### ***Advanced Placement Environmental Science***

The EE movement also sought to gain legitimacy by the creation of the Advanced Placement (AP) Environmental Science (ES) exam program by the College Board. If the AP ES exam program followed the EE definition, the EE movement would gain the prestige of the College Board and have access to the best and the brightest high school students taught by the best teachers.

Environmental science qualifies as a lab science in many high schools; often students must take at least one lab science to graduate. Students faced with a choice between environmental science and the AP hard science lab courses such as biology, physics or chemistry to meet their lab science requirement, many students will select environmental science.

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<sup>21</sup> NSTA Official Position Statement: Environmental Education, adopted by the NSTA Board of Directors, February 2003.

<sup>22</sup> NSTA, EE, Feb. 2003

As with the NSTA policy statement, the AP ES program stops short of a full endorsement of the action orientation of the EE definition. The AP ES program description states that the course will provide:

students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.<sup>23</sup>

Thus the AP environmental science course does not include the last step, training students to engage in personal and political actions to solve or prevent environmental problems. But this setback for EE educators is more of form than substance. Several aspects of the implementation of the AP ES program have added the action orientation desired by the EE movement.

Also, the College Board, while not officially endorsing any environmental science textbooks, nevertheless provides a list of “example” textbooks. Some of the books on this list have been criticized in reports by the Independent Commission on Environmental Education (ICEE) and its successor, the Environmental Literacy Council, for straying into advocacy. One of the major findings of the ICEE report is that “Many high school environmental science textbooks have serious flaws. Some provide superficial coverage of science. Others mix science with advocacy.”<sup>24</sup>

Some of the environmental science textbooks on the AP ES “example” list were also reviewed for a study of materials used in EE teacher-training courses in Wisconsin. AP ES courses often use college-level texts. This review found that:

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<sup>23</sup> “Environmental Science: Course Description,” College Board, May 2008–May 2009, p. 3.

<sup>24</sup> “Are We Building Environmental Literacy?”, Independent Commission on Environmental Education, April 1997, p. 42.

- Many materials mislead prospective teachers by mixing science with advocacy.
- Environmental science in many of these materials is often the selective use of scientific information to lead future teachers to predetermined conclusions.
- A balanced and fair treatment of economic reasoning is largely nonexistent in them.
- Normal standards of scholarship, which require citations for data and opinions taken from other sources, are almost entirely missing from these teacher education materials.<sup>25</sup>

Another factor that has moved AP ES closer to the EE movement's definition is the AP ES exam itself. The academic members of the AP ES exam development committee are not in traditional hard-science departments, but are faculty in the newly created environmental departments, such as the Department of Environmental Studies, the School of Environment and Natural Resources and the Department of Ecology and Evolutionary Biology — academic units that have been created in recent years and that often share the action orientation of the EE movement's definition.

While many of the questions on the AP ES exam are strictly science-based, others that deal with environmental issues often reflect environmentalist positions. In addition, some of the exam questions written by this committee show evidence of the biased presentation of information to lead students to predetermined conclusions and the actions necessary to support those conclusions. For example, a question concerning the Convention on International Trade in Endangered Species (CITES) treaty offers no recognition of the controversy surrounding it in some places in Africa, where it has the unintended consequence of prohibiting local villages from benefiting from animals that

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<sup>25</sup> Michael Sanera, "Teaching Environmental Education to Wisconsin Teachers: A Review of University Course Materials," Wisconsin Policy Research Institute, Volume 10, Number 7, November 1997, p. 1.

they protect. The question simply asks: “The CITES treaty has been helpful in protecting endangered animals and plants by,” with the answer being “listing those species and products whose international trade is controlled.” Thus students are taught incomplete information that leads them to support the CITES treaty unquestionably.

Many of the multiple-choice questions and free-response questions (the AP version of an essay question) on climate change also parrot the environmentalist conclusions and leave no room for alternative actions by students. One of the 2006 free-response questions used graphs that were almost an exact copy of an infamous graph used in former Vice President Al Gore’s movie, "An Inconvenient Truth." The question presented students with two graphs, one depicting the change in global carbon-dioxide concentrations over the past 200,000 years and the other charting mean global temperatures during that same time span. The only difference from those graphs and the graph from Gore's film was that in the exam the graphs were not superimposed. To compensate for that deficiency, the exam writers asked students to “Calculate the ratio of the change in mean global temperature to the change in atmospheric CO<sub>2</sub> concentration between 140,000 years ago and 125,000 years ago.” Of course that time period corresponds to the most rapid rise in CO<sub>2</sub> and temperature on both graphs. Students were then told: “Scientists predict that between 1950 and 2050, the atmospheric CO<sub>2</sub> concentration will increase by 200 ppm.” That statement was followed by the direction: “Predict the change in mean global temperature between 1950 and 2050 using the ratio that you calculated in part (ii).” The answer given in the official “Scoring Guidelines” used by the exam readers was 25 degrees Celsius warmer; answers in the range of 18 to 34 degrees Celsius warmer were also considered acceptable.

Students were then asked to discuss the major assumptions necessary to make their predictions. Several assumptions were offered in the “Scoring Guidelines,” but the first assumption was that the prediction is based on a direct relationship between CO<sub>2</sub> and temperature. Students were expected to discuss several reasons why that assumption could be invalid, but ultimately they were to conclude that it is valid because “this has been the case for the past 200K years” and “correlation remains constant over time.”<sup>26</sup> Those are the same conclusions Gore wants his viewers to reach when he shows his graph in *An Inconvenient Truth*. It is obvious that Gore wants his viewers to act on those conclusions, and just as obvious that the exam writers want AP ES students to act, too.

### **Threats to the Definition**

The road has not been entirely smooth for the EE movement’s definition. Criticism in the early 1990s led many to question the action component of the definition. That directly resulted in a confrontation in Congress in 1996 over the reauthorization of the EE Act of 1990, which expired in 1996.

Supporters of reauthorization gained the support of Sen. James Inhofe, R-OK, one of the most conservative members of the Senate. With his support the reauthorization bill passed the Senate. The bill faced stiffer opposition in the House. Republican control gave the chairmanship of key committees to conservatives. The National Center for Public Policy Research organized opposition to reauthorization by gaining the support of 33 major conservative groups, including Americans for Tax Reform, the Competitive

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<sup>26</sup> “AP Environmental Science 2006 Scoring Guidelines,” College Board, Advanced Placement Program, p. 7. [www.apcentral.collegeboard.com](http://www.apcentral.collegeboard.com).



Enterprise Institute and the Free Congress Foundation. The coalition letter signed by the leaders of these groups was presented to Senator Inhofe at the weekly meeting of conservative groups held by the Free Congress Foundation.

Another factor that influenced the reauthorization debate was an op-ed in the *Wall Street Journal*, "The ABCs of Environmental Myths," written by Michael Sanera and Jane Shaw.<sup>27</sup> This letter was attached to a "Dear Colleague" letter sent to key House members. Given this opposition, the reauthorization bill failed to pass.

Two successive Congresses faced similar reauthorization bills, and similar actions prevented their passage. At one point Inhofe's staff tried to negotiate with opponents of reauthorization and learn what modifications to the bill would be necessary to win their support. They were told that the bill must clearly state that all EE must be based on sound science and economics, that controversial environmental issues must be presented in a balanced way and that the program must be transferred to the National Science Foundation. Those changes were completely unacceptable to the EE community, of course, because they would negate their definition of the field.

Lack of authorization for federal EE programs was not as big of a setback as it might first appear. Even without legal authorization to conduct programs or spend money, Congress continued to fund environmental education. Even the Republican-controlled Congresses after the 1994 election continued to fund the EPA's Office of EE and EE programs to the tune of about \$8 million per year.

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<sup>27</sup> Michael Sanera and Jane Shaw, "The ABCs of Environmental Myths," *Wall Street Journal*, September 4, 1996.

This threat to the EE movement resulted in cosmetic changes, however. The EPA established informal guidelines that any EE programs it funds must be based on “objective and scientifically sound information.” The EPA softened its emphasis on action by using the terms “participation” and “responsible action.” And in some places environmental education has been changed to “environmental literacy.” But all that is little more than an effort to protect the movement with more acceptable language.

***Independent Commission on Environmental Education and the Environmental Literacy Council***

Another substantial threat to the EE movement was the critical report by the Independent Commission on Environmental Education, a program of the George C. Marshall Institute. The Commission’s report, “Are We Building Environmental Literacy?”, found that “materials often fail to prepare students to deal with controversial environmental issues.” Furthermore, environmental science textbooks “provide superficial coverage of science. Others mix science with advocacy.” One high school text begins with a discussion of the “crisis of unsustainability” and uses a quote from radical environmentalist and Earth First! founder David Foreman to define “Earth-wisdom,” a concept used throughout the textbook.<sup>28</sup> The Commission also noted the glaring contradiction between the notion that EE is about critical and independent thinking and EE’s use of behavior-modification techniques to goad students into personal and political action.<sup>29</sup>

In the long run, this threat was neutralized when the Environmental Literacy Council (ELC) began joint projects with and accepted funding from the mainstream EE

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<sup>28</sup> “Are We Building...” p. 42.

<sup>29</sup> Ibid., p. 34-35.

community and government agencies. One sign that ELC has been co-opted is that the EETAP includes the formation of the ELC's forerunner, the Independent Commission on EE, in its history of the EE movement.<sup>30</sup>

### ***Bush Budget Cuts***

Starting with the FY 2003 federal budget through the proposed FY 2009 budget, the Bush administration provided no funding for EE in its budget request. To justify this defunding decision, the Administration cited the performance rating for EE by the Office of Management and Budget (OMB). OMB has repeatedly rated the EPA's EE program as "Results Not Demonstrated," so when OMB applies its Program Assessment Rating Tool (PART), the lack of performance metrics make it "difficult to determine whether the [EPA's EE] program is achieving its goal of improving the quality of environmental education."<sup>31</sup>

Although the administration has not requested funding for EE, Congress has continued to fund it to the tune of the \$8 million to \$9 million per year even without authorization legislation.

### **The Current Offensive to Save EE**

While the Bush administration's efforts to defund the federal EE program failed, funding was kept to a relatively low level. With a new Democratic Congress after the 2006 election, the EE movement began working to gain reauthorization and to increase funding dramatically.

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<sup>30</sup> Edward J. McCrea, "The Roots of Environmental Education: How the Past Supports the Future," EETAP, p. 9.

<sup>31</sup> Bearden, CRS, p. 3.

The new effort is called “No Child Left Inside” (NCLI); it is attempting to hitch its wagon on the reauthorization of the No Child Left Behind (NCLB) Act.

The environmental education changes to NCLB include:

- A new grant program for states to develop environmental education standards.
- A new grant program to train environmental education teachers modeled on the Math/Science Partnership program.
- Classification of EE as an “authorized program” of the Fund for Improvement of Education, which would provide more funding for environmental education programs in the states.
- A requirement that, in order for a state to qualify for these new EE grant programs, it must develop and submit a K-12 EE plan showing how high-school graduates would become environmentally literate.
- Classification of EE as a “Core Academic Subject” under NCLB, which would make EE equal to English, reading, math, science, civics, economics and geography under NCLB. The next step would be to make it a requirement to be taught under NCLB.<sup>32</sup>

In addition to those changes, financial support for EE would be increased tenfold under a bill introduced by Sen. John Sarbanes, D-MD. This bill would increase funding to \$100 million for grants and aid.

### ***Congressional Lobbying Effort***

In order to lobby Congress for this change along with three other high-priority environmental items, several environmentalist foundations have formed the Campaign for Environmental Literacy (CEL). The CEL was created in the fall of 2004, with funding provided by the Marisla Foundation, the Turner Foundation, the Rockefeller Brothers Fund and the Munson Foundation provided the money for the first three years of the campaign.<sup>33</sup> The program continues with funding from the Tortuga Foundation, the

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<sup>32</sup> “Environmental Education and No Child Left Behind,” Campaign for Environmental Literacy, June 2007.

<sup>33</sup> Campaign for Environmental Literacy, “About CEL, History,” [http://www.democracyinaction.org/dia/organizationsORG/cel/content.jsp?content\\_KEY=415&t=about](http://www.democracyinaction.org/dia/organizationsORG/cel/content.jsp?content_KEY=415&t=about)

Marisla Foundation, the Wendling Foundation, the Ocean Foundation, Mary Kay Inc. and the Alaska Conservation Foundation.

In addition to lobbying for the passage of the NCLI as part of the reauthorization of NCLB Act, the CEL is lobbying for a restoration of funding for EPA's Office of Environmental Education, an increase in funding for NOAA's Office of Education and Sustainable Development and the passage of the Higher Education Sustainability Act. All of these are important priorities for the EE movement.

The CEL website is set up to facilitate the grassroots lobbying efforts by coaching individuals and groups on how to take action: writing Congress, writing letters to the editor of local newspapers and telling friends to take action in support of the CEL legislative agenda.<sup>34</sup>

## **Conclusion**

To have a well-rounded education, our K-12 students need to learn about the environment. They even need to be taught about controversial environmental issues and problems. This education must be based on the full range of scientific and economic debate, however, and it should emphasize scientific concepts and principles in the lower grades and introduce environmental issues and controversies only in the upper grades. Unfortunately, those concepts are far removed from the goals of the EE movement.

The environmental education community's definition of EE focuses on prompting personal and political action by students. Instead of instilling knowledge of the environment and environmental issues and trusting that those would be the prerequisite

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<sup>34</sup> Council for Environmental Literacy, "Take Action: Tell Congress you support NOAA's Environmental Literacy Programming!"  
[http://www.demaction.org/dia/organizations/cel/campaign.jsp?campaign\\_KEY=1563&t=action](http://www.demaction.org/dia/organizations/cel/campaign.jsp?campaign_KEY=1563&t=action).

for well-informed action, achieving rote action all too often becomes the driving force behind EE presentation. Students suffer because teachers present information selectively in an attempt to lead them to predetermined conclusions in order to motivate them to take predetermined actions. Professional environmentalists have captured the vast majority of environmental education and have designed it to serve their own ends. Reforming EE will be impossible until educators can change the definition of the field to align with the proper principles of science education.