

National Institute for Environmental Renewal (NIER)

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Project Manager: Joyce Stone

Grant Award: \$15,000

The “**Hands-On Environmental Learning**” program trained sixth grade teachers from three local school districts to use the ENVIRONMENTAL SMARTS resource guide to provide their classes with student-centered activities related to aquatics, forestry, soils, wildlife, and energy. Students conducted outdoor activities using the NIER gardens and indoor activities using equipment and supplies purchased through the program. This strategy emphasizes five components that move students from simple awareness of the environment to actual involvement in addressing environmental health issues.

In September 1997, a teacher’s workshop was conducted with eleven teachers from the Mid Valley and Lakeland School Districts. The morning session covered the environmental education curriculums, books, videos, water-quality kits, and scientific supplies which teachers were encouraged to borrow for their classrooms. The afternoon focused on “in the river” aquatics training. Joyce Stone (NIER) used her stream investigative skills, and Art Popp (LRCA) conducted water quality tests and identification. The group was shown how to venture into the river, collect specimens, and identify them using microscopes. Teachers were given the chance to select a science-related field experience for their class. These experiences fell into three categories and occurred the following spring.

Wetland Activities - (Mid Valley School) -Three 4th grade classes (75 students) learned about wetland types, the plants and animals that live in wetlands, and the value of each type of wetland. Groups of students were given the opportunity to develop a list of wetland plants that were then purchased for the wetland planting activity. The students ordered and planted 262 wetland plants.

Nature Walks (Mid Valley School) - Two 1st grade classes (44 students) were shown how to develop their observational skills by learning to look carefully around them for signs of wildlife, to use smell and texture to identify plants, and to find interesting forms of life where they do not expect to see it.

Field Trip to NIER (Mid Valley School) – Two 5th and one 7th grade class (90 students) participated in two-day sessions that included proper planting techniques, mammal skull identification, monitoring for stream life, microscope identification, and nature walks.

Evaluation survey responses were as follows: 82% of the teachers felt that they were more motivated to teach environmental subjects after attending the workshops, 100% found the information on additional resources helpful, and 100% would attend another workshop the following year.

Project Value and Match

Grant Award	\$15,000
Cash Contributions	\$700
In-kind Contributions	<u>\$19,637</u>
Total Project Cost	\$35,337

Project Accomplishments

- Provided “hands-on environmental education” to 11 teachers from 2 local school districts using the ENVIRONMENTAL SMARTS program developed by NIER.
- Increased regional awareness of NIER’s environmental education programs, promoting greater participation in their Chesapeake Bay Program.
- Improved the quality of environmental education in the region and supported outdoor learning.
- Worked with students to plant 262 plants along 120-1-ft. of schoolyard wetland.
- Provided natural science resources, available by loan to all school districts.
- Provided outdoor environmental education to 209 students.
- Increased plant and animal appreciation by strengthening identification skills.
- Worked with the students who committed 75 hours of volunteer service.
- Constructed and installed an exhibit panel that featured hand-painted wetland plants and animals.
- Achieved a 1 to 1.35 cost share ratio for the grant.



SMALL GRANTS

Partners' Contributions

- Forest City High School – Technical assistance
- Lackawanna Heritage Valley Authority – Educational services
- Lackawanna River Corridor Association – Educational services
- Lackawanna State Park – Technical assistance
- Lakeland School District – Advocacy
- Mid Valley School Teachers – Interest and participation