

State Education & Environment Roundtable



Thirteenth
SEER
Seminar

May 19, 2002
through
May 22, 2002



State Education & Environment Roundtable

REPORT OF THE 13TH SEMINAR

INTRODUCTION

From May 19 through May 22, 2002 the State Education and Environment Roundtable (SEER) held its thirteenth seminar in Kenilworth, New Jersey.

This document reports on the agenda and participants, briefly describes the various exploratories and relates the discussions that characterized the Seminar.

In addition to Minnesota's SEER member Jean Tushie, Annette Drewes of the Minnesota Office of Environmental Assistance joined the group of participants. Tanya Oznowich of the New Jersey Department of Environmental Protection and Jerry Schierloh, New Jersey's EIC-Network Coordinator, participated in the seminar for many of the sessions. Donny Roush from the Idaho Environmental Education Association joined the group for the first time as Idaho's representative. Gene Myers of Western Washington University represented Washington State in Tony Angell's absence. Sherry Beasley, South Carolina's representative, was unable to attend.

SEMINAR AGENDA

The thirteenth seminar focused on the following topics and activities:

- Partnerships with national community-based organizations;
- State-based EIC Demonstration Networks;
- Role of math in environment-based programs.
- Visits to two of New Jersey's EIC Demonstration schools;
- Role of coaches in developing and supporting State-based EIC Demonstration Networks; and,
- Function of community-based partners in supporting EIC-network schools;

The full Seminar Agenda is included as Appendix A. The list of participants is included as Appendix B.

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Daily Discussions and Presentations

State Reports

Throughout the week, SEER member state representatives delivered informal presentations on advancements and ongoing program development within their states. The state reports also contained descriptions of activities including: the state's EIC demonstration networks; state plans; funding and grants; and, standards and curriculum development. **The state updates are included as Appendix C.**

Sunday, May 19, 2002

The thirteenth SEER Seminar opened at the New Jersey Marine Sciences Consortium at Sandy Hook. SEER's director, Dr. Gerald Lieberman, greeted the participants and introduced the seminar's main topics.

Claire Antonucci, Director of Education Programs at the Marine Sciences Consortium, gave the participants an introductory tour of the facility and guided the group through a series of activities offered to students who visit the Marine Science Program. As a coach for one of New Jersey's EIC Demonstration Schools, Claire also shared her experiences in supporting the EIC implementation process.

During the afternoon session, Dr. Lieberman reminded participants that SEER's third phase focuses on establishing partnerships with national education and environmental education colleagues and, building and strengthening EIC demonstration networks in SEER member states. Opening discussions included an update of SEER's activities since the 12th seminar, the introduction of new participants and state reports.

Monday, May 20, 2002

The seminar's second day convened at the Trailside Nature and Science Center. The morning session centered on the following discussion topics:

- Potential role of lobbyists in strengthening the role of environment-based programs in the national education system. The strategy of focusing on delivering the message through Congress and the Senate, instead of through federal agencies.
- Possibility of aligning with the "No Child Left Behind" Act.
- The need to follow-up with Kevin Coyle of NEETF.
- After-school programs as another avenue to be explored.
- Federal monies being moved from EPA to NSF and how this may affect block grants to the states.
- Congressional research paper on environmental advocacy to help positioning of The EIC Model with emphasis on examples of states "doing EIC." Showcase success stories and identify elements to strengthen state programs.
- Rallying federal support. Identification of representatives to present the case to congressional officers.
- Need to clearly delineate what it is the group is asking for, the elements to be highlighted and identification of who will pitch the concept.
- The importance of supporting good education vs. a single model, such as EIC, to emphasize that the goal is good education with the environment as a delivery vehicle.

- Flow of information should come from USDOE to states or through regional entities, not necessarily through state agencies.
- Need to clarify state legislatures' involvement.
- Use demonstration network model to showcase and support networks already in place. Capitalize on place-based connections.
- Work with like-minded organizations. Marty Blank (Director of Community Collaboration, Institute for Educational Leadership) has pulled together eight organizations to start talking about parallels between various collaborative projects.
- SEER members Jane Eller, Deron Davis, Becky Bell, Bill Andrews and Kathy McKee agreed to be on a committee to further explore putting together a strategic plan and "sales pitch" to gain national recognition of the role of environment-based education.

Community-based Partnerships

Rachel Tompkins, President of the Rural School and Community Trust (The Rural Trust) and Cory Bowman, Associate Director of the Center for Community Partnerships joined the group for the afternoon session.

Ms. Tompkins opened the discussion by sharing activities of The Rural Trust. Her presentation included:

- Origins of The Rural Trust — providing grants to place-based educational programs. They are active in 16 states and regions implementing place-based education.
- The Rural Trust's mission is to enlarge student learning and improve community life by strengthening relationships between rural schools and communities and engaging students in community-based public work.
- The Rural Trust maintains a small national office in Washington, DC, housing the organization's six-person staff. Other staff members work from their home communities in Arizona, Colorado, Georgia, Iowa, Kentucky, Massachusetts, New Hampshire, North Carolina, Vermont, Virginia and Wisconsin to advance The Rural Trust's policy and capacity-building work.
- The Capacity Building Program works with schools, teachers, students and community members to foster and strengthen "place-based" education programs. This work is based upon the following six principles:
 1. The school and community actively collaborate to make the local place a good one in which to learn, work, and live.
 2. Students do sustained academic work that draws upon and contributes to the place in which they live. They practice new skills and responsibilities, serving as scholars, workers, and citizens in their community.
 3. Schools mirror the democratic values they seek to instill, arranging their resources so that every child is known well and every child's participation, regardless of ability, is needed and wanted.
 4. Decision-making about the education of the community's children is shared, informed by expertise both in and outside the school.
 5. All participants, including teachers, students, and community members, expect excellent effort from each other and review their joint progress regularly and thoughtfully. Multiple measures and public input enlarge assessments of student performance.

6. The school and community support students, their teachers, and their adult mentors in these new roles.
- The Rural Trust recently designed a comprehensive assessment and support system for place-based school and community work. At the high end of the system is a portfolio-based assessment process created in part through the work of nine design teams from Rural Trust network sites around the country.
 - The portfolio assessment establishes indicators of success, levels of student learning and community learning. They see it as a means of deepening the work, influencing how schools and their communities connect. The focus is on student voice and democracy, they do not want their efforts to be perceived as “just a curriculum project.”
 - With a planning grant from the J. Paul Getty Trust, The Rural Trust embarked upon a rural arts education initiative this year.
 - The Rural Trust’s Policy Program aims to help rural people be effective and responsible participants in important policy issues affecting schools and communities.
 - The Rural Trust influences professional development and teacher education by working with a consortium of higher education institutions that trains educators who work in rural areas.
 - Recognize the need to focus on financing — created a finance center to help non-profit groups.
 - Projects are based on economics, history, oral history, arts and culture as part of their place-based work.
 - Working to create a national rural voice for education. They are concentrating their efforts on a strategic plan that focuses on six regions in the country.
 - Website offers connections to regional representatives and to The Rural Trust’s strategic plan.

Cory Bowman of the Center for Community Partnerships (CCP) discussed his role at the Pennsylvania University Center. He shared research on the connection of higher education with models of rural community schools. Studies have been conducted to determine why rural community schools have not succeeded over time. The reported reasons include: not linking activities to the core mission of a higher-education institution; and, not having institutional anchors such as funding, connections, and infusions of short-term resources.

Mr. Bowman’s presentation focused on the following key points:

- Universities can be the long-term anchors for community partnerships.
- The CCP is the University of Pennsylvania’s primary vehicle working to solve the complex, comprehensive, and interconnected problems of the American city so that West Philadelphia (Penn’s local geographic community), Philadelphia, the University itself, and society benefit. The Center is based on three core propositions:
 7. Penn’s future and the future of West Philadelphia/Philadelphia are intertwined.
 8. Penn can make a significant contribution to improving the quality of life in West Philadelphia/Philadelphia.
 9. Penn can enhance its overall mission of advancing and transmitting knowledge by helping to improve the quality of life in West Philadelphia/Philadelphia.
- The Center, a university-wide initiative, is an outgrowth of the Penn Program for Public Service. The Center works to achieve the following objectives:

1. Improve the internal coordination and collaboration of all university-wide community service programs.
 2. Create new and effective partnerships between the University and the community.
 3. Encourage new and creative initiatives linking Penn and the community.
 4. Create and strengthen local, national and international networks of institutions of higher education committed to engagement with their local communities.
- Through the Center, the University currently engages in three types of activities: academically-based community service, direct traditional service, and community development.
 - Much of the Center's work has focused on the public school as the educational and neighborhood institution that can, if effectively transformed, serve as the concrete vehicle of community change and innovation.
 - The mediating structure for on-site delivery of academic resources is the West Philadelphia Improvement Corps (WEPIC), a school-based school and community revitalization program.
 - WEPIC's goal is to produce comprehensive university-assisted community schools that serve, educate, and activate all members of the community, revitalizing the curriculum through a community-oriented, real-world problem-solving approach.
 - The Ford Foundation has awarded the Center for Community Partnerships a planning grant designed to facilitate systematic and systemic school reform first in West Philadelphia Schools and subsequently throughout the region.
 - The Urban Nutrition Initiative (UNI) connects Penn undergraduate courses with courses in an elementary, middle, and high school in West Philadelphia, creating a pre-K through 16 curriculum. UNI's goals are to:
 1. create and sustain an interdisciplinary pre-K through 16 curriculum that focuses on improving community health;
 2. work with university faculty and public school teachers to effectively engage students as agents of school and community change; and,
 3. improve the nutritional and health status of public school students, their families, and the local community.
 - Need to fund programs that strengthen university-community partnerships.
 - Affiliation with schools of education may not be the strongest connection. There is a need to consider overlooked departments. Should explore how to get other departments in the university to establish meaningful relationships with rural communities.
 - Issues such as increased asthma, lead exposure and tobacco use are uniting urban and rural populations. Diverse areas need to leverage their resources.
 - CCP is encouraged by indicators of success. A case in point is the reduction in blood-lead levels in 2 of 19 schools in which CCP is working.
 - CCP promotes peer education as a key to solving many of the problems they are combating. Students should be producers not consumers of knowledge. Students can be effective health information deliverers.
 - CCP wants to work to establish community-based programs that go beyond drop-in programs. CCP wants to help establish mutually beneficial, democratic, collaborative community boards to tackle the real-world problems of the populations they serve. Support a system of university-assisted community schools.

- All 11 schools at Penn are involved in broad-based partnerships, with 128 classes at Penn involved in community-health improvement or Service-learning.
- University students are reconsidering their career paths, increasing numbers are following a school of education path.
- Universities should have a number of entry points: the chaplain, volunteer service office or cooperative extensions. Each institution must work to identify their best entry point.

The session concluded with group discussion that integrated the following points:

- The need to identify long-term indicators of university students' role in the community.
- Standardized achievement data doesn't address core issues of harnessing resources for organizational change.
- Need to explore how organizational change ultimately influences the intertwined health of communities and schools.
- Standards need to be considered. Community-based programs can be assets in helping departments of education accomplish their goals.

Role of Coaches

Two coaches from the New Jersey EIC Demonstration Network, Holly Hoffman of the Trailside Nature and Science Center and Mike Anderson of New Jersey Audubon, shared their experiences in working with their school teams. They talked about the successes and adversities in their roles as "mentors" in the EIC implementation process.

Tuesday, May 21, 2002

Math and the Environment

Dr. Patricia Kenschaft of the Department of Mathematics at Montclair State University led a session on math and the environment. Dr. Kenschaft is the chair of the Committee on Mathematics and the Environment of the Mathematical Association of America. She is author of *Mathematics for Human Survival* (2002). Dr. Kenschaft's session concentrated on the following:

- The importance of math in environment-based studies.
- The need to pay attention to the underrepresented groups in mathematics nationwide.
- The importance of teaching teachers how to do math as they go through their own educational process. Teachers can't teach what they don't know.
- Teachers do not know how to teach math. Education and political communities are unwilling to admit the magnitude of this problem.
- Original math standards were misinterpreted. "Math wars" over standards began in 1997.
- Educators must know the facts vs. application of math facts (math education vs. work of mathematicians).
- Need to work on communication — details of how we reach students and their teachers.
- There is open hostility toward math. General population must learn to tolerate frustration since frustration is the way of mathematics.
- Most Americans were taught by people who really didn't enjoy math. It's hard to understand "pieces" of mathematics. It is easier to understand pieces of science.

- The general public needs a real connection, an understanding of how to apply math.
- In Japan, all children are asked to explain how they arrived at the learning. We must also rejoice in the learning!

New Jersey EIC Demonstration Schools

The participants divided into two groups to visit an elementary and middle school in New Jersey's EIC-school network. Half of the group visited DeFuccio Elementary School in Jersey City. The other half went to Briarcliff Middle School in Mountain Lakes. Following the school visits, the group reconvened to discuss their experiences and observations.

Charles P. DeFuccio School

DeFuccio School is an urban elementary school (pre-K through eighth grade) in the heart of one of New Jersey's most populated cities. The DeFuccio School has a student ethnic breakdown of 70% African American, 19% Hispanic, 5% Asian, 5% White, and 1% Native American. As an Abbott school, DeFuccio has chosen to implement the Whole School Reform Model called the School Development Program. As a Comer school, the school is committed to providing students with an educational environment that meets all of the needs identified.

DeFuccio's EIC team is comprised of a third-grade teacher, a fifth-grade teacher and an eighth-grade science teacher who also serves as the lead teacher for the project. At times, the older EIC team students mentor those in the younger grade levels. The team's environmental mentor/facilitator is a Naturalist/Educator from Liberty State Park's Interpretive Center, Morris Pesin Drive, Jersey City, NJ.

The team's focus for their EIC investigation is 'Urban Wildlife,' as it relates to the organizing question: "What are the effects of urban wildlife on the community, and how does the community affect urban wildlife?" This question permits the team to investigate supporting questions that relate to the wildlife of nearby Lincoln Park, as well as the impact of ongoing housing renovations and urban traffic on wildlife. The EIC team is incorporating a number of assessment vehicles into this investigation, including: research papers, creative writing, peer teaching, oral presentations, field guides, video documentation, journaling, and habitat illustrations.

Briarcliff Middle School

The second site for visitation was Briarcliff Middle School. Briarcliff is a 6th through 8th grade school that serves 310 children from the residential community of Mountain Lakes, near the center of northern New Jersey. According to the school's mission statement, "Our school and community form a unique partnership with the common goal of providing for the ever-changing needs of young adolescents in today's society. Parental involvement is one of the many keys necessary to the success of the students during this time of transition."

The School's EIC team is comprised of a lead teacher (6th grade earth science); a 6th grade math teacher; and a 6th grade resource room teacher. The EIC mentor/facilitator is a Museum Educator from the nearby Morris Museum, 6 Normandy Heights Road, Morristown, NJ.

The context for Briarcliff's EIC investigation is the Tourne, a Morris County Park with unique natural and historical features, and one that is used by Mountain Lakes and other surrounding communities. The focus of investigation is "the Tourne as a natural system," and the key organizing question: "In what ways does the Tourne affect the community and what is, in turn, the community's influence on it."

Wednesday, May 22, 2002

The final morning of the seminar was held at the Newark Airport Hampton Inn. The final state reports were presented, administrative matters were discussed, and planning for the 14th seminar was initiated. The dates and location of the 14th SEER Seminar are yet to be determined. It was decided that the next seminar would be held in May, 2003.

The 13th SEER Seminar closed.



State Education & Environment Roundtable

APPENDIX A

Thirteenth SEER Seminar Agenda May 18 – May 22, 2002

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Saturday – May 18, 2002

Arrivals	Kenilworth Inn Garden State Parkway (exit 138), Boulevard & S. 31st St., Kenilworth, NJ 07033 908-241-4100 Taxi from Newark Airport (unless we have told you otherwise)
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Sunday – May 19, 2002

8:00 a.m.	Breakfast: Kenilworth Inn
9:00	Meet in lobby — Depart for New Jersey Marine Sciences Consortium at Sandy Hook
10:30	Tour NJ Marine Sciences Consortium
12:00 p.m.	Lunch: at NJ Marine Sciences Consortium
1:00	Opening Session
1:15	State Reports: Ohio Kentucky California
2:15	SEER Update
3:30	Open Discussion
4:30	Adjourn and return
5:30	Opening Dinner
8:00	Return to Kenilworth Inn

Monday – May 20, 2002

8:00 a.m.	Breakfast: Kenilworth Inn
8:45	Meet in lobby — Depart for Trailside Nature and Science Center
9:15	State Reports: Georgia Massachusetts South Carolina
10:15	Open Discussion
11:30	Tour of Trailside Nature and Science Center
12:00 p.m.	Lunch: Trailside Nature and Science Center

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Director
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Monday – May 20, 2002 — continued	
1:00	State Reports: Maryland New Jersey Texas
2:00	Exploratory: Community Partnerships <ul style="list-style-type: none"> • Center for Community Partnerships • Rural School and Community Trust
3:15	Break
4:00	Exploratory: The role of coaches in developing state-based EIC Implementation Networks <ul style="list-style-type: none"> • Holly Hoffman, Trailside Nature & Science Center • Mike Anderson, New Jersey Audubon
4:45	Adjourn
6:00	Group Dinner

Tuesday – May 21, 2002	
8:00 a.m.	Breakfast: Kenilworth Inn
8:45	Meet in lobby — Depart for Repetti's
9:00	State Reports: Minnesota Pennsylvania Florida
10:00	Exploratory: Math and the Environment with Dr. Pat Kenschaft, Montclair State University, New Jersey
11:30	Lunch
12:00 p.m.	Depart for visits to EIC Demonstration Schools
1:15	New Jersey EIC Demonstration Schools <ul style="list-style-type: none"> • Briarcliff Middle School, Mountain Lakes • DeFuccio Elementary School, Jersey City
3:00	Meet with teachers and principals
3:45	Return to Repetti's
5:00	Debrief about school visits
6:00	Closing Dinner
7:30	Return to Kenilworth Inn

Wednesday – May 22, 2002	
7:30 a.m.	Breakfast: Kenilworth Inn
8:15	Meet in lobby <u>with all of your luggage</u> — Depart for Hampton Inn by Newark Airport
8:45	State Reports: Iowa Washington Idaho
9:45	<ul style="list-style-type: none"> • Administrative Matters • Planning for the 14th SEER Seminar • Seminar Evaluation
11:15	Close of 13th Seminar
11:30	Depart for airport

13th SEER Seminar

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California Update

By Bill Andrews

Office of Environmental Education

May 2002

State Plan for Environmental Education is Complete

After two years of planning and development, the State Plan, which is entitled *Education and the Environment: Strategic Initiatives for Enhancing Education in California*, is in print and will be disseminated to thousands of educators beginning this month. Thanks to the leadership of Dr. Jerry Lieberman, Director of the State Education and Environment Roundtable, and chair of the State EE Plan writing working group, the 37 page document describes the purpose of the plan; the need for environmental education in California; and identifies six strategic initiatives accompanied by the expected results from implementation, as well as recommended activities and a call to action. State Superintendent of Public Instruction, Delaine Eastin, will lead the roll-out of the State Plan at the Orange County Children's Water Festival, the largest of its kind in the United States. Each of the 11 Superintendent's regions will host celebrations and invite sign-ups for the working groups which will be formed around each strategic initiative that is found in the State Plan. Copies of the State Plan will be available in June on the following website www.californiaee.org.

New Environmental Education Compendium

The latest evaluation of supplemental environmental education curricula for kindergarten through grade 12 is entitled *Environmental Education Compendium on Communities: A Review of Curricula on Natural and Built Environments*. This new 250 page document will be printed this summer and available in Fall 2002. All curriculum titles will be entered into the searchable CREEC Network Resource Directory at www.creec.org by September of 2002.

California Guide for Environmental Literacy (CGEL)

Layout of the text and illustrations has begun on the CGEL with an expected completion date of late summer. A roll-out plan is being developed in order to ensure widespread dissemination among educators and administrators. The purpose of the CGEL is to provide classroom educators with specific school-site examples of standards-based, interdisciplinary environmental education at the elementary and secondary levels. A unique website will be developed to enhance educator access and dissemination.

CREEC Network Website – A BIG Success!

Kudos to Michelle Kirk at WestEd, Jeff Bryant and Celeste Royer as CREEC Managers, and the 17 regional coordinators of the CREEC Network for effectively marketing the CREEC website. In the month of February over 82,000 hits were made on the creec.org website. Over 2,400 records have been entered into the database and evaluated by the CREEC Coordinators.

EE Grant Program

In Fiscal Year 2001-2002, 46 grant awards were issued by the Office of Environmental Education to: 30 Competitive grants and 16 State Priority grants.



Using the Environment

as an Integrating Context for Learning (EIC)

Implementation in Georgia – 2002

- December 1-4 Deron Davis of the Georgia Environmental Protection Division (GEPD) and Bob Moore of the Georgia Department of Education (GDOE) attend the State Education and Environment Roundtable (SEER) seminar in Austin, Texas. Bob and Deron develop a list of representatives from the education and natural resource communities to serve as the Board of Advisors and Steering Committee for this initiative.
- December 10th week Deron develops an invitation packet for Advisors and Committee members.
- December 17th week Deron develops the application for schools to participate using successful models from other SEER states.
- January 18 Richard Osorio of The University of Georgia submits an application for an \$85,000 Eisenhower grant to fund EIC.
- February 13-14 The State Board of Education approves the initiative as a partnership with SEER and GEPD.
- February 14-16 Deron presents at the Georgia Science Teachers Association conference. GEPD distributes applications at its exhibit there.
- February 19 GDOE mails applications to schools with assistance from Richard and volunteers from the Environmental Education Alliance of Georgia. GDOE invites representatives from the education and natural resource communities to serve as Advisors and Steering Committee members. Application process is promoted through email announcements and web site postings.
- March Eisenhower agrees to fund \$69,000 of initiative. GEPD agrees to fund the balance.
- March 20 Deadline for applications to be postmarked.
- April Applications and selection criteria mailed to Advisors and Committee members for review. Each application scored by two members and the scores were averaged. Advisors and Committee members review scores and select 10 schools. 10 environmental educators representing nonprofit organizations and state agencies invited to serve as EIC coaches.
- May 8 Dr. Lieberman trains EIC coaches.
- May 9 State Board of Education approves 10 schools to participate.
- May 10 Deron and Richard contact each school and community organization selected to participate.

**A partnership of the Georgia Department of Education,
Georgia Environmental Protection Division, University of Georgia
and Environmental Education Alliance of Georgia**

May Deron and Bob meet with Mark Smith of GEPD to arrange funding to hire a full-time EIC staff person at GDOE next year.

June 10-14 Linda Hoody and Grace Lieberman facilitate the EIC Leadership Institute - a five-day training for 40 teachers, 10 administrators, 10 community organization representatives and 10 EIC coaches.

July GEPD contracts with EEA for \$37,000 to fund the EIC initiative.

August – May 2003 10 schools in Georgia implement the EIC Model.

**A partnership of the Georgia Department of Education,
Georgia Environmental Protection Division, University of Georgia
and Environmental Education Alliance of Georgia**

Partners will contribute:

- Technical assistance and training – State Education and Environment Roundtable
- A staff person on loan to co-coordinate the effort in 2002 – Environmental Protection Division
- A staff person to co-coordinate the effort in 2002 – The University of Georgia
- A grant submission for \$85,000* in Eisenhower Funds in 2002 – The University of Georgia
- Funding for a DOE staff person to coordinate this effort beyond 2002 – Environmental Protection Division
- A nonprofit organization to apply for and receive funds – Environmental Education Alliance of Georgia

Closing the Gap EIC Leadership Institute

June 10-14, 2002

10 Education Partnerships

Education Partnerships = 4 Teachers, 1 Administrator, 1 Community Organization Representative

Community Organizations = local, state and national parks, museums, nature centers, zoos, botanical gardens, corporations, universities, government agencies and nonprofit organizations.

Staffed by SEER and Representatives from the Georgia Department of Education, Georgia Environmental Protection Division and the University of Georgia.

Facilities offered by Chatham County's Oatland Island Education Center.

**A partnership of the Georgia Department of Education,
Georgia Environmental Protection Division, University of Georgia
and Environmental Education Alliance of Georgia**



Bringing EIC to Idaho

- April 2001 Strategic planning at the Idaho Conservation Education Summit, held in Twin Falls, identifies the establishment of an EIC network as a top priority for environmental education in the state
- Dr. Jerry Lieberman delivers keynote address
- August 2001 Idaho Environmental Education Association (IdEEA) board of directors determines EIC to be the organization's top programming activity through 2004
- IdEEA executive director approved to serve as EIC coordinator at 50% FTE
- September 2001 IdEEA facilitates meeting between SEER (Jerry Lieberman) and Idaho State Department of Education (Susan Harrington, Tom Farley, and Kevin Collins) at which Idaho is invited to become member of SEER
- November 2001 Idaho becomes member of SEER
- IdEEA begins fundraising for EIC school network
- January 2002 IdEEA awarded Eisenhower Professional Development Program grant of \$19,820 for EIC network
- February 2002 Introduction and invitation packets go out to all Idaho schools (public, private, and border districts) (n = ~800)
- March 2002 Two of what will eventually be eight Idaho EIC schools selected: Shoshone-Bannock Junior/Senior High School (a tribal/Bureau of Indian Affairs-operated school on the Ft. Hall Indian Reservation) and St. Paul's Catholic School (a parochial school in Nampa)
- Marketing to other schools expressing interest continues
- U.S. EPA notifies IdEEA of grant award of \$24,186 for July 2002-June 2003 to assist with EIC network operations
- April 2002 Jerry Lieberman of SEER and Donny Roush of IdEEA present "Idaho Achievement Standards: How to get in the game" at the Idaho Environmental Education Summit in Boise
- School identification process goes on

Contribution of \$1,500 received from the Idaho National Engineering and Environmental Laboratory, a U.S. Department of Energy site

May 2002

Idaho EIC Institute shifted from July 22-25, 2002, to June 9-12, 2003

Plans made for school visits by Donny Roush, to conduct orientation and needs assessment

Recruiting of mentor/coaches begins

Upcoming...

June 2002

Schools expressing interest in EIC will be contacted and encouraged to complete applications ASAP

August 2002

Orientation and needs assessment site visits will be conducted by Donny Roush

September 2002

Site visits continue

October 2002

Second application deadline

Revised forms note "Applications prior to the deadline are encouraged, however, as schools will be selected upon receipt and review of qualified applications. The network will consist of eight schools."

Donny Roush to present "Embedding Education in the Community: Environmental Education and the Idaho Achievement Standards" at the Idaho Science Teachers Association Conference in Hailey

—Submitted by Donny Roush, IdEEA executive director, as state report for the 13th SEER Seminar, New Jersey, May 18-22, 2002

Kentucky State Report
State Education and Environment Roundtable
May 2002

This has been a very successful year for environmental education in Kentucky. We are working on several long-term projects that we hope will significantly improve EE in our state and have gotten new state funding as well. In every project, EIC is recognized as the model to be used when we talk about EE.

- In March, the state legislature passed HB 174, which provides funds to establish EE centers at all eight state universities. These centers will work to improve teacher preparation and to better coordinate EE at the regional level. We also have federal seed monies to initiate these centers.
- We are about halfway through the process of designing a credentialing program for non-formal educators. The program will follow the NAAEE *Guidelines for the Initial Preparation of Environmental Educators* and assessments will be part of the program. Though it will be voluntary, nearly all state and federal agencies, as well as private organizations in the EE community, are supporting it.
- Our state education professional standards board has added EE to the performance goals of all our teacher education programs and we are beginning to work with colleges and universities to implement this goal. Two Kentuckians have also been major players in the recent agreement by NCATE to make NAAEE a partner. As part of our state-level process, we are also working to develop a specialty in environmental education in Kentucky.
- We have aligned our state educational standards, called the core content for assessment, with the national EE standards and these are available online and are now being used to develop EE materials and programs across the state.
- Our agency just received an \$800,000 “319 Grant” to implement a statewide adult water education program. Twenty agencies and organizations will partner in this project, which will create a media campaign, a documentary and workshops for local officials.
- The Department of Education has agreed to include a section on outdoor classrooms in the official state school facilities manual. We are working on those guidelines.
- We have, over the past two years, developed a much stronger political base for EE in our state. Though we have a very long way to go, we managed to get enough bipartisan support in this past session to be included in the only new money bill to pass both houses.

MARYLAND STATE REPORT

May, 2002

Rebecca Bell & Gary Heath

LEA PROGRAMS

1. Funded 15 Environmental Education grants for habitat projects, teacher training, AP Environmental Science, etc. (See attached).
2. Serve as a central clearinghouse for teacher training information via web site.
3. Trained all PG County schools grade 9 Civics teachers in Smart Growth resource guide; Howard, Anne Arundel, and Montgomery training by June 30, 2002; Rauch Foundation Grant with DNR to train 200 teachers in Southern, western MD, Baltimore City and County by March, 2003.

MSDE PROJECTS

1. HSA & Content Standards- Exemplars on web include environmental ed topics in Social Studies, Science, and Math. Math: Class Aquarium; Population Predictions. Social Studies: A River Remembered; The O Zone; Stream Releaf; A Sea of Troubles. Science: Greenhouse; Blue Crab.
2. EE web site expands www.msde.state.md.us/DOI/index.html
3. Promotion of AP Environmental Science increased from 37% to 58% to 71% of LEAs offering AP EnS next year. Partnership with University of Maryland Baltimore County (UMBC) to sponsor official College Board AP Env Science teacher training workshop this summer.
4. Maryland Summer Centers for GT Students- Offer residential and day centers at CBF, Horn Point Labs, Living Classrooms Foundation, Washington County, Baltimore Zoo, Horsehead Wetlands, Wicomico Co. Diary of a River, Calvert County.
5. State-Aided Institutions- Review and evaluate programs in EE- Aquarium, Zoo, Md Science Center, Alice Ferguson Fnd, CBF, Living Classrooms.
6. School Construction- Funded 2 projects last year; 1 more project this year renovation and new construction.
7. May, 2002 issue of Maryland Classrooms features MD Environmental Education.
8. EPA Model Schools Grant – 4 schools completing implementation.
9. Smart Growth Initiative- Gov's Youth Environmental Summit in Sept on Land Use and the Bay; Student teams from C2k states will attend for first time.
10. C2K- Continued implementation of the Bay 2000 Agreement of providing a meaningful Bay or stream experience to all MD students before graduation.
11. Fall Briefings for LEA coordinators and nonformal environmental education providers.

Program Involvement- Partnerships

1. Green Schools chosen for 2002.
2. GIS initiative with Towson University and UMBC.
3. DNR partnerships- Arbor Day, tundra swan lesson plans, Smart Growth

SEER Seminar

Massachusetts Report

May 20, 2002

Background

- ◆ The Secretary's Advisory Group on Environmental Education (SAGEE) developed the "Benchmarks on the Way to Environmental Literacy" in 1998.
- ◆ In 2000-2001 the Massachusetts Environmental Trust funded the development of the Massachusetts Environmental Education Plan (MEEP) with significant involvement by organizations, agencies, school administrators and teachers. It was signed jointly by Secretary Bob Durand of the Executive Office of Environmental Affairs (EOEA) and Commissioner David Driscoll of the Massachusetts Department of Education (DOE) in a memorandum of understanding in April 2001.
- ◆ The MEEP calls for the establishment of an EIC Demonstration School Network in the state.
- ◆ The MEEP calls for Regional Environmental Education Alliances (REEAs) to be established in partnership with Community Foundations across the state. Approximately eight to ten REEAs are in various stages of development. The Community Foundation/REEA partnership is intended to build capacity for implementing the MEEP. A REEA Roundtable has been meeting quarterly to support the continuing establishment of the REEAs.
- ◆ The Secretary and Commissioner signed a joint letter endorsing the implementation of an EIC Demonstration School Network in the state.
- ◆ A Director of Environmental Education position is established in the EOEA with some DOE staff time designated to SAGEE.

Update since the 12th SEER Seminar

EIC Demonstration School Network – In February 2002 a cover letter signed by the Secretary and Commissioner along with a application packet for schools to become demonstration schools was sent to all the districts in the state and was also distributed through SAGEE and the participating REEAs. Approximately 14 schools responded. An advisory committee selected 7 schools to become part of the network. The goal is for an additional 5 schools to be accepted each year in subsequent years.

EIC Coaches – No coaches are engaged at this time. There was an all day training held in Boston at the New England Aquarium that included persons who have been involved in the various EE initiatives and will support EIC implementation, some may serve as coaches themselves or will be identifying coaches. Coaches will be engaged as funding begins to flow now that the EIC schools are identified.

EIC Summer Content Institute for Teachers – DOE has funded a ten-day institute to be held in New Bedford, MA July 8-12 & 15-18 with a call back August 24. The teams of teachers/administrators along with some representatives from REEAs and potential coaches will also attend. The institute will be hosted by Schooner Ernestina, the Global Learning Charter School with graduate credit available through University of Massachusetts Dartmouth.

Funding for Environmental Education – The Massachusetts Environmental Trust has dedicated \$100,000 for education grants primarily for projects that involve regional approaches in partnership with Community Foundations that implement the MEEP.

Funding for EIC Implementation – The Massachusetts Environmental Trust has dedicated another \$100,000 grants to Community Foundations that would be matched 2 to 1 to support the implementation of EIC in the Demonstration Schools.

Future Funding – The Massachusetts Legislature is considering the "Environmental Bond Bill" at a \$750 Million level that will fund many programs in the Environmental agencies. There is a line specifically for environmental education and implementation of the MEEP. One of the REEAs, the Southeastern Environmental Education Alliance (SEEAL) has received an earmark in the federal DOE budget in the amount of \$200,000 for the improvement of math and science learning for elementary and middle school students which will be used, in part, to support EIC implementation in southeastern Massachusetts.

NAAEE Conference – The NAAEE Conference will be held in Boston, MA August 6-10, 2002. Some of the presentations will focus on the MEEP, including indication of the implementation of EIC as a goal.

Ohio Report
State Education and Environment Roundtable
13th SEER Seminar
Kenilworth, New Jersey
May 18 - 22, 2002

Note: Background materials referenced below have been mailed directly to SEER members.

1) Ohio Science Academic Content Standards

Developing K-12 standards. Potential for creating an 11th grade environment based integrated science course. See copy science standards.

http://webapp1.ode.state.oh.us/content_standards/standards/

2) Ohio Technology Academic Content Standards

Developing K-12 standards merging computer literacy, information literacy and technological literacy. One standards topic focuses on the impact of technology on the environment

<http://www.iteawww.org/>

http://www.ode.state.oh.us/academic_content_standards/acstechnology.asp

<http://www.nae.edu/nae/techlithome.nsf>

3) Environment Education Council of Ohio, 35th Annual Conference,

April 5 - 7, 2002. Conference theme Diversity Matters: Nature, Culture and Environmental Education. See copy program.

4) Directory of Ohio Environmental Education Sites and Resources 2002 has been updated and distributed statewide. Produced by the Environmental Education Council of Ohio and the Office of Environmental Education at Ohio EPA. Directory resources are also available online. See copy of directory.

<http://www.epa.state.oh.us/other/oef/stateee.htm>

www.environmentaleducationohio.org

5) Ohio Interagency Council on Environmental Education

Group of 28 representatives from state and federal agencies continue to meet quarterly.

<http://www.environmentaleducationohio.org/>

6) Ohio Environmental Education Website supported by Miami University.

Showcases EE Ohio activities and events. Under Science for Ohio there are 16 EE inquiry units with resources.

www.environmentaleducationohio.org

<http://casnov1.cas.muohio.edu/scienceforohio/SfoMain/Inquiry.html>

7) National Institute of Environmental Health Sciences projects: Environmental Health Sciences as an Integrating Context for Learning. Division of Extramural Research and Training. Projects funded in Washington, New Mexico, New Jersey, Texas (2), Ohio, Oregon, New York, Maryland, and Florida. See copy project abstracts.

<http://www.niehs.nih.gov/dert/programs/translat/k12/ehsic.htm>

8) Ohio Audubon developing and distributing brochure featuring benefits of environmental education to Ohio students. See draft brochure.

www.audubon.org

9) Federal legislation

EE Ohio formal and nonformal program providers are concerned that the transfer of EE funds from EPA to NSF will not provide access to small grants as in past years.

See Congressional Research Service report.

10) Environmental Education Month April 2002 presented in resolution from the Office of the Governor Bob Taft.

11) Ohio Geospatial Program for agriculture and natural resources applications (GIS).

See copy of Introduction to Remote Sensing Workshop materials.

<http://gis.ag.ohio-state.edu/>

12) The Bicentennial Commemoration of the Lewis and Clark Expedition 2003 - 2006 Corps of Discovery. This Army Corps of Engineers program will feature events honoring the start of the expedition down the Ohio River in 1803. See map / brochure.

13) Ohio Environmental Education Fund provides mini grants to teachers and larger grants for educational projects by regulated communities and school districts.

<http://www.environmentaleducationohio.org/>

14) Ohio and Illinois, Maryland, and Texas are in a consortium of states funded to promote Advanced Placement (AP) course participation. Under provisions of this grant

teachers can be prepared to teach any of the 31 courses (including environmental science) and students in low wealth districts can have AP course testing fees paid.

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ODE Web: <http://www.ode.state.oh.us/>

http://www.ode.state.oh.us/academic_content_standards/acstechnology.asp

Tech Ed: <http://www.iteawww.org/>

<http://www.nae.edu/nae/techlithome.nsf>

<http://www.otea.org/>

EEd: <http://www.seer.org/>

<http://www.epa.state.oh.us/other/oef/stateee.htm>

<http://www.environmentaleducationohio.org>

**PENNSYLVANIA UPDATE
SEER SEMINAR
MAY 2002
Prepared by Dr. Patricia Vathis**

- 1. Mandated Environment and Ecology standards passed into law, January 5, 2002.**
- 2. Mandated state assessment for “all” children in grades 4, 7 and 10 passed as part of the Empowerment Law in the fields of science, technology, environment and ecology.**
- 3. 26,000 classroom connections kits developed and disseminated for science, technology, environment and ecology.**
- 4. Curriculum mapping and benchmarking model developed to articulate curriculum to the environment and ecology standards. Over 50 school districts are part of the program. (Video and sampler available)**
- 5. State grants program now has two tracks for curriculum articulation and integration as it relates to the environment and ecology standards (potential of over \$300,000 per year).**
- 6. Full curriculum piece developed specific to the environment and ecology standards for middle and high school. The curriculum focuses on Pennsylvania forestry, land use, biodiversity, laws and regulations, etc. Over 8,000 have been disseminated in the State.**
- 7. The Governor’s Institute for Environment and Ecology has been approved for the fourth year. It will run from July 29 to August 2. Over 200 teachers have applied for the 100 spaces.**
- 8. The national projects (Learning Tree, Wet and Food, Land and People) have been extremely successful this year. The requirements for workshop approval has strengthen the one day training by making it standards-based and more grade level specific. Complete articulation of all activities to the environment and ecology, science and technology, communications, math and geography standards should be completed by the end of the summer.**
- 9. Classroom assessment workshops are being scheduled for the fall to heighten the awareness for all teachers about the new state assessment test.**
- 10. The Pennsylvania Department of Education and the Pennsylvania Center for Environmental Education Higher Education Work Group will have nine institutions of higher education aligning course requirements for students to meet the environment and ecology standards for elementary certification.**
- 11. A multi-agency biodiversity school packet was developed for earth week and over 10,000 packets were disseminated.**
- 12. A new curriculum packet was developed called “Conserving for the Future” Renewable and Nonrenewable Standards Based K-12 Activity Guide”**

All of our activities have been centered on the E&E standards and the new assessment.

Washington State Report
State Education and Environment Roundtable
May 2002

*Concrete School District. Please note that a June 8th meeting is scheduled with Dr. Terry Bergeson where the progress in this Middle School will be reported.

*The results of *The Environmental Education Needs Assessment Survey* for Washington State was compiled and provides some important insights for future strategies in servicing the needs of teachers. Responses were received from 740 of the 2600 schools surveyed. Proportional numbers were received from elementary, middle and high schools from throughout the state. Highlights include:

Nearly eighty percent of the respondents indicated they were aware of the State's Mandate requiring EE, K-12.

Nearly ninety percent of the respondents indicated they wanted more information on how EE can help improve student learning.

Seventy percent of the educators said that EE could be integrated into most subjects and sixty four percent felt it could be used as a strategy to teach any subject or academic skill.

Seventy six percent felt that EE was an important part of a student's education.

Seventy three percent said that EE should be incorporated into the school curricula.

Ninety two percent indicated that the science curriculum was where EE took place.

Seventy percent indicated that EE in their instruction was a factor in improving student learning and development.

Eighty six percent said they wanted instructional and technical support in using EE to integrate the curriculum.

In ranking resources for improving student learning, access to an integrating EE curriculum with field-based learning was most important.

*In Washington State, with support from SEER, NEETF, The Washington Mutual Foundation, the Washington Forest Protection Association and the Discuren Foundation, the **Environmental Education Assessment Project** has continued its progress. Lynne Ferguson of the Washington Forest Protection Association, Tony Angell of the Superintendent of Public Instruction and Dr. Margaret Tudor of Washington State Department of Fish and Wildlife have co-chaired this project. Dr. Kathy Taylor, of the University of Washington's School of Education and an expert in assessment, has played

a critical role in working with the above team in the development of authentic assessment strategies that involve education in the context of the environment and mirror the Washington State Assessment of Student Learning. Dr. Gerald Lieberman has also provided his usual consistent support and leadership in advancing this effort.

In November and December, the Environmental Education Assessment Project, EEAP, advanced through a series of teacher training and pilot sessions with 167 teachers from throughout Washington State. Representing grades 4-12, the teachers piloted the newly developed assessment tools and provided the designers with important information regarding the suitability of the tests. The teacher and student comments and recommendations are the basis for the editing of the tests now underway. As a result of collaborative meetings with Health, Arts and Language Arts educators, more test items are being developed.

In the fall of this year EEAP will conduct the first research study to examine how well students in and out of environment-based classrooms perform on targeted Essential Academic Learning Requirements.

The second phase of EEAP(July 2002-June 2003) will involve the creation of a system to implement and disseminate the information and strategies developed by effort. A web page will be established, educators workshops will be designed, a data collection system will be developed and educator workshops conducted.-

*An April Conference in Spokane WA, for University teacher training institutions, featured a presentation by members Tudor and Ferguson, of the EEAP team. Twenty of the twenty-six Universities participated and committed to learning more about how to enhance their pre-service teacher training with methods that use the environment as a laboratory for learning. There was also commitment to developing assessment skills in teachers in training that reflect the work currently being done by the EEAP team. This initiative, a compliment to the assessment efforts in EE, was made possible through an EETAP grant coordinated by Dr. Tudor.

*The new Puget Sound Environmental Education Center has started its operations on Bainbridge Island. They have currently raised \$44 million of the \$52 million required to build and operate the Center. Perhaps unique in the world as an Environmental Edu. Center, it demonstrates in its construction and operations, the current technology in recycling and alternative energy resources. Its goal is: To inspire Environmental and community stewardship by providing hands-on learning experiences that link science, technology and the arts in a natural setting. At its inception, the Center based its efforts on involving the underserved students of the Seattle School community. It is hoped that the endowment associated with the Center will provide a continuous source of scholarship support for those students that otherwise could not afford to attend the Center's four day environmental education training experience that is linked to ecological science, technology, the arts and communication.

*A National Park Service regional meeting was held in Seattle with a focus on developing strategies to enhance services to schools. EIC was a featured element of these meetings and the Roundtable Report was discussed and considered as part of their planning.

*The Office of the Superintendent of Public Instruction prepared and submitted an NSF grant that seeks in part to enhance student interest and skills in math and science. The concept of “contextual” learning will be emphasized and the strategies of **EIC** were written into this 8 million dollar grant that would extend over a period of years. Three regions within Washington State will develop strategies of instruction that they feel best suit the needs of their students. This is a competitive grant application. Awards will be announced this summer.

*Tony Angell, Supervisor of Environmental Education for the Superintendent of Public Instruction for the past 31 years, is moving on. As of June 30th. I’ll be Tony Angell, citizen/artist. The time is right – the field is full of fine leaders, EE progress is being made and teachers are eager for more.

No educational affiliation and group of fellow professionals have given me more inspiration and delight than the **State Education and Environment Roundtable**. I will look upon this time in my career as one of the most important both by the progress in the field and the partnerships in EE established. Thank you one and all. Your devotion to what brings education alive for kids and contributes to a brighter future has and is making a great difference – I’ve been around long enough to measure it. It’s been my honor to know and serve with you.

Of particular importance in my memories will be Jerry, Linda and Grace. Time and again you went that extra distance and produced results that we have all benefited from immensely. What has been accomplished by your leadership of the Roundtable has had a profound effect on our field. It’s a rare commitment you demonstrate and I hold your friendships very dear.

For a while at least, I’ll be on the EE sidelines, a willing substitute if you need a helpful voice or another insight on matters before you. If the likes of Sanera emerge again, put me into the lineup. I can still charge straight ahead and I’d like nothing better than to nail him for a big loss.

Ahead will be time to work on unfinished books, new drawings and sculpture projects that I’ve never had time to engage in the past. I’ll be in Santa Fe with my family for my opening at the Peters Gallery in August and back in Seattle for my show at Foster White in December. I hope that other venues will take me into the territory of old friends and you’ll drop by to see what I’ve been up to and we can share a few stories.

Farewell and “bon voyage.”

Tony

Addendum from Gene Myers, Huxley College, Western Washington University

In 2001, Huxley College, in partnership with the North Cascades Institute, admitted the first cohort of students into its new MEd / Science Education / Environmental Education "Residency" option. The program enrolls one cohort of about 10 students each year for 7-consecutive quarters. Its goal is to prepare leaders in environmental education, particularly in the non-profit and agency sectors. Presently 6 students are in the program, and 11 are coming in June. (Huxley also offers 2 other EE Masters options, one of which encompasses K-12 careers and calls for a field project, and the other resource management careers and requires a thesis.)

The new program includes these elements: solid foundations in education, science education and environmental education; balance of natural history/natural science and human-factors / culture & history content; theory and practice; instruction, curriculum and administrative learning and skills; final professional presentation capstone. The entire second year of the program is the "Residency" and is conducted on-site at NCI's facilities and programs. When the new \$13 million Environmental Learning Center is completed on Diablo Lake in the Upper Skagit River valley, students will be located there for the Residency. Completion is projected for 2004. In addition to the MEd, students receive a Certificate in EE Instruction and Administration.

- ◆ Concrete Middle School, an EIC site, is located mid-way up the Skagit Valley. In 2002, a partnership has developed between Huxley, NCI, Concrete School District, and SEER. Students in all EE Masters options at Huxley will be able to include experience with the EIC Model at Concrete. The Residency cohort visited CMS in winter 2002, and several students have expressed keen interest in contributing at and learning from the EIC efforts at CMS. Student projects so far include:
- ◆ A report on the EIC Model as a class project
- ◆ Examination of evaluation efforts by SEER as a case-study for the Evaluation course
- ◆ A student proposal to develop a Native Plant Nursery at CMS, involving a range of research activities and working with Concrete Resource Partners
- ◆ An MEd/ Certification student has requested to do her student teaching at Concrete.
- ◆ Two other Residency students have expressed interest and intend to propose projects for the coming fall at Concrete.

The relationship between the parties involved will be articulated in non-legally-binding Letter of Agreement, in the near future. It ensures that there are common understandings, and adequate communication concerning students' work at CMS (or other Concrete Schools).