



## **Preparing Pre-Service Environmental Educators To Use Environmental Service Learning in the Classroom**

A Six-Month Project Review

Notes from Convening of Leaders—Washington, DC, June 4, 2009

### **Project Overview**

Through generous support from the U. S. Environmental Protection Agency (EPA), over the last six months Earth Force has partnered with Murray State University, Western Kentucky University and the University of Wisconsin at Stevens Point to develop teacher preparation programs that prepare pre-service educators to use Earth Force's Six Step Process as a means for building environmental service learning strategies and techniques into the classroom. With the project reaching its mid point, on June 4, 2009 the partnership convened environmental and service learning leaders to discuss progress and gain feedback.

### **Integration Models**

Each university has approached the infusion of environmental service learning into their curricula in a unique way. The models range from stand alone courses, to an approach that integrates environmental service learning into general teaching methods courses.

#### **Murray State University**

Murray State University is integrating environmental service learning into two existing environmental education courses. First, they have infused the [Earth Force Six Step Process](#) into a residential experience program. This three-day program gives students experience in the Earth Force process, combined with hands on training in the Six-Step Model. As a complement to this, program directors are also weaving the Earth Force Process into a required Elementary Science Methods course.

#### **University of Wisconsin at Steven's Point**

At the University of Wisconsin Steven's Point, faculty have integrated the Earth Force Process into an existing methods course. The course is evenly divided between lecture and discussion, and the Earth Force model has been used as tool to guide the discussion component of the course.

#### **Western Kentucky University**

Western Kentucky University has integrated the Earth Force Process into three different aspects of its teacher preparation program. First, the Process was integrated into a one-day professional development event for students in elementary education. Second, faculty built the

Earth Force Process into a course entitled *Teaching Strategies In The Secondary Schools* (a generic methods course for students from a wide variety of specialties). This 15-week course was taught in three-hour blocks each week, and the Earth Force Process was included in four of the 15 weeks. Third, Earth Force is serving as the basis for a new graduate level course as a part of state endorsement in environmental education for current educators. This course was taught in three nine-hour blocks over a three-month period. The students used the time between classes to develop and implement an environmental service-learning project.

## **Questions Raised**

The discussion on June 4<sup>th</sup> centered on the challenges the universities have faced as they have worked to integrate service learning into their pre-service preparation programs for teachers. A number of questions were raised about how to prepare environmental educators and to what extent the integration of service learning approaches such as Earth Force's can serve as the bridge to combine service learning and environmental education in the classroom.

With the project still in its nascent stages, the conversation raised more questions than it answered.

Initial student survey results have been positive, with nearly 90% of participants at one university saying they were likely or somewhat likely to use Earth Force in their classrooms and almost all participants indicating that they developed skills they believe will be useful in the classroom.

Despite these early positive signs, faculty members are cautious about the ability of pre-service educators to implement programs such as Earth Force when they enter their own classrooms. When asked if the pre-service educators were prepared to use Earth Force in the classroom, the Murray State contingent indicated that they did not believe they were.

Clearly more work is needed to fully prepare pre-service educators to use environmental service learning in the classroom. The question about what form that work should take remains.

## **Challenges**

- A number of faculty members mentioned that one of the biggest hurdles they faced is that the lack of prior exposure to inquiry-based learning among their students. For many of the pre-service educators, this program was their first chance to participate as students in a course that asked them to guide their own learning. The lack of exposure made it very hard to teach students how to use inquiry-based learning as a strategy in their own classrooms.
- Several participating faculty members were also using the Earth Force curriculum and materials for the very first time. Faculty members felt that with more practice using the curriculum, their abilities to teach students would improve, resulting in deeper impact among pre-service educators.

- The time lag between when pre-service educators take courses and when they will use materials in their own classrooms was a significant concern for faculty members. Many of the pre-service educators will not have the opportunity to use the materials in the classroom for at least 18 months. Faculty members discussed the need to incorporate environmental service learning into their student teaching programs as well.

### Next Steps

Participants in the discussion suggested several ways that the partnership could adapt and grow to ensure that pre-service educators are prepared to use service learning in the classroom:

- Engage a broader range of university faculty members in the use of service learning or similar techniques in their teacher preparation courses to expand students' use of the Earth Force strategies and techniques;
- Ensure that pre-service educators participate in classes based on the pedagogy multiple times over their careers;
- Develop a program that places pre-service educators in student teaching classrooms where the techniques are being used in order to see them modeled;
- Train pre-service educators earlier in experiential and inquiry-based models tied to their content studies
- Develop a curriculum guide specifically for use in higher education pre-service classes; and,
- Host multiple opportunities to train university faculty members in order to fully understand the teaching methods embedded in the program.

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