

Education and Outreach in Environmental Justice

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Abstract

A project was begun in January 2003 to create an education and outreach program in Environmental Justice (EJ) to study issues at the intersection of poverty, race, and environmental pollution. Specific activities have included a summer field course for college students and high school teachers, service learning opportunities through partnerships and connections with community organizations, grants to teachers to develop curricula, and a speaker program to bring EJ scholars to campus. Through these initiatives, students become engaged in their learning by experiencing first hand that injustices, inequities, and racism exist in our society.

Introduction

The environmental justice (EJ) project originated as the initiative of a group of freshmen in a first-year interest group seminar on Environmental Justice. One group of students organized an environmental justice teach-in. Their keynote speaker was Cheryl Johnson (Fig. 1), executive director of People for Community Recovery (PCR). PCR is a grassroots, community-based environmental justice organization in the Chicago Housing Authority's public housing community Altgeld Gardens, in southeast Chicago. Another group of students developed a proposal to the Ira and Ineva Reilly Baldwin bequest, which the University of Wisconsin uses to fund grants furthering the "Wisconsin Idea" (outreach activities). The core of that proposal was to develop a summer field course in environmental justice, to bring in outside speakers in environmental justice, and to develop service learning opportunities in partnership with community organizations.

Summer Field Course (www.geology.wisc.edu/~wang/SummerEJ/):

The purpose of the three-week Summer Field Course was to introduce college students and high school teachers to EJ issues in a multidisciplinary and experiential way. Five full days were devoted to field trips to visit locally unwanted land uses (landfills, power plants, recycling plants, sewage treatment plants), and environmental justice communities (Altgeld Gardens, Sixteenth Street Community Health Center in Milwaukee, and the Menominee Reservation in northeastern Wisconsin). Classroom days were devoted to readings, videos, and discussions, which covered the history of the environmental justice movement and its connections to the civil rights and anti-toxics movements; case histories covering political, legal, economic, scientific, and health aspects; critical evaluation of demographic and socioeconomic evidence for inequitable location of hazardous waste sites; global environmental justice; and the future of the environmental justice movement.

Enrollment consisted of 7 students and 3 high school teachers. The teachers were from Marin Academy in San Rafael CA, West High School in Madison, and South Milwaukee High School. Service learning activities in the Summer Field course included additions to the web site for People for Community Recovery in Chicago and a mercury pollution web page for the Clean Water Action Council (CWAC), an environmental group in Green Bay, Wisconsin, who

provided the tour of PCB contamination of the Fox River. The outreach goals of the course were met by teachers producing curriculum for their term projects. One teacher created “Environmental Justice Monopoly” in which players do not all start with the same amount of money and on “Chance” they uncover cards of environmental pollution or “get out of the hospital.” A typical student reaction to the Altgeld Gardens trip follows: “Visiting Altgeld Gardens was an intense experience. I had previously read about the situation as a whole in *Garbage Wars* by David Naguib Pellow but seeing the area in person, explained a great deal that could not be expressed by a book. The story that Cheryl told us that affected me the most was when she explained how children from the community liked to play in the tunnels that use to dump sludge into the Little Calumet River until it was boarded up. It seemed like something we all would have done in our childhood, and while mine might have been a little dangerous, theirs was toxic and causing them to get life-threatening diseases. Just being there for a few hours and seeing the never-ending barrage of industrial sites, landfills, and any other polluting facility made me understand their situation on a more personal level.”

Altgeld Gardens

Altgeld Gardens is a Chicago Housing Authority project of approximately 5000 African-American residents in southeast Chicago. Built in 1942 the Altgeld Gardens-Murray Homes are among the oldest public housing communities in the United States. A third to half of its housing units stand dilapidated and vacant, and there are concerns about lead and asbestos in the buildings (Fig. 2). Many people are worried about air quality and its impact on rising asthma rates, especially among children. Seventy percent of residents in Altgeld Gardens-Murray Homes experience some form of respiratory infection. Claiming a variety of illnesses that may be related to environmental contaminants, a group of Altgeld’s residents who suffer health problems are currently litigating a “mass action” lawsuit against the CHA. Several times over the past twenty years, PCR has challenged land-use decisions like the siting of landfills and their operations, in particular the CID Landfill immediately southeast of the community, and more than twice its size.

The environment of and around Altgeld Gardens holds soil contamination from prior land uses and ongoing illegal dumping, air contaminants from area industry and highways, and water contamination from decades of industry outflow and landfill operations. Since the late 1800s, heavy industry such as coke ovens and steel plants, manufacturing facilities, paint and pesticide factories, refineries, landfills, incinerators, and sewage treatment have impacted the environment and communities of the area around Lake Calumet. More than 100 industrial plants and 50 active or closed waste disposal sites surround the Altgeld community. The former railroad company town of Pullman, now a Chicago neighborhood to the northwest, once pumped its residential and industrial sewage to spread on the land beneath and adjoining Altgeld Gardens and the adjacent Golden Gate Park neighborhood of small single-family houses.¹

Currently, Chicago Metropolitan Water Reclamation District sludge beds lie just north of Altgeld. Both closed and active landfills surround Altgeld Gardens, including the Paxton Landfill, Land & Lakes, Cottage Grove Landfill, and the CID Landfill, several of these bordering the waterways that drain shallow Lake Calumet. Over the Expressway to the east are former and existing steel plants and the Ford Motors Chicago Assembly plant, which in 2001 accounted for a third of total air emissions reported to the Toxics Release Inventory for manufacturers in the

¹ Colten, C. 1985. *Industrial Wastes in the Calumet Area 1869-1970: An Historical Geography*, Illinois State Museum and Department of Energy and Natural Resources.

Calumet Area. Ford reported 526,858 pounds of air emissions. Other local manufacturers released over 1.1 million pounds of 70 reported substances, including over 2,000 pounds of lead and lead compounds, 260 pounds of mercury, and other heavy metals, assorted polycyclic aromatic hydrocarbons, pesticides, and hydrochloric and sulfuric acids.²

To date, thorough characterization of potential environmental contaminants in the soil or housing units has not been undertaken. In 1998 the ATSDR asked the Illinois Department of Public Health to review ten surface soil samples taken from Altgeld's 200 acres in 1996, on which basis the IDPH determined that the contaminants were not a widespread or worrisome problem. In 1997, Kimberly Gray, Ph.D. of Northwestern University's Department of Civil and Environmental Engineering developed a plan for assessing hazards and subsequent phyto-remediation; however, the CHA has not pursued her recommendations. Concern remains that the environmental health hazards in and around the homes and wider community have not been sufficiently characterized or determined "safe" for habitation, let alone expansion of the population.

The challenges facing PCR and the Altgeld community span environmental health conditions, housing, employment availability and preparation, transportation, regional industry and land-use. Altogether they present clear demands for collaborative problem-solving and leveraging partners' skills and resources. Over time, developing healthier relationships between the community and both the Chicago Housing Authority and dominant regional industries is a further goal. In the meantime, we propose to engage in the development of skills, knowledge, data resources, practical grassroots problem-solving, and environmental health protection and remediation that will provide us with alternatives to offer to the process.

Partnership with People for Community Recovery

Eleven students in Professor Gregg Mitman's course, Environment and Health in Global Perspective (History of Medicine 513), developed a web site for PCR, under the leadership of J. M. Schaffer. An independent study student, E. L. Eggebrecht, spent spring semester doing a service learning project in which she helped PCR with the paper work associated with purchasing a computer. M. A. Boyd organized a 20-person meeting April 2003 at Loyola University's Center for Urban Research and Learning (CURL), where a discussion was held on creating an Environmental Justice Research and Training Center in Altgeld Gardens, a long-standing vision of PCR's. This vision was presented in PCR's submission of a community problem-solving grant proposal to the EPA in September 2003. UW-Madison is one of four partners. PCR was notified in December 2003 that it received one of fifteen awards. Also in December a group of students in an Honors Seminar held an EJ Awareness Day for high school students, the college community, and the public. The half day of events included workshops and a keynote presentation by Cheryl Johnson. Other student groups added to the PCR website and identified additional grant opportunities for PCR.

Conclusions

Connecting to community organizations can be both an educational experience for students and a benefit to the community. Communities will teach students about the issues of environmental justice from first-hand experience, and universities can provide student, staff, and faculty assistance where their needs overlap with academia's traditional missions of teaching, research, and service. Connecting service learning opportunities to a broad scholarship area provides a motivating entry point for interested

²*Toxics Release Inventory*, 2001, USEPA.

students. EJ is local, regional, national, and global in scope. It is a lens through which the Wisconsin Idea can be projected.

Figure 1. Cheryl Johnson, executive director of the People for Community Recovery (PCR) in southeastern Chicago, talking about her community to Environmental Justice students (from left to right: Ashley Gehrke, Brooke Manthe, Cheryl Johnson, Lindsey Verbunker, and Emily Eggebrecht. Photo by Jeff Miller.



Figure 2. Sludge sewage outlet from Pullman factory where it enters the Little Calumet River. The outlet was bricked shut to keep children from walking through the pipe. Photo by Josh Grice.





Figure 3. Active unlined landfill south of Little Calumet River, which flows into Lake Michigan.