Environmental Studies at Oberlin: A Program Like No Other

BY HARLAN WILSON

The Environmental Studies Program at Oberlin is one of the outstanding environmental studies programs among liberal arts colleges. Our curriculum is ideally balanced: strong foundations in the natural sciences along with equally strong offerings in the social sciences and humanities. Our state-of-the-art building is a tremendous educational asset for students and faculty studying energy generation and consumption. The Environmental Studies Program (ESP) has spawned a number of projects in the community, most recently the Oberlin Project and the Environmental Dashboard, and has helped to catalyze Oberlin College’s policy on sustainability, which is written into the college’s strategic plan and is being implemented by an Office of Sustainability. The ESP has also inspired not only many career choices, but also plenty of student activism around environmental causes, all based on foundations of knowledge taught in our courses and developed through student-faculty collaboration.

My involvement in the Environmental Studies Program goes without a compelling narrative; what we make of past experiences; how we envision a sustainable, resilient, and desirable future; and how we frame the narrative determines both what we conceive as possible and what we actually do to make it so.

This issue of the environmental studies newsletter marks important transitions in the reality and the story of Oberlin’s Environmental Studies Program. Two seminal figures in the history of Oberlin’s leadership in environmental education—Harlan Wilson and David Orr—are officially retiring this year. Among their many contributions, Harlan and David have both offered critiques and stimulated debate on the role of technology in mediating relationships between humans and the natural world. Indeed, during my student days at Oberlin in the 1980s, I was fortunate to participate in a short course on the politics of technology that Harlan co-led with a well-known author on the subject. The continued on page 2

Telling Stories: Notes on David Orr, Harlan Wilson, and Environmental Studies

BY JOHN PETERSEN, DIRECTOR, ENVIRONMENTAL STUDIES PROGRAM

Over the 500,000 years of modern human evolution, we have developed a few unique tricks that separate us from other animals. One might argue that two of these—technology and storytelling—are the most important in terms of how they have shaped the way that we perceive and interact with each other and with the natural world around us. Although other animals use and in some cases even fashion tools, human’s ability to design, fabricate, and modify our environment with technology has allowed us to expand our influence from local to regional to global scales. Today, industrial, household, and military technologies have a fearsome power to devour and desecrate the natural world and human civilization. At the same time, technology has vastly expanded the powers of our fives senses so that we can observe and (we have to hope) constructively respond to our impacts at scales ranging from the subatomic to the biospheric.

Whether technologies ultimately do us in or help us transition to a more sustainable relationship with the natural world, a strong case can be made that the ability to tell compelling stories invariably trumps the power of science and technology. While an objective reality may exist, this reality has no meaning or motivational power to human beings without a compelling narrative; what we make of past experiences; how we envision a sustainable, resilient, and desirable future; and how we frame the narrative determines both what we conceive as possible and what we actually do to make it so.

This issue of the environmental studies newsletter marks important transitions in the reality and the story of Oberlin’s Environmental Studies Program. Two seminal figures in the history of Oberlin’s leadership in environmental education—Harlan Wilson and David Orr—are officially retiring this year. Among their many contributions, Harlan and David have both offered critiques and stimulated debate on the role of technology in mediating relationships between humans and the natural world. Indeed, during my student days at Oberlin in the 1980s, I was fortunate to participate in a short course on the politics of technology that Harlan co-led with a well-known author on the subject. The continued on page 4
back to 1978 and the founding of the program. I was hired in 1972 by the politics (then government) department to teach political theory, so my engagement with environmental studies has been voluntary. After a period on the ESP Committee, I succeeded David Egloff as director from 1984 to 1992. Except for the occasional semester when I was on leave or otherwise away from Oberlin, I’ve been active on the ESP Committee ever since.

Interest in the scientific and academic study of the natural environment has been around at Oberlin since at least the 1960s. An Environmental Studies Program at Oberlin was first proposed around 1971, led by Egloff. This proposal, however, did not meet with administrative support. Afterwards, a few courses on environmental issues were offered by individual faculty in biology and economics.

The current Environmental Studies Program originated in 1978. An enterprising student, John Shordike, organized a winter-term project called Humankind Tomorrow (HT) in January 1978, with speakers from all areas of the college, from biology and physics to sociology and English, attracting a large audience in King 306 every day. Soon after, an exploratory committee was formed by Egloff, the real founder of the program. Meanwhile, HT was repeated the following year on an even wider scale. Karen Florini, now an Oberlin trustee with a distinguished career in environmental advocacy, but then a student, did an honors thesis on an environmental topic and also drafted a rationale for a new professorship in ES. Egloff himself started to teach a regular environmental biology seminar with guest lectures and became the first director of the program. The hiring of Clayton Koppes in 1978 by the history department to teach environmental history was a huge step forward.

Meanwhile, led by Egloff, who wisely envisioned an environmental studies program that linked social sciences and humanities with natural science, the ESP applied for grants to develop new courses, including a collective NEH pilot grant to support four courses in the humanities—in English, philosophy, and political theory. That included my course, a modified version of which was still in the curriculum 30 years later. Soon after, the student-faculty committee put in a proposal for an environmental studies program committee. It was approved by the college, and the ES program started in 1980. The Environmental Studies Program Committee became its governing body. There were at least four student members from the beginning, all of them actively engaged with the business of the committee.

I mention all this partly in order to show that ES at Oberlin was not established or nurtured by the administration. The key has always been teamwork between students and faculty. College-wide faculty committees and administrators then gave us the support we needed.

Further progress came in the 1980s. The ESP started to offer its own major. In 1982 we hired our first full-time faculty member, Joan Hartmann, whose field was environmental politics with a feminist emphasis. This position didn’t become a permanent tenure-track position until several years later; Carolyn Watkins was hired to fill it. Both Hartmann and Watkins were highly able and energetic political scientists and leaders. After Watkins’ resignation to pursue a non-academic road to sustainability, another political scientist, David Orr, was hired in 1990; his leadership contributions are well known. Up until 2001, when John Petersen was hired, these three faculty members (and temporary replacements) were the only ones hired through the program. All other faculty members teaching in the program were members of associated departments, donating their time to environmental studies teaching and committee work.

When I inherited the directorship from David Egloff in 1984, the program was already up and functioning pretty well. True, we still didn’t have a tenure-track faculty member; we had to rely mostly on the good will of disciplinary departments to supply us with committee members and required courses; we didn’t have an enormous number of majors; and we had cramped office space in the basement of Rice instead of a beautiful building of our own. Still, we did some very good stuff. We sponsored a series of weeklong residencies from prominent scholars and activists in the environmental community. We awarded many wonderful, lucrative Mellon grants to students for environmental research projects all over the world. And we worked with groups in the Cleveland area to sponsor major initiatives on environmental education. I mention all this partly in order to correct the impression, reflected in a misleading article in the Oberlin Alumni Magazine several years ago, that until 1990 the program was inactive or moribund. In fact, in the 1980s, the participation and engagement and energy of students in the ES program and its activities were remarkable: it was a model of collaborative education and student initiatives. But what is also true is that the hiring of David Orr in 1990 catapulted us to a new level. We are established now. Thanks largely to David, we have a wonderful building and six core faculty. I hope, though, that doesn’t mean we will lose the excitement of innovation that we had 30 years ago when we were camped in the Rice basement.

Ten years ago, Clayton Koppes,
then dean of the College of Arts and Sciences, said, “The growth of ES since the 1980s has been remarkable. I can think of no program or department on campus that has developed so strongly in such a short period of time. Mr. Orr has played a remarkable role in making all this happen. The college faculty and administration have shown strong support for some time.” Twelve years later, that statement still stands. I would only add that environmental studies, and environmental concerns, would not be where they are on campus without the early leadership of David Egloff and the pioneering faculty hires in ES; or without devoted staff members such as Patt Clarkson, Carol Longsworth, Cheryl Wolfe-Cragin, Sean Hayes, and Bev Burgess; or without the commitments of recent and current faculty such as (a partial list) David Orr, John Petersen, David Benzing, Roger Laushman, Rumi Shammin, Janet Fiskio, Tom Newlin, Cindy Frantz, Denny Hubbard, Swapna Pathak, T.S. McMillin, Matt Elrod, Camille Washington-Ottombre, and Jordan Suter; or without the consistent energy, intelligence, commitment, and participation of our students.

I have always been struck by the atmosphere of cooperation and collaboration that has characterized the work of the ESP and its governing committee. A committee made up of natural scientists, various kinds of social scientists, and humanists can easily develop an unhealthy disciplinary pecking order. We’ve never had that in ES. As we expanded the core faculty, we could have developed an isolated program with few ties to the rest of the liberal arts curriculum. We’ve never had that either. And, while remaining a place for scholarly teaching and research, we are also a program that contributes mightily to community service projects, thus melding research, teaching, and service functions into one unit. Our relatively new emphasis on environmental justice theories and movements has also been a source of great strength.

My own involvement in ESP, beginning with that first NEH grant 30 years ago, also helped catalyze my present research interest in environmental political theory, which brings together environmental issues with conceptual work in traditional political theory on topics such as democracy, authority, and justice. Besides doing scholarship in this field, I have been fortunate enough to be part of a group that developed environmental political theory on a national level in the last 20 years or so. I feel extraordinarily privileged to have been able to pursue these opportunities at Oberlin. My only regret is that my course in environmental political theory, which I have taught in some form or other since that initial NEH grant, will not continue beyond this year. I hope some way can be found to restore this course to the curriculum eventually, because I think it offers a good way to encourage students to think both politically and critically about environmental issues.

As I leave Oberlin College after 42 years, I reflect that one of the activities in which I take the most pride is having participated in the origins and development of the Environmental Studies Program at Oberlin. I value, more than I can say, the relationships I have had with terrific colleagues and students over the years. The Oberlin ESP has certainly become one of the best, if not the very best, liberal-arts environmental studies program(s) in the United States, and I feel very fortunate to have played some part in that.
author’s contribution to the seminar was disappointing, but Harlan’s role as the facilitator of provocative and deep discussion on the subject left a lasting impression on me.

Harlan has been an integral element of the narrative of Oberlin’s Environmental Studies Program. As he outlines in his reflections within this newsletter, in the 1970s he worked closely with students, faculty, and administrators to begin to craft a course of study and then a major that drew ideas, faculty, and students from across the disciplines in a focused exploration of human relationships with the natural world. Harlan served as director of environmental studies during much of its early history—from 1984 to 1992—and has remained centrally involved in the evolution of the ES program since that time. In addition to facilitating the design of the program, Harlan’s own teaching was key to the success of the program. A number of my friends, spanning multiple generations of students, credit Harlan’s signature course in the ES program, Green Political Theory (eventually renamed Environmental Political Theory) as one of the (sometimes THE) most important courses that they took during their time at Oberlin.

Several years back, a good friend of mine and fellow Oberlin alum who had enjoyed taking courses with Harlan urged me to follow a link to a set of comments that students had left related to Harlan Wilson on ratemyprofessor.com. This site is widely recognized as a scurrilous and disreputable source of information—the internet equivalent of bathroom graffiti. That said, at the urging of my friend I DID visit the site (and just visited again a few minutes ago to grab some quotes). Here’s a sampling of what so amused my friend and what I think also captures some of the essence of students’ experience with Harlan Wilson over the years:

- 2004: “AMAZING! he is soooooooo helpful, and really wants you to learn AND be happy. Oh and the man is brilliant.”
- 2004: “The man’s brains are always packed and loaded…crazily thought-provoking and plays handball like a pro. Must-have prof.”
- 2004: “I took Harlan’s class back in the 1970s. It was better than any seminar I ever had in graduate school. The highlight of the class, still remembered by everyone, was when Harlan turned to one obnoxious, loudmouth student and said, “Cut the ****, _____!”
- 2005: “Talking to him about political theory is, like, better than sex.”
- 2005: “Surely the best racquetball player in the Politics Department.”
- 2005: “He could be the most delightful man in the universe.”
- 2006: “I love Harlan Wilson. A lot. You don’t understand. I want to be Harlan Wilson when I grow up. He’s incredibly smart, sarcastic as all hell, and just plain awesome… Once I went to discuss a paper with him and somehow ended up talking about dissecting cats. Live cats.”
- 2012: “Took as many classes as I could with him at Oberlin 20 years ago, and I wasn’t even a minor or major in politics. Still remember his teaching with great appreciation.”
- 2012: “His intellectual enthusiasm is contagious. He is sly and likes to challenge and provoke responses, but he has a genuine passion for getting students to really engage with the ideas and with each other.”

As director of environmental studies, one of Harlan’s many great achievements was to recruit and hire David Orr, who joined the Oberlin faculty in 1990.

David is the quintessential storyteller, which makes it a bit daunting to tell stories ABOUT David. One story he likes to tell is about his brilliant friend and energy guru Amory Lovins, founder of the Rocky Mountain Institute. As David tells it, when you say something you...
think is super articulate and smart to Lovins, what he hears is “moooo.” It’s not like that with David. As often as not, his stories are designed to make YOU feel smart, but this from a man who can write more compelling prose before breakfast than many academics write in a lifetime. I know that it makes David uncomfortable to be called a visionary. But I have personally never worked with any other individual with his capacity to envision a future scenario, construct a clear and motivating story line regarding steps we might take to get from here to there, and then actually bring the right people on board to make it happen.

Back when I was a student at Oberlin in the 1980s, the hippest ES students were making winter-term pilgrimages to the Meadowcreek Project—an environmental center initiated by David and his brother in the deep backwoods of Arkansas at about the same time that Oberlin was first developing its Environmental Studies Program. Under David’s leadership, almost everyone who was anyone as a thinker and actor on environmental issues spent time stewing in the rich intellectual environment that he created at Meadowcreek.

A new creative strand of the Orr narrative began in the mid-1990s. After joining the Oberlin faculty, David began to explore with students and with most of the cutting-edge design professionals of the time the notion of the built environment as a component of curriculum: what would it look like to develop an environmental studies center that actually manifests the principles of ecological design being taught in the classroom? The ubiquity of the green building movement today is in no small measure a result of what David did then in creating a compelling narrative that simultaneously attracted thinkers, doers, and donors. The fact that in 2010 the American Institute of Architects named the Adam Joseph Lewis Center the most important green building in the last 30 years is a testament to the power and art of David’s ability to translate narrative into reality.

One of the emergent themes of David’s work here has been an expansion in scale and scope of Oberlin’s environmental enterprise. He started with a building, and the ripples moved outward from there. In the early 2000s, faculty, staff, and students worked together with David to develop one of the first comprehensive environmental policies for an institution of higher education. We were then the first of our peer institutions to adopt a formal commitment to “climate neutrality.” With Harlan’s help, sustainability was adopted as one of the core pillars of Oberlin’s strategic plan. We formed a permanent Committee on Environmental Sustainability and developed an Office of Environmental Sustainability, now with two full-time staff. With its emphasis on whole community and bioregional transformation, the Oberlin Project and now the Lake Erie Crescent Project represent a natural expansion of the circles outward from the Lewis Center project. David continues to build and expand a compelling narrative concerning what Oberlin and the larger world might be—and must be—if we put our minds to it and roll up our sleeves.

Both Harlan and David have an ambitious set of projects ahead of them. I know that Harlan intends to wrap up some writing and transition out of his academic life at Oberlin College and on to other things. All power to him for that. To be sure, his departure leaves a void, but leaves behind a profound impact on the intellectual life of Oberlin College, its ES program, and generations of students.

In David’s case, I’m pleased that his immediate plans are still intimately linked with Oberlin College, the city of Oberlin, and the larger region. I still can’t get my head wrapped around the meaning of the word “retirement” for David. I HOPE that it does not actually mean much other than that he is able to spend a larger percentage of his time writing and spending quality time with Elaine, his children, and his grandchildren.
Reflections from David Orr

The assignment for the course was to write seven five-page papers on designated topics pertaining to environmental policy. His first paper came in at 15 pages or so. I reminded him of the page limit. His second paper was five pages but single-spaced. I reminded him that papers were to be double-spaced. His third paper was five pages but without margins. I reminded him of the need to have margins and double-spacing. His fourth paper was five pages with margins but with a 9-point font. I stressed the need for page limits, double-spacing, standard margins, and a 12-point font. His fifth paper, in standard format, was 15 pages. His explanation was that he canvassed the class to find out how many were not using their full allotment of five pages then arranged to appropriate 10—rather like the transferable air pollution credits that we’d studied. Defeated, I surrendered. His last two papers were each over a dozen pages. He now teaches law.

Retiring Professor David Orr
Graduating Seniors

SHANE CLARK
When I enrolled at Oberlin after a year volunteering on organic farms in Spain, I was sure I wanted to be an environmental studies major. Once here, though, I quickly changed my mind to mathematics, then East Asian studies, and then film, before finally declaring my ENVS major at the last possible second. What swayed my decision—and what I still love about the program now—is that it united all my interests and focused them toward addressing the issues that are important to me. My “Urban Place-making and Community Engagement” pathway has helped me explore and leverage connections between courses in new media, Latin American politics, architecture, statistics, and ecology.

Most rewarding, though, has been the way this major has fostered project-based engagement with the larger community. As part of ENVS 101, I started managing a learning garden at Prospect Elementary School. I formed relationships within the schools and connected with local businesses and organizations such as Oberlin Community Services and the Oberlin Pottery Co-op. This led to my involvement with the Oberlin Environmental Dashboard project. This project has given me the opportunity to be part of a research team of endlessly inspiring Oberlin faculty; present at regional conferences; work on exciting grant proposals; connect with an even broader range of Oberlin community members; and pursue my own honors research on the effects of incorporating real-time resource use feedback into primary school curricula. Both the challenges and successes of these experiences have shaped my learning at Oberlin and changed the way I think about what it means to foster community sustainability.

Margaret Heraty

A constant theme throughout my time at Oberlin has been the importance of community. I have built community with other environmentalists, in and out of the classroom. From living in Kahn Hall during winter term 2013, I was able to work on the Environmental Dashboard Project’s Community Voices initiative to explore how religious leaders and lay people in Oberlin experience the connection between their faith tradition and environmental sustainability. This helped me build relationships with diverse Oberlin community members and to research and reflect on the many ways people of faith are taking steps towards sustainability all over the world.

My involvement with the intersection of the ES program and community engagement prompted me to build on

ANITA PEEBLES
As a religion and environmental studies double major, my guiding question in both areas of study has been, “In light of the state of our world right now, how do we live together?” The Environmental Studies Program especially has not only provided me with the space to think critically about the relationship of humanity, nature, culture, and religion within the classroom, but also with the opportunity to explore how those concepts are employed beyond the classroom. During winter term 2013, I was able to work on the Environmental Dashboard Project’s Community Voices initiative to explore how religious leaders and lay people in Oberlin experience the connection between their faith tradition and environmental sustainability. This helped me build relationships with diverse Oberlin community members and to research and reflect on the many ways people of faith are taking steps towards sustainability all over the world.

My involvement with the intersection of the ES program and community engagement prompted me to build on
my ongoing work with the Bonner Center for Service and Learning to serve as the Community Based Experience Project Teaching Assistant for ENVS 101 classes this year. I collaborated with community organizations to create projects for the students in the introductory ES class that would give them an opportunity to explore Oberlin, form relationships with community members, and employ their in-class learning outside the classroom.

It was because of my community based experience project in ENVS 101 that I became involved in community engagement work in Oberlin, and I loved witnessing first- and second-year ENVS students dive into projects working in the public schools, with the Oberlin Project, or at the George Jones farm. Gaining an appreciation for the biological and social ecology of Oberlin has been an important part of my education, and I look forward to witnessing how the 101 students I have worked with this year further that growth.

DAVID ROSWELL
I didn’t know what to expect when I decided to come to Oberlin to be an environmental studies major. I thought I’d fill my time in classes, reading, and struggling through group projects. And I was excited. Now, as I look back, I’m starting to understand what being an environmental studies major means to me. It means fostering a deep care for people and planet, developing a robust critique of power and injustice, and surrounding one’s self with a community of love, praxis, and resistance.

I had the opportunity to get involved in a range of efforts to make this institution and town more just and sustainable. I worked for the Office of Environmental Sustainability. I helped to organize the Lorain County Bike Festival, where 200 bikes were raffled off for free to the community. I sat around conference tables in the Committee on Environmental Sustainability and in conversations with Oberlin’s Board of Trustees debating the college’s pathway off coal. And all the while, I had a strong community of support in front of and behind me, one that helped me understand how all things are connected.

As I go forth, I’ll hold dear the inspiration I’ve drawn from the amazing faculty, staff, and students I’ve had the good fortune of working with, arguing with, and celebrating with. And, as my hope for a just, resilient world waxes and wanes, I’ll always be comforted knowing that this community, as spread out as it may become, will remain strong in its fights, its ability to ask big questions, and its capacity to love and care deeply.

EVAN TINCKNELL
In my time at Oberlin, so many people have shown me in so many ways how to effectively identify and articulate solvable problems and how to go about tackling them productively. As a first-year student I was welcomed with open arms onto an interdisciplinary research team by faculty who dedicated themselves to ensuring my academic success and intellectual development. Our work helped develop the Environmental Dashboard and facilitated the installation of digital displays to provide real-time resource use feedback in public schools, the public library, and several other community spaces. Over the course of the process, I gained invaluable experience as a researcher, project manager, grant writer, community organizer, and communicator in multiple contexts.

I also had the opportunity to serve as a member of the Green EDGE Fund—a student-financed, student-run organization that provides funding for sustainability and efficiency projects in the Oberlin Community. I had the pleasure of working with incredibly committed and multifaceted students, faculty, and administrators to allocate hundreds of thousands of dollars for an incredible variety of projects; among them, converting campus vehicles to run on used vegetable oil, installing efficient lighting and low-flow shower heads, and facilitating the installation of a 10kW solar PV array on top of Kahn Hall.

The Environmental Studies Program has sometimes been the target of criticism from students keen on challenging the status quo, but I maintain that our program (and Oberlin more generally) is amazingly powerful in its capacity to educate and motivate such a diverse collection of students and enable us to tackle important issues in many different ways. I get the sense that the kind of idealistically minded and creative solutions developed here are more challenging to make happen in most other places in the world. I look forward to this new challenge after graduating, and am grateful for the incredible experience and guidance I’ve received here that will undoubtedly allow me to do so.
IAN BURNS ’10

I have been working as the Environmental Dashboard Project’s sustainable technology research fellow for the past year, and it has been an amazing and varied experience. I began working here immediately after returning from two years in Peace Corps South Africa, which was a dramatic transition, to say the least. My work here has included everything from database management to hunting through basements for sensors, and it’s been very rewarding. I’ve also enjoyed getting a behind-the-scenes look at the Oberlin utility infrastructure and the organization behind the various environmental initiatives on campus. But most rewarding has been the opportunity to help raise ecological awareness and having a job that makes the world a better place. The main venue for this is the Oberlin Environmental Dashboard Project, which enables display of live environmental data and education content throughout the town. I have been involved in all aspects of the project, building and installing the hardware as well as creating the displays. I’ve enjoyed the hands-on aspect, because it lets me see the impact the signs have when they are installed. Through our work in the college, community, and schools, we are helping raise a new generation with a sense of environmental awareness and responsibility. I’m very proud to be a part of it.

DANNY ROSENBERG DANERI ’12

I returned to Oberlin in January to work as the assistant project manager for the Environmental Dashboard. Prior to returning to Oberlin, I worked as an eighth-grade science teacher in Miami, Florida. Even under two feet of snow, Oberlin continues to be one of the warmest and most inspiring places I’ve ever lived.

Since 2004, Professor John Petersen and his students have been developing technology that allows people to see how their daily actions have an impact on the environment. This work has culminated in the Environmental Dashboard—a tool that promotes environmental sustainability by providing people with real-time data on their energy and water use, while also highlighting the sustainable actions of community members.

As a student, I worked closely with John as both a research assistant and a student in his Ecological Communication course. It’s exciting to see that many of the technologies and outreach efforts that were still in development when I was a student are now up and running. The effort to integrate the Dashboard into the public schools, for example, has come a long way. A quick glance at the new flat screen displays we installed this spring near the entrances of each of the Oberlin schools gives viewers a compelling visual display of current electricity use in their buildings as well as city-wide electricity use, water use, and data on water quality in the nearby stream. Moving forward, we hope to replicate the model we’ve developed here in other communities across the United States.

I consider myself very lucky to be working with such great people on a project that aligns so well with my values. We believe that the Environmental Dashboard is a powerful tool for motivating and empowering people to conserve resources. Next time you find yourself surfing the net, consider going to EnvironmentalDashboard.org to see the progress that we’re making.

DARRICK EVENSEN

I am excited and honored to be joining the environmental studies faculty at Oberlin this fall as a visiting assistant professor. I will be coming to Oberlin from Ithaca, N.Y., where I recently finished my PhD in natural resources at Cornell University. I completed my master’s degree in this same department; my bachelor’s degree was in public policy and international affairs (with a focus on environmental policy) at Princeton University. At Cornell, I taught courses in sociology, history, planning, philosophy, and ethics—all with an environmental focus.

My current research focuses on shale gas development via hydraulic fracturing (“fracking”). I research the social-psychology and sociology of fracking—studying how the issue is represented in public discourse with the goal of improving the policy process and communication related to fracking (and energy development more broadly). I have studied and presented my research on fracking in the U.S., Canada, and Europe. My current work is funded by grants from the U.S. Department of Agriculture and a fellowship from the EPA.

Next semester, I will be offering two courses at Oberlin: Environment and Society (the foundation course for en-
in participant observation of the fifth Annual Healing Walk through the Syncrude tar sands mining site in Fort McMurray, Canada. This event opened up new areas of research, including the links between the Alberta tar sands and the Rust Belt that I will continue to work on this summer and next year. As part of my fall classes, American Agricultures (ENVS 302) and Climate Change (ENVS 219), we travelled to Detroit on an all-day field trip. We met with activists and community leaders, toured the D-town Farm, and learned about 48217, the most polluted zip code in Detroit, where the tar sands are being processed after being piped down from Alberta.

Off campus, I was elected to the executive council for the Association for the Study of Literature and Environment and continue to serve as book review editor for the journal Resilience. Here on campus, I’ve been thrilled to accept a courtesy appointment in comparative American studies. The energy and excitement about the connections between ENVS and CAST are evident in our cohort of double majors as well as student activism. Oberlin continues to be a vibrant community to teach and research at the intersection of environment and justice.
Center with the engineers designing the mechanical systems in the upcoming Peter B. Lewis Gateway Center, the cornerstone of Oberlin’s Green Arts District.

As much as I enjoy tweaking the Lewis Center’s performance, that portion of my job occupies a smaller percentage of my time than in previous years. That void is rapidly filling with other opportunities. This year, I gave keynote addresses at two different conferences—the 2013 Environmental Education Association of Indiana Conference and the inaugural 2014 West Virginia Urban Agriculture Conference. Additionally, I took on my first academic advisees and taught a private reading for the first time. That private reading grew naturally out of my advisory role with the college’s Green EDGE Fund. I am particularly proud of my students’ work; they have considerably improved the structure and accountability of Oberlin’s most exciting student organization (my opinion), developed metrics to evaluate future projects, delivered payback documents to the VP of finance, and generated the fund’s first annual report.

Finally, I remain excited about the work of my wonderful student employees. Their efforts have resulted in substantial updates to the Environmental Studies Information Center (ESIC) catalog; improved care and maintenance of the landscape and Living Machine; creation of a cider press for use this fall; and, to my knowledge, the first ever tapping of maple trees in Tappan Square. In case you were wondering, it’s the sweetest maple syrup ever.

**SARAH KNUTH**

I am very excited to join the Environmental Studies Program as a visiting assistant professor. A native of northwest Pennsylvania, I studied earth sciences and geography at Penn State University before completing a doctoral degree in geography at the University of California, Berkeley. I look forward to returning to the Great Lakes region and exploring it more with students.

My research investigates connections between urban development strategy in cities like San Francisco, ongoing transformations in the financial industry, and new ideas in green economic development. Drawing on my long-term study of urban climate change policy, my work investigates how the economic crises of the late 2000s have transformed U.S. energy and climate politics. I argue that finance and large real estate developers have become major players in the task of remaking cities for the 21st century. They have played a significant role in the green building movement, even as the movement for green collar jobs has won support for a more economically just vision of the future. On one hand, finance is helping make green building mainstream within real estate and urban development practice and promises badly needed investment for transitions to sustainability. On the other hand, financialization threatens to make green development practices increasingly risky and exclusionary. Tackling this apparent contradiction means engaging in interdisciplinary debates in urban political ecology and economy, financial geography, and the sociology of finance, development studies, and human geography more broadly. I look forward to involving students in research.

Next year I will co-teach Environment and Society with Darrick Evensen. In the fall, I will teach Urban Political Ecology. As a developing field, urban political ecology offers an important window into 21st-century environmental transformations and solutions. In the spring, I will teach Energy and Society and an upper-level course, Environmentally Responsible Investing. The investing course will consider how certain groups are attempting to harness finance sector power, while others demand more fundamental financial reform, pointing to ongoing scandals and the environmental injustice created by mounting indebtedness. I look forward to engaging students in a discussion of these strategies and debates.

**CARL MCDANIEL ’64**

Visiting Professor Carl N. McDaniel published his fourth book, *At the Mercy of Nature: Shackleton’s Endurance Saga Gives Promise of Our Future* (Sigel Press, 2014). On the 100th anniversary of Sir Ernest Shackleton’s Imperial Trans-Antarctic Expedition, biologist McDaniel reveals the ultimate value of the Endurance Party’s survival. Edward O. Wilson, two-time Pulitzer wining author and eminent evolutionary biologist, wrote, “*At the Mercy of Nature* is a brilliant re-telling of the greatest survival of which we have record, enhanced by reflections on the principles of leadership, courage, and the ultimate relation of humanity to an unforgiving nature.”
SWAPNA PATHAK

I am very excited about joining the Environmental Studies Program as a tenure-track faculty member this fall. My year in the program thus far has given me a glimpse of how unique our students are. It is refreshing to see their passion and optimism for bringing about change in this world. As I engage with our students inside and outside the classroom, I feel constantly inspired to expand my own academic boundaries. In terms of research, my primary interests are international environmental politics and environment and violent conflicts. Within ENVS, I am teaching courses on environment and society, environmental policy, international environmental politics, and natural resources and conflict.

I was born in India and lived there for about 22 years. Now my family in Delhi and my research take me back to India almost every year. Having grown up in India, I understand environmental issues and policy from the perspectives of scarcity, lack of environmental policy, colonialism, and neo-imperialism. Therefore, to teach about environmental policy and environmental issues in Oberlin has involved a lot of soul searching and renegotiation of my own identity. Needless to say, it has been a great journey so far, and I look forward to the rest of it.

JOHN PETERSEN ’88

This spring I returned to chairing the Environmental Studies Program. Although there may be leadership involved, the great challenge of this position is responding to whatever comes your way. And this year that has meant lots of hiring of faculty and staff. We were very pleased last fall to select Swapna Pathak as our new tenure track political scientist (see Swapna’s update). Swapna taught full time in Oberlin’s ES program this year and has taught in various capacities in the politics department and ES program over the last three years. Six faculty and staff searches this spring! Economics and ES were, unfortunately, unsuccessful in our joint efforts to hire a tenure track environmental economist—we hope for better luck next year. Environmental studies was, however, please to hire Sarah Knuth and Darrick Evensen as visiting faculty to replace Rumi Shammin (who will be on leave) and Camille Washington-Ottombre (who has accepted a position at Smith College).

On the teaching front, I returned to leading a section of Environment and Society, our introductory course, after a multi-year hiatus. From systems theory to ethics to agriculture to economics and psychology, the goal of this course is to provide students with exposure to a breadth of perspectives, tools, and experiences. Although challenging to teach, it is gratifying and rewarding to get to know first- and second-year students as they deepen their understanding of the complexity of relationships between humans and the natural world. It was also a pleasure to assist Swapna Pathak in her first time teaching this class. We had record waitlists for the four sections of Environment and Society and record turnout for our prospective majors open house. In the class, we stress the importance of biophysical limits to natural systems, but ES at Oberlin remains in a growth phase!

While I try to keep a foot in the door of ecosystem ecology, the focus of my research is now squarely on the ecology of the built environment and on development and assessment of “sociotechnical feedback” technology as a mechanism for engaging, educating, motivating, and empowering change in thought and behavior. I continue to enjoy working with faculty collaborators Cindy Frantz and Rumi Shammin and the outstanding group of student collaborators working on our Environmental Dashboard project (www.environmentaldashboard.org, see Samantha Serazo’s article). Shane Clark and Evan Tincknell completed fabulous honors projects that built in important and creative ways on the role of dashboard technology in promoting “systems thinking” skills in children and adults. Both played important roles in preparing successful grant proposals to Ohio EPA’s Environmental Education Fund and to the State Farm Youth Action Board; in 2013 we were awarded $150,000 to expand Environmental Dashboard into all of the public schools in Oberlin and into a variety of other community venues such as Kendal at Oberlin, Oberlin Community Services and the Oberlin Early Childhood Center.

It has been a busy year for conference presentations, continued on page 12
Faculty/Staff News CONTINUED

with an increasing emphasis on sharing dashboard with decision-makers in other communities that might adopt the technology. Colleagues and I presented at the Garrison Climate Mind and Behavior conference, the American Planning Association Meeting, Ecological Society of America, the Ohio City Manager’s Conference, American Municipal Power Association, the EPA’s Sustainable and Healthy Community group, and the Western Reserve Conservation and Development Council. Student co-presenters at these meetings included Shane Clark, Hannah Ball-Damberg, Enzo Cabili, Samantha Serazo (all ’14), Jacob Gilbert ’16, Caroline Lawlor ’17, Brendan Nuse ’17, Mae Kate Campbell ’17, Erika Brandt ’13, and Danny Rosenberg ’12.

Beyond conference presentations, Public Radio International’s Living on Earth show did a story on Environmental Dashboard that aired on more than 500 stations around the country. Rumi Shammin, Cindy Frantz, and I served as guest editors for the spring 2014 issue of the journal Solutions on transition to sustainable communities. In that issue, the three of us coauthored the paper “Using Sociotechnical Feedback to Engage, Educate, Motivate, and Empower Environmental Thought and Action.”

RUMI SHAMMIN
This past year has been eventful in many ways. Since receiving tenure in 2013 and being promoted to associate professor, I decided it was time to think about long-term research plans. Building on my previous projects, I began developing three new threads of scholarship: a project on ecological economics analysis of urban sustainability initiatives in Cleveland; a long-term study of youth engagement in urban agriculture in selected cities in Ohio and Michigan; and a study of climate change adaptation and mitigation initiatives in Bangladesh. I am scheduled to be on sabbatical in 2014-15 and hope to work on the logistics of these new projects and seek external support to finance them. I am also continuing my research on motivating behavior change using real-time monitoring and feedback technology funded by the Great Lakes Protection Fund with John Petersen and Cindy Frantz. We have received two new grants to support further expansion of this project—one from State Farm and the other from the Ohio EPA. This project continues to be exciting not only because of its visible presence on campus and around town, but also because it involves active engagement by student research assistants. Finally, I served as a guest editor for a special issue of the journal Solutions on transition to sustainable communities. This issue, published in April 2014, includes three articles that I coauthored with my wonderful colleagues in Oberlin. While I am looking forward to my leave next year, I am certainly going to miss my students and fellow staff and faculty members. Thousands of miles away from my home country of Bangladesh, Oberlin is now truly my home away from home, and I will surely be drawn to the Lewis Center every now and then—even when on leave.

CAMILLE WASHINGTON-OTTOMBRE
One of the great challenges of a double academic household is finding a situation in which both partners find satisfying long-term opportunity. Camille Washington-Ottombre joined the Oberlin faculty in the fall of 2010 in a newly created “Land and People” position in Environmental Studies. Her husband, Garrett Washington, holds a PhD from Purdue University. His work focuses on Japanese history with an emphasis on religion, medicine, the environment, natural disasters, and the state. Although Garrett successfully found temporary teaching positions at Case Western Reserve and Oberlin, the family has been unsuccessful at securing a permanent opportunity for him in Northeast Ohio.

We report with regret that Camille and Garrett are leaving Oberlin for Northampton, Mass., where Camille will be joining the faculty of Smith College. There she will be participating in the development of an environmental science and policy program as she continues to build a research program focused on the critical issue of adaptation to climate change in Sub-Saharan Africa. During her time at Oberlin, in addition to teaching Environment and Society and Environmental Policy, Camille developed two new upper level courses: Vulnerability and Resilience of Social-Ecological Systems and Governing the Commons: A Seminar in Water Resources. Camille thanks all the students and alumni in the ES program for providing her with the opportunity to contribute to and learn from their intellectual development over the past four years. The ES program thanks Camille for her service to Oberlin and wishes her and Garrett great success in Northampton!
A Glimpse into the Environmental Studies Program

A. David Orr, Wes Jackson, and Wendell Berry discussed nature as measure at this year’s opening Convocation event. B. Arthur Davis ’16 and Griff Radulski ’14 drill a maple tree as part of the “Tappin’ Tappan” project; student workers led an effort to tap 10 maple trees in Tappan Square this year. C. The Tappin’ Tappan project yielded over four gallons of maple syrup. D. Woody agriculture expert Philip Rutter ’70 with student researchers from Systems Ecology. The plant in the foreground is part of a hybrid hazelnut planting experiment at the Lewis Center. The sack is full of hazelnuts (but not yet from the Oberlin’s trees)! E & F. Students led an ENVS program hike for majors and faculty members at the Rocky River Reservation this spring. G. Wendell Berry, Janet Fiskio, and Wes Jackson illustrate the difference between annual and perennial root systems for a packed house in Hallock Auditorium.
A. Anita Peebles ’14 and family at the Big Parade. B. Marie Claire Erskine ’13, Danny Rosenberg ’12, and David Rosewell ’13 enjoying the Big Parade picnic. C. Students and faculty enjoying food and conversation at this year’s ENVS picnic while beating the heat in John Petersen’s pond. D. John and Shane Clark ’14 at the Environmental Studies open house held during Commencement/Reunion Weekend in May. E, F, G. Scenes from David Orr’s retirement party in May.
Hannah Ball-Damberg, Shane Clark, Emily Lumsdaine, and Shelby Ziesing have been elected into the Phi Beta Kappa academic honor society.

Emily Belle has been selected as the Bonner Center for Service and Learning’s Community-Engaged Research Fellow for summer 2014. She will spend the summer conducting research for the Oberlin Boys and Girls Club, focused on providing insight into strategies for institutionalizing practices and awareness around food justice and enhanced nutrition.

Shane Clark received the Excellence in Community-Based Learning Award from the Bonner Center for Service and Learning for her involvement in incorporating the Environmental Dashboard into the schools and managing the Prospect School Learning Garden. Shane also received the Great Lakes Innovative Stewardship Fellowship, which supported her summer research with the Environmental Dashboard.

Laura Messman received several awards for her ongoing research project focused on the effects of climate change on prairie plant community composition. The research is being conducted under Regents Professor David Tilman from the University of Minnesota. Laura also received the Lawrence Award from the University of Minnesota Department of Ecology, Evolution and Behavior and the Elizabeth Gardner Norweb Summer Environmental Studies Scholarship from the Garden Club of America. Finally, she received a Doris Baron Student Research Fund award from Oberlin’s Environmental Studies Program; the Baron fund was established in 2009 by Doris’ son, Frank Baron ’70, as a way to support student-initiated research projects.

Sophia (Zo) Paul and Peter Saudek have been granted the President’s Public Service Fellowship, now in its pilot year. The fellowship provides funding for three Oberlin College students to work full time during the summer with select Oberlin community partners on an intensive service project addressing the challenge of engaging local teens while focusing on youth empowerment, leadership, the arts, and/or ecological and economic sustainability. Zo will serve as the President’s Public Service Fellow at Oberlin Community Services, where she will work with local high school students to coordinate opportunities for them to work with community gardens and learn about local food systems and food issues. She will also help to coordinate a summer tutoring program. Peter’s work will primarily be dedicated to providing and improving the many opportunities offered free of charge by the Oberlin Public Library and The Bridge to our teen population. He’ll be working with youth programs in Oberlin throughout the summer.

Anita Peebles received the Bright Light Award from the Bonner Center for Service and Learning, which seeks to recognize a student or community partner with bright ideas. Anita was awarded for her efforts on projects such as Girls in Motion and Project CALL/Interfaith Appalachia.

BLANK FELLOWSHIPS
Established by the Arthur M. Blank Foundation, this grant enables Oberlin students to undertake research and educational opportunities in collaboration with Environmental Studies Program faculty.

Professors John Petersen (ENVS and biology), Cindy Frantz (psychology), and Rumi Shammin (ENVS) collectively supervised five students focused on a range of important projects that advanced the Environmental Dashboard while providing these students with hands-on experience in multiple aspects of research, development, and communication.

- Ethan Zimmerman developed messaging and calendar display software for the “Community voices” component of the Environmental Dashboard.
- Casey Silverstein further developed the Environmental Dashboard website.
- Thomas Kearney redeveloped software for the campus Environmental Orb.
- Saad Talha completed data analysis on social systems assessing the impact of Environmental Dashboard on views toward the environment and systems thinking.
- Shane Clark developed a formal process for soliciting and managing content for the Community Voices component of Environmental Dashboard.

Lewis Center Facilities Manager and Community Outreach Coordinator Sean Hayes supervised three students focused on summer management and improvements to the Lewis Center. John Bergen, Allison Monroe, and Griff Radulski worked on the Lewis Center’s landscape, cared for the livestock, and monitored water quality in the Living Machine and Plum Creek. Additionally, they furthered the Environmental Studies Program’s hybrid hazelnut agroforestry research collaboration with alumnus Phillip Rutter. John, Allison, and Griff used capital funds to plant the Lewis Center’s conference room terrace with attractive edibles and constructed a new mobile chicken coop that allows the flock to be moved around the landscape for effective fertilization and pest management.
Associate Professor of Environmental Studies Md Rumi Shammin supervised four students involved with research on multiple projects during 2013-14.

- **Gabe Klooster** assisted Rumi with data collection, data analysis, and report writing on physical metric of sustainability for Oberlin. He will be a coauthor of a report resulting from this research.
- **Matthew Phillip** assisted Rumi with data collection, data analysis, and report writing on ecological indicators for Oberlin. He will also be a coauthor of the same report mentioned earlier for his contributions to sections on ecological indicators.
- **Zohra Ansari-Thomas** worked with Rumi on his research on developing community scale ecological footprint analysis for Oberlin. She helped compile data and develop a method for combining local data with national input-output databases.
- **Joel Ginn** worked on three projects with Rumi. He conducted literature review and data analysis on the effectiveness of different units for representing resource use on the Environmental Dashboard. He worked on ecological footprint analysis. He is currently working on analyzing consumer expenditure data from Bangladesh to help develop several profiles for modeling resource consumption as a result of social mobility in Bangladesh.

**GORN PRIZE RECIPIENTS**

Each year the Environmental Studies Program awards the Joyce Gorn Memorial Prize to one or more graduating seniors for outstanding work on an extracurricular or off-campus environmental project. This year we are pleased to bestow the award on five worthy recipients:

- **Shane Clark** initiated the “learning garden” in Prospect Elementary School and has been a leader of efforts to integrate Environmental Dashboard into the schools.
- **Maggie Heraty** has been involved throughout her time at Oberlin as a leader of campus environmental activism.
- **Anita Peebles** is recognized as a leader in environmental activism within the Oberlin community and beyond, including facilitating fall/spring breaks service trips and winter terms to Appalachia.
- **David Roswell** worked on numerous campus environmental campaigns at Oberlin College including cofounding the Responsible Investing Organization (RIO).
- **Evan Tincknell** is recognized for his years of work and leadership on the Green EDGE fund.

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THE ENVIRONMENTAL STUDIES PROGRAM

sponsored talks and workshops by a range of seminal thinkers on environmental issues this year. Here is a sampling:

Philip Rutter, president/CEO, and Dr. Brandon Rutter-Daywater, vice president/COO of Badgersett Research Corporation, Workshop on Woody Agriculture: Simultaneous Food and Fuel Production

Dr. Wendy Ring, Climate 911: Climate Change Is a Public Health Emergency

Dr. Jennifer Hirsch, anthropologist specializing in sustainability, diversity, and community development, and Matt Gray, director of Cleveland’s Office of Sustainability, Collaborative Governance, Community Engagement and Climate Action: Lessons from Cleveland, Chicago, and Beyond

Brian Czech, founder and president of the Center for the Advancement of the Steady State Economy (CASSE), Supply Shock: Growth Versus Steady State Economy Public Lecture

Hiroshi Sunairi, installation artist and award-winning documentary filmmaker, film screening and artist talk

Brad Tyler, managing editor of the Texas Observer, Opportunity, Montana: Big Copper, Bad Water, and the Burial of an American Landscape

Dr. R. Lawrence Edwards, recipient of the Day Medal from the National Academy of the Sciences, Deciphering Climate Change from Underground: the Timeline for Cave Climate Records and Deciphering Climate Change from Underground: Stalagmites as Scribes of Climate History

Lillian Molina, Mestiza Environmental Justice advocate, Environmental Justice Workshops focused on Environmental Justice, Environmental Racism, Classism and Anti-Oppression

Beehive Design Collective, all-volunteer activist arts collective, presentation: Mesoamerica resiste

Christ Crass, environmental activist, Workshop: Why Men Need Feminism

Junior Walk, West Virginia anti-MTR activist, Talk: Water, Coal, and Resistance

Clayton Thomas Muller, indigenous rights/environmental activist, A Native Rights-Based Strategic Approach to Environmental Justice

Nicolae Morar, scholar at the Rock Ethics Institute Penn State University, Science and Environmental Value: An Argument for a Critical Understanding of the Normative Role of Biodiversity

Mark Nowak, author of Coal Mountain Elementary and Shut Up Shut Down, Poetry is a verb

Malik Yakini, founder and executive director of the Detroit Black Community Food Security Network, Fostering Community, Food Safety, and Food Justice
Awards CONTINUED

SCHAENING MEMORIAL FUND AWARDS
The Ann Marie Schaening ('89) Memorial Fund, established by the family and friends of Ann Marie Schaening, provides support for students pursuing winter-term projects related to the environment. Five students were granted awards in 2014:

• **Gene Fukui '14** conducted a cultural analysis on unsustainable industrial fishing in Japan by using an interdisciplinary and comparative methodology, with a focus on Bluefin Tuna.

• **Jackson Kusiak '15** participated in a project titled “Community Sustainability” in Detroit.

• **Machmud Makhmudov '16** interned at the International Climate division of the Environmental Defense Fund, working with translating and writing memos for Russian greenhouse gas emissions legislation.

• **Benjamin Marks '15** traveled to Minnesota to collect data and study “Wolves and Northwoods Carnivores: A Look at Predatory Ecology.”

• **Annie Seder '14** learned first-hand the craft of sheep tanning and wool spinning at Deluge Farm and explored the natural history of Flathead Valley near Missoula, Montana.

EnviroAlums Continues Student Fund and Establishes an Internship

BY CARL MCDANIEL '64, CHAIR, ENVIROALUMS

BEGINNING IN 2005, EnviroAlums provided financial support from its Student Fund for various student activities with the goal of furthering student education and professional development. Over the past nine years, the Student Fund has provided “seed” funding—$100 to $500—for a few dozen activities including:

• A documentary film on the ecology and conservation of redwood trees.

• A bike trip across the country by about a dozen students who stopped in a number of places to present educational programs on environmental sustainability.

• Oberlin Storm Water Management Project that initiated in spring 2011 a multiyear program to plant and maintain trees in riparian zones to filter water draining into Plum Creek.

• Funds to help students attend the 2011 Power Shift conference in Washington D.C.—about 120 Oberlin students attended.

• Two years of support for the founding of *Headwaters Magazine*, a student environmental publication that is still being published.

A recent review of this program has affirmed its value and importance as an easily accessible source of funds that helps students to engage in a wide range of educational activities. The EnviroAlums Steering Committee unanimously supports the continuation of this program.

A second part of the review was to consider how best to use income from the EnviroAlums Endowment that was established in 2008 and has grown to over $100,000 thereby providing about $5,000 annually to support EnviroAlums activities.

The Steering Committee agreed to initiate an annual internship for a current student or a recent ENVS graduate to support his/her preparation for a satisfying and productive career in sustainability. The fellow will work with a host environmental organization that will supervise the fellow and is encouraged to provide additional in-kind or financial support. The fellowship is capped at $3,000 and requires the fellow to complete a minimum of 200 hours of work. The funds can be used for salary, travel, lodging, and similar expenses. Detailed information and application can be found on EnviroAlums website: http://new.oberlin.edu/office/alumni-affiliate-groups/enviro-alums/.

Living Machine float at the Big Parade, spring 2014
Oberlin College students launch Environmental Dashboard with a successful “Ecolympics” in Oberlin Public Schools

BY SAMANTHA SERAZO ’14

OBERLIN STUDENTS HAVE long volunteered in the Oberlin public schools—teaching Spanish, tutoring math and writing, building gardens, and promoting environmental education in multiple contexts. On campus, students and faculty pioneered the development of “Dashboard” technology designed to use real-time visual feedback on electricity flow and water use to engage, educate, motivate, and empower college students to conserve electricity. Engagement in the schools and Dashboard came together this spring in a major event.

On April 25, all four of Oberlin’s public schools—Eastwood Elementary, Prospect Elementary, Langston Middle School, and Oberlin High School—completed a two-week long competition to reduce electricity use. This was the first such event ever held in the Oberlin Public Schools. Modeled after the college’s annual Ecolympics (which occurred during the same time), the schools competed against each other to reduce their electricity use by the largest percentage relative to a previously recorded baseline period just prior to the competition. The event brought together college students, faculty, and staff from the public schools, college, and city in a celebration of sustainability and community.

As described in previous environmental studies newsletters, Environmental Dashboard is a technology and approach developed by Oberlin students and faculty that combines three scales of ecofeedback to change thought and behavior:

1) “Building Dashboard” delivers socially, environmentally, and economically comparative information on resource consumption in individual buildings;
2) “Citywide Dashboard” is a conceptual model animated with real-time data that provides feedback on resource flows and environmental conditions in whole communities and organizations;
3) “Community Voices” combines images and words drawn from the full diversity of communities to celebrate thought and action that build a shared vision and identity around a sustainable future. Digital signs installed in schools, storefronts, and in community organizations provide a delivery venue that cycles through all three components and incorporates a community calendar and site-specific content associated with each location. The goal of Oberlin’s Environmental Dashboard project team has been to produce a technology that can be used to build “systems thinking” skills and to motivate deep behavior change. Oberlin faculty members Rumi Shammin, Cindy Frantz, John Petersen, and Steven Meyer received initial funding from the Great Lakes Protection Fund to develop Environmental Dashboard as a technology that can be made available to communities throughout the Great Lakes region and beyond.

Three years ago, students in John Petersen’s Practicum in Environmental Education class first

Student Dashboard crew

The logo for Environmental Dashboard was designed by Jacob Gilbert ’16 as part of his work in the Practicum in Ecological Communication in the fall of 2013.

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proposed that the Environmental Dashboard might be integrated as an important component of public education in Oberlin. In 2011, over the course of fall semester, Even Tinknell ’14, Noel Meyers’14, and Jenny Taylor ’12 met with teachers, students, principals, and school superintendent John Schroth to explore possibilities. The concept was met with much enthusiasm. In fall 2012, with support from the Green Edge Fund (a grant organization funded and managed by Oberlin College students), a pilot installation was installed in Prospect Elementary (grades 3-5). Based on the success of this pilot, students and faculty collaborated on grant proposals to Ohio EPA’s Environmental Education Fund and to the State Farm Youth Action Board (YAB). Although a first proposal to the YAB was turned down, in spring of 2013 we learned that both the Ohio EPA AND a revised YAB grant proposal were awarded funds totaling $150,000 to implement Environmental Dashboard in all four Oberlin public schools, plus the Joint Vocational School in Oberlin. The funds were to be used to install monitoring technology, to host summer workshops for public school teachers, to develop curricular materials for each of the schools, and to install Environmental Dashboard display technology in multiple locations in downtown Oberlin and in organizations like Oberlin Community Services and Kendal at Oberlin. The first teacher workshop will be held in June of 2014.

The design of a system to monitor electricity and water use in each of the schools took place over the summer and fall of 2013. Finding a time to shut down power and water so that sensors could be installed in the schools proved challenging, but in a window of opportunity between Christmas and New Year’s Day 2014, electrical contractors worked overtime to install the technology in the three remaining public schools.

Over the course of the 2013-14 academic year, I had the privilege of working with other members of the student/faculty Dashboard team at the college and with public school teachers to develop a set of lessons on the Dashboard. My own work focused on collaborating with teachers in Langston Middle School to integrate Environmental Dashboard into seventh-grade math and science classes. This spring, working in the context of independent research projects in Environmental Studies and also under the auspices of Oberlin’s Bonner Center for Service Learning, a group of students worked hard to design and promote an Ecolympics event for the public schools that would generate excitement about the educational possibilities of Environmental Dashboard among both teachers and students. During spring of 2014 the Dashboard organizing team included me, Noel Myers, Shane Clark, and Hannah Ball-Damburg, all ’14; Machmud Makhmudov and Yvette Chen, both ’15; and Brendan Nuse, Caroline Lawlor, Emily Belle, and Melissa Cabat, all ’17. In addition, several project groups from both sections of Spring 2014’s Environment and Society class focused their work on promoting Ecolympics specific events in the schools.

Ecolympics proved to be a smashingly successful kickoff event for launching Environmental Dashboard in the schools. Just over a week into the event, the Oberlin school district had already averted over 24,000 pounds of carbon dioxide from being released into the atmosphere. Students, faculty, and staff threw themselves into the competition. Longtime Dashboard team member Shane Clark reported that the winning school, Prospect Elementary, was “in near total darkness” during one of her visits to the school (even principal Jim Eibel was relying exclusively on natural lighting in his office). At
Langston Middle, sixth grade teacher Eileen Hickerson reflected, “Personally [after interacting with the Dashboard and Ecolympics], I am much more conscious of turning lights on and off. I think I really began to think more about my energy use in the classroom.”

Having made environmental education and the implementation of Environmental Dashboard in the public schools the central focus of my senior capstone project in Environmental Studies, it was particularly gratifying for me to see the excitement and interest that the competition stimulated in the schools. As a member of the Environmental Dashboard project team, I went into the competition believing that we could make a difference, but I found myself truly inspired by the commitment and insight of the kids and teachers in Oberlin schools. The final results speak for themselves. Prospect Elementary reduced electricity during the competition by 39 percent relative to its baseline consumption during the weeks before the competition. In spite of the fact that school children have much less control over resource consumption than dorm residents, this score nearly tied with the winning Oberlin College dormitory, which reduced electricity use by 40 percent and beat the college's second place dorm by nearly 10 percent.

Teachers are in a position to understand the potential long-term impact of an event like this. Ron Bier, who teaches chemistry and environmental science at Oberlin High School, believes that teaching students about resource conservation is essential to maintaining the economic, environmental, and social well being of communities. “What they take with them from school can affect the rest of their lives, and it is also what they take to educate people at home.”

My own work with the Oberlin Public Schools and the Environmental Dashboard showed me that the impact of the Dashboard technology extended well beyond simple awareness of electricity use and beyond actions such as turning off lights. In mini-lessons that I and others delivered using the Dashboard, students’ answers to a post-lesson questionnaire made this clear. For example, in her reflection, ninth-grader Marisha wrote, “Saving paper saves trees. Saving trees saves people.” Ashanique, another ninth-grader wrote, “What affects your community affects you.”

Fostering the development of a community identity around citizenship and appreciation for the environment is one of the core objectives of Environmental Dashboard. With many reflections similar in nature to those above, the students revealed a warmth for the social as well as the ecological aspects of their community. The success of the Ecolympics event this spring suggests that we are already making good progress on the goals associated with the three components of Environmental Dashboard outlined at the beginning of this article. But I would like to add a third aspect that the Dashboard addresses: partnerships within the community. My own experience working closely with students and teachers in the Oberlin Public Schools suggests that collaborations between community members are one of the most valuable and encouraging aspects of this project. The work accomplished this year by students and faculty at the college, schoolteachers, children, and other members of the community suggests that the act of collaboration itself does much on its own to foster the overall goals of the project. This work has brought the full diversity of the Oberlin community together and moved us towards an inclusive notion of sustainability. It has instructed all of us on the power of education and community.
ENVIRONMENTAL STUDIES PROGRAM

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