



Environmental Consortium
of Hudson Valley Colleges & Universities

Presents

**Civic Engagement and Service Learning for the Environment:
The Challenge for Higher Education**

November 4-5, 2005
Rensselaer Polytechnic Institute, Troy, New York

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From left: John P. Harrington, Dean, School of Humanities & Social Sciences, RPI; Eric Pallant, Director, Center for Economic and Environmental Development, Professor of Environmental Science, Allegheny College; Nadinne Cruz, Practitioner, Author, Advocate; John Cronin, Director, Pace Academy for the Environment, Pace University, Managing Director, Rivers and Estuaries Center Photo by Donald A. Moore, Rensselaer Polytechnic Institute

Agenda

Friday, November 4th

- 8:00 a.m. **Check-in**
- 8:45 a.m. **Welcome and Introductory Remarks**
- John P. Harrington**
 Dean, School of Humanities & Social Sciences
 Rensselaer Polytechnic Institute
- 9:00 a.m. Keynote
 **Service-Learning: Reflections on the Vision, Promise and Reality of a
Pedagogy for Personal and Social Transformation**
- Nadinne Cruz**
 Practitioner, Author, Advocate
- 9:45 a.m. Panel - **The Role of Higher Education in the Development of an
Environmentally-engaged Civil Society**
- Moderator: **John Cronin**
 Director, Pace Academy for the Environment
 Pace University
 Managing Director
 Rivers and Estuaries Center
- Panelists: **Nadinne Cruz**
 Practitioner, Author, Advocate
- David J. Hess**
 Professor, Science and Technology Studies
 Rensselaer Polytechnic Institute
- Kenneth Reardon**
 Chair and Professor
 Department of City and Regional Planning
 Cornell University
- 10:45 a.m. **Break**
- 11:00 a.m. **Workshop Session #1**
- 12:30 p.m. **Lunch**
 River Summer 2005 Report by
- Stephanie Pfirman**, *Barnard College*
 Lisa Son, *Barnard College*
 John Cronin, *Pace University and*
 Rivers & Estuaries Center on the Hudson
- 1:30 p.m. **Workshop Session #2**

3:00 p.m. **Break**
3:15 p.m. Panel - **Hudson River Tributaries as Resources for Pedagogy and Civic Engagement in the Hudson Valley**

Moderator: **Ann Davis**
Professor of Economics
Marist College

Panelists: **Stuart Belli**
Professor of Chemistry
Vassar College

Andy Bicking
Director of Education and Volunteers
Scenic Hudson

Nancy Cozean
Mayor
City of Poughkeepsie

Harvey Flad
Professor of Geography
Vassar College

Thomas Lynch
Professor of Environmental Science
Marist College

Ryan Palmer
Environmental Associate
Hudson River Sloop Clearwater, Inc.

4:45 p.m. **Reception and Poster Session**

6:00 p.m. Private Showing of *Doodles, Drafts and Designs, Industrial Drawings from the Smithsonian* at Rensselaer County Historical Society



Dinner at Bush Memorial Center, Russell Sage College

“Biloxi Blues”

Patricia Dunne
Program Coordinator
Rivers and Estuaries Center

“Katrina and New Orleans: Local Knowledge, Culture, Geography, History, Environment and Politics”

Rachel Dowty
Department of Science and Technology Studies
Rensselaer Polytechnic Institute

Saturday, November 5th

9:00 a.m. **Keynote**
Keeping Civic Engagement Civil for Students, Faculty, and the Community

Eric Pallant

Director, Center for Economic and Environmental Development
Professor of Environmental Science
Allegheny College

10:00 a.m. Panel - **Integrating Civic Engagement and Service Learning
into the Life of a Small Liberal Arts College**

Moderator: **Ken Scott**
Director of Community Services
The College of Saint Rose

Panelists: **Claire Andryshak**
Student, Education Major
The College of Saint Rose

Nate Davis

Director of Urban Community Environmental Programs
W. Haywood Burns Environmental Education Center

David Szczerbacki

Provost and Vice President for Academic Affairs
The College of Saint Rose

11:15 a.m. **Break**

11:30 a.m. **Workshop Session #3**

12:30 p.m. **Closing Remarks, Box Lunch**

Keynote Address: Nadinne Cruz

“Service Learning: Reflections on the Vision, Promise and Reality of a Pedagogy for Personal and Social Transformation”



Photo by Donald A. Moore, Rensselaer Polytechnic Institute

Good morning and thank you so very much for a warm welcome. Thank you for the time and the space to receive reflections on something I have been involved with for over 25 years. Rather than tell you a dispassionate argument, well, I guess not dispassionate, all right, passionate rendering of what this about, I instead am choosing to tell you a few stories, to share with you my journeys with service-learning and why I am convinced it is a pedagogy worth committing to.

I'll start with a short poem by William Stafford, *The Way It Is*.

There's a thread you follow.
It goes among things that change.
But it doesn't change.
People wonder about what you are pursuing.
You have to explain about the thread.
But it is hard for others to see.
While you hold it, it can't get lost.
Tragedies happen; people get hurt or die; and you suffer and get old.
Nothing you do can stop time's unfolding.
You don't ever let go of the thread.
So what I'm going to share with you is my thread - it's the invisible thread that makes everything coherent for me.

I have been, I feel, a voice of the loyal opposition within service-learning; within the intimate circles of colleagues and friends, committed to pedagogy, a way of teaching, sometimes a way of life. I always present that annoying, naggy voice, but "this", but "that", what about diversity, what about institutionalization, what about diluting the essence and ethos of what should be about a movement for social transformation as well as the individual transformation through learning. But as service-learning has taken root, and now has experienced huge growth over the past 10 years, I feel it is okay now to just speak my mind. So I will today.

When I say that service-learning has taken hold, just take a look at National Campus Compact (www.compact.org/), from about a dozen colleges that pledged to commit to this vision of engaged education, there are now over 900 institutions that are members of Campus Compact and over 31 states are organized to be state-based Campus Compacts. We now have a Corporation for National and Community Service (www.nationalservice.org). If you look just at the web page for the National Campus Compact, which is based at Brown University, you will find everything, syllabi in every discipline, toolkits

for faculty, links to every conceivable resource you can imagine, the national service-learning clearinghouse, even now, a UC Berkeley based research center focused entirely on research in and on service-learning. And they have an annual national/international conference. There's also a subset of service-learning in various national organizations, even before its closing, AAHE [American Association for Higher Education] had very healthy, vibrant energy around service-learning. So you can point to the very many organizations, even the Political Science Association has engaged with a question of how should we teach civic education? Which, as you know, was a new thing for the political science group.

Service-learning is strong now. It's taken root everywhere. Kudos on the institutionalization because in many ways it is like having a beachhead in every single campus where some kind of service-learning is taking place, whether it's a few courses or a full scale program, part of the major requirements, or even connected to some majors. But now is a time to renew some of the energy of the pioneers who really didn't identify with service-learning, they didn't sit down and dream up a service-learning pedagogy. Many of these pioneers, unknown to each other, experimented with how to make good the promise of education to respond to so much suffering and so many social issues that seemed so intractable, and that they should exercise responsibility of connecting education to these issues.

To make good on the promise of education, they experimented with all kinds of ways to make the learning vibrant and connected to communities adjoining the colleges where issues abounded. I met up with lots of these individuals. They didn't call what they did service-learning. That was to come later, when it became identified as such, or named as such, and then over a period of time, the name stuck. I was a reluctant joiner of the service-learning crowd, because I didn't like the word "service." I spent my formative years critiquing imperialism and colonialism, and I had many an argument about Peace Corp and had wounded colleagues around these arguments. It called to mind manifest destiny, charitable approaches that were in my view inappropriate for what the issues were and what they called upon people to do and to consider. But it was the people and their practice that was compelling to me and I paid attention to what they did because of how they presented themselves as persons committed to a vision and committed to experimenting to make that vision true. I would call what they did liberatory education. But, I think, for all sorts of reasons that I won't go into, volunteerism and working in communities in the form of service has been the most acceptable kind of action connected to a learning activity in most higher education institutions. Just to give you a sense of the spirit of the controversy around it, in this book [*Service-Learning: A Movement's Pioneers Reflect on Its Origins, Practice, and Future*] that I proudly co-wrote with Timothy Stanton and Dwight Giles, we say postsecondary education's relationship to social problems is fraught with conflict over the social function of teaching and research. These debates represent clashes between competing concepts such as objective science versus social advocacy, classical versus utilitarian education, and critical thinking versus critical action.

So just to give you a sense of the early conflicts around this, in 1834, Lane Seminary had an active antislavery society composed of faculty and students. To put their abolitionist views into action, the society organized an educational program for the blacks in their community. But soon after they began, the trustees of the seminary closed the program on the grounds that these activities were "non-educational". So that debate goes on. I have handouts here with definitions of service-learning. I was going to show you a little bit about how to conceptualize service-learning since we don't have time to go into that now; the nuts and bolts of this will I think be treated throughout the rest of today and the next day - the actual practical nuts and bolts of how to do this kind of engaged teaching and research and learning. Suffice it to say briefly that service-learning is about the integration of an action component that is service or provides value to community with an intentionally designed, often curricularly based learning component. And that somehow these two outcomes, learning for the students, and value to communities - that is called the service - both of these will be achieved. And the mantra for that, for those practitioners of service-learning is, service combined with learning adds value to each and transforms both. Unfortunately, because of the push for rigor, where's the rigor? *Where's the learning in service-learning?* as the title reads of a book by Dwight Giles and Janet Eyler. So much focus has been on proving or showing that the learning is vigorous and warrants credit or warrants a place in educational institutions. But what I've discovered over the years of 25 years of practice, teaching over by now 30 to 50 courses in service-learning and directing this program for seniors who would do their honors thesis to meet both honors requirements for thesis research as well as service to community, I learned two things, and this is what I wanted to share with you by way of reflections on this pedagogy.

First of all, I found that the community people we worked with are tremendous, powerful teachers, and they would ask question like, "how come they don't teach you guys this stuff?" They would say many variations of that kind of question to the students. Puzzled when the students would show a lot of appreciation. But of course you know it wasn't just the facts or the information about what they knew in communities, on whatever issue, whether it was homelessness, at risk youth, the failure of the schools, environmental issues, brownfields and the adjoining city of east Palo Alto to Stanford, whatever the issues might be, it wasn't just the facts that the community people would be teaching the students and what the students would be resonating to. I think what the students noticed and often they couldn't quite put the words to it readily, but over time it was as if they were learning the skill, the language to identify what it is they were learning from the community people. It was courage. To take risks. The passion. To act on conviction. The inventiveness. The stamina. The determination with little resources. Dignity under fire. Grit, even when besieged. To be whole with feelings. Even after trauma, after trauma. And this kind of wholeness and the dignity under fire were the most veteran of community people that students worked with, in many ways they were modeling in profound ways, civic engagement, without ever calling it civic or engagement. They taught profoundly through how they lived their lives. They acted on their convictions, engaged with significant issues of life and death, and to do it without all the vast resources of our higher educational institutions. The contrast that students I think detected, were hearing on campuses that there's a lack of recognition of faculty for tenure and promotion when they do this kind of pedagogy, that there's fear and anxiety about being less than, the seeming ambivalence about expert knowledge, sharp analyses that didn't seem to ever produce action with conviction. These things the students seemed to see as a contrast with the campus. But working with the students and seeing them awoken to a lot of things as they engaged with this kind of exposure in communities connected to their coursework, I found that the students would seem to grow with a sense of the compelling authority of personal experiences and connectedness. To connect what one seeks to know with a meaningful purpose that matters in a public context. That was the pattern that I would see that the students would gain from this kind of experience.

So, over the years, I noticed two things that I just want to propose to you are what makes this kind of teaching and learning a compelling activity.

When we complain about students being disengaged, being clueless, apathetic, they don't even register to vote, or they are registered but they don't vote, I feel really badly about blaming the victim. There is not much, I don't think, that presents itself as compelling modeling for the students and they are cut off from the knowledge base that I feel they need to be connected to. It's as if I said that I want to learn how to write poetry, but I'm only going to learn literary criticism. I don't learn to actually write the poetry. And in this case the poetry is the art or the craft of participating in creating our own social order. It is the highest form of civic arts. As a craft, it is learned in many ways, most profoundly by doing with the identification and the theorizing following after or accompanying it and so exposure to the people who are acting all the time on their conviction either in a mode of resistance struggle against injustices or things that are weighing on them as oppressive and cutting them off from fullness of life, the students are cut off when they don't have access to this education.

So let's pretend for a moment that this circle represents the universe of all knowledge that we need - adequate knowledge to address the most urgent issues of our time. I want to propose that this much is academic based knowledge [*hand drawn diagram shows small percentage of pie graph*]. That's a radical statement to make to a crowd full of expert academics. And I have to tell you I'm really nervous and anxious precisely because I'm in a room full of expert academics. You are more expert than me on almost everything, and so for me to make this statement, I'm saying that from my 25 to 30 years of experiences, working with students, working in communities with students, and the intersections between the academy and the community, I have come to the conclusion that of all the things we need to know, to be able to act on those things out there that need to be acted on because people are dying, this much is academic scholarship. So, what the heck is all the rest, one would ask. I want to make the argument, just as we talk about diversity among human beings, that there is also different ways of knowing and knowledge diversity, and I propose that democracy needs what I will call epistemological pluralism. That it is the cutting off from other knowledge base that is deadening and paralyzing for people.

I want to share with you two quick, interrelated, stories:

I'm in the Philippines. I'm 18 years old. It's monsoon season, the rain is coming down in huge sheets. It's not little pitter patter rain, it's like sheets. The doorbell rings, I open the door. It's my uncle. I looked at him. I say but you are not wet? And he laughs, kind of giggles, I'll return to that in a minute.

I was born in the northern most area in the Philippines, Bontoc Mountain Province. I'll show you a few pictures [see Appendix C], and then I'll return to [Chadoney]. So this is Bontoc Mountain Province, these are the Banaue rice terraces, carved over 3000 years by the Ifugao, an indigenous peoples of the Philippines, with their bare hands and simple stone implements. Not much tools. And there's a person planting rice.

So what has that got to do with anything and of service-learning? A dam was going to be built, it was going to flood these thousands of years old rice terraces. And of course, it's cultural genocide. But what stopped this whole thing was students in opposition, a whole massive protest, but, scientists began to speak out and say, well, you know, they have been practicing an almost perfect form of sustainable agriculture, we need to know more about how they do potato planting, how they've been capable of building all these steps, over thousands of years with no sophisticated tools. How did they know the physics of this, the engineering of this? And so forth. So all of a sudden these indigenous people who are just an annoyance for this dam that needed to be built, knew something. They were experts over something.

I return to my uncle. So I was saying, ah, but you're not wet. And he says well I was meditating right? So of course, I've spent the past 10 years in the United States, this weird thing, the United States, in Indianapolis, Indiana, I go back to the Philippines, my uncle shows up and this story that I told you, and it's a true story. But as the saying goes, I'm telling you a true story, but it may or may not have happened. So of course, I'm sophisticated, I know rational scientific stuff. This is not possible, even though I see with my own eyes that he is not wet. And his explanation, I've been meditating, well, I thought, okay, this is like 100 years of solitude, magical, you know, this is my great family with all these characters in it and of course I'm more superior than that, I don't believe in all the superstition, my uncle says, so of course this is the uncle who was a bohemian before there was a bohemia. He became an artist late in life. He became the Olympic coach for the Philippines, he was a healer, he was there because he knew I was struggling to get into the Philippines after many years of absence. He was trying to reassure me with his presence. But I was only fixated on this puzzle, this mystery of defying scientific explanation. I could not receive the other gifts he had to give.

So too with Ifugao, even though they have all these rice terraces of marvelous engineering, we could not see it because of the certain kind of a knowledge base that sends the best and the brightest Philipinos to all of your institutions, sends them back to look down their noses on what people know from another knowledge base. And so I'm just simply saying that service-learning provides the excuse to connect us to access a knowledge base that is not part of the academy. But not because we want to throw this out. This is invaluable space. That's the last thing I want to talk about.

We cannot throw this out. Even though I have now made this heretical statement that there's all this other knowledge, and that democracy requires epistemological pluralism, we can't throw this out because this is an area of huge freedom to expand it. To access resources. To apply them towards the most urgent problems of our times that are not just abstract or theoretical, but people are suffering because of this. We know that. The betrayal of Katrina was not just the devastation of the moment, but the long slow invisible, chronic stuff that had been happening all along. We know that there is a difference and it should make a difference in terms of appropriate action between misfortune and injustice. There is a difference and it takes intellectual labor and time for analyses and thinking to know that is the case and what the consequences ought to be, in terms of our action, if we know that what is an active "natural cause" misfortune that must be attended to by reaching out with one's heart and giving in a charitable way. But also on the other hand, understanding the part that is injustice and what happened with the tsunamis, the earthquakes and Katrina, all three natural causes, everybody rushes to "do something for the disaster," but too lazy to do the intellectual labor that it requires to know that there is a difference between

misfortune and injustice. And they require different kinds of responses. The trouble is, in most higher education institutions, we squash out student's experimentations with advocacy, with partisan politics, with politics period, as if, oh no, volunteerism, community service, okay, but let's not get into power struggle or any of that advocacy stuff because we are dispassionate, objective scholars and we're teaching discipline based stuff, illustrated in the field, which is a very different thing from being engaged in the service part, as if you cared about the outcome, as opposed to just an illustration of some theory in some discipline.

So this is contested space. And it's worth hanging onto, not throwing out. You have incredible freedom to teach any service-learning course you want. I know, I know, we talk about well, it doesn't count for tenure and promotion, and, people get burnt out, etcetera, etcetera, but when you think about all the different people we were able to invite from the Philippines, during the marshal law, dictatorship, to save their lives from the military by the simple act of inviting them, please come to our campus to give a lecture. I mean there's refuge, there's an oasis on campus. There are all those students who deserve an adequate education. And what they are getting now, in my view, for the 35 to 45,000 dollars they pay every year in some places, is inadequate education for preparing them to do what needs to be done, to act with conviction in the world, to reorder our social order, which is designed by humans, not just [accident].

So I will just end with a few things. Three thoughts through poems. The first is the question that keeps me trying to think and be caring about what happens with educational institutions. A short poem by Bertolt Brecht, *The World's One Hope*.

Is oppression as old as the moss around ponds?

The moss around ponds is not avoidable.

Perhaps everything I see is natural, and I am sick and want to remove that cannot be removed? I have read songs of the Egyptians, so their men who built the pyramids. They complained of their loads and asked when oppression would cease. That's four thousand years ago.

Oppression, it would seem, is like the moss and unavoidable. When a child is about to be run down by a car one pulls it on to the pavement. Not the kindly man does that, to whom they put up monuments. Anyone pulls the child away from the car.

But here many have been run down, and many pass by and do nothing of the sort.

Is that because it's so many who are suffering?

Should one not help them all the more because they are many?

One helps them less. Even the kindly walk past and after that are as kindly as ever they were before walking past.

That poem reminds me of the insidiousness of a very limited paradigm of kindly acts and that it actually requires all of this infrastructure to help students and ourselves unpeel the masks of the multi-dimensions of the various sufferings and oppressions and hopefully isn't only just analysis of "isms" and things that we have to undo and fight against, but the poem reminds me about the invisibility of what needs to be thought about.

And then the second poem, and then the last, to close. This one is by Otto Rene Castillo. He was a Guatemalan political activist who was captured, brutally tortured, and then burned alive. This poem is called, *Apolitical Intellectuals*.

One day
the apolitical
intellectuals
of my country
will be interrogated
by the humblest
of our people.

They will be asked
what they did
when their country was slowly
dying out,
like a sweet campfire,
small and abandoned.

No one will ask them
about their dress,
or their long siestas
after lunch,
or about their futile struggles
against nothingness.
Or about their ontological
way to make money.
No, they won't be questioned
on Greek mythology,
or about the self-disgust they felt
when someone deep inside them
was getting ready to die
the coward's death.

They will be asked nothing
about their absurd
justifications
nurtured in the shadow
of a huge lie.

On that day,
the humble people will come,
those who never had a place
in the books and poems
of the apolitical intellectuals
but who daily delivered
their bread and milk,
their eggs and tortillas;
those who mended their clothes,
those who drove their cars,
those who took care of their dogs and gardens,
and worked for them,
and they will ask:
What did you do when the poor suffered,
when tenderness and life
were dangerously burning out in them?

Apolitical intellectuals of my sweet country,
you will have nothing to say.

A vulture of silence

will eat your guts.
Your own misery
will gnaw at your souls.
And you will be mute in your shame.

So the last thing to close, some of my reflections and I hope that I'll be able to talk a little bit about specifics, which I have not so much done, like talk shop. I couldn't sleep last night, actually I haven't slept at all, because I kept tossing and turning about sharing this poem with you. I felt like I should share it because it's about a river. And the river is at the core of this gathering. And the reason why I tossed and turned is first of all, I felt that it should be shared with you, but then I kept thinking that it shouldn't be me, because my friend [Lewis Alomayou], who is a spoken word artist in Minneapolis, over 10, 15 years, I have off and on heard him intone, invoke, bless, speak, dance this poem. And I can't do Lewis, but I have to share what Lewis has to say on the theme of river. And so, with much fear and a sleepless night, I close my reflections with a thought on the river by my friend, [Lewis Alomayou]. Who by the way didn't write this out. So I called him up last night. I said Lewis, I've got to share your poem. I wish you could be there. He said, well, let me see, you know, I sort of do this in my sleep and when I'm doing it, it just flows. So I said Lewis please, just say it out loud and I'll write it down. So this is what we did. Can you believe it? So forgive me for not being Lewis because I know how he would share this poem with you.

Healing wings of fire, fly over the river and let the moon rise.
Moon rise.
Healing wings of fire, fly over the river and let the moon rise.
Moon rise.
Dusk light, dawn light, dance over the river and let the moon rise,
like the moon rise in song.

Song about the red river, flowing to the sea, singing in the sun, they are a river.

Don't want to be left here, don't want to leave here until I hear the song,
the song, the song, the song of the black river flowing to the sea, the music in me, they are a river.

Don't want to be left here. Don't want to leave here until I hear the song, the song, the song, the song of
the white river, flowing to the sea.

Dancing on the rocks, they are a river.

See, I don't want to be here. If I can't hear here, the song, the song, the song, the song of the yellow river,
flowing to the sea. Waving [peonies], they are a river. I don't want to stay here, if I can't hear, the song,
the song, the song, the song of the brown river, the muddy, muddy, brown river, the mighty river of
humanity.

We are a river.

With love, all our rivers twine and flow, gather and grow, into a great, great river and then empties into the
sea, where our journey just began, where our journey never ends.

We are a river, rising up like a green water creature, all dripping with seaweed to caress, to kiss, the
flaming flower and then rain, rain, rain we are the river.

Thank you so much.

Keynote: Eric Pallant

“Keeping Civic Engagement Civil for Students, Faculty, and the Community”

[See Appendix C for presentation.]

I'd like to shape my talk first with a sense of place. At heart I'm really a geographer, though I have no training in geography, I look at the world in geographic terms. From there I want to provide the sense of challenge, what it is that we face in northwest Pennsylvania that perhaps is a little bit different from the Hudson River watershed, provide our solutions, and whenever I say our or we, I really am talking about students, faculty and community partners, hundreds of community partners working in collaboration. And then I would love to have plenty of time for questions. If I do my job well, there will be some questions I'm sure you'll have. I think most of you have discovered, but if you haven't, I've left some materials in the back of the room. There are newsletters, the announcement for the French Creek Journal, which is an online journal of environmental writing that is free and accessible for undergraduates. It's run by undergraduates, they can submit their writing. Don't feel compelled to take that material. I know when I come back from these meetings, I always come back with a stack of papers and I then put them on my desk and think, "what was I thinking? Why did I pick up all of this stuff?" So don't feel like you have to take it all.

Before we started doing this, CEED, Center for Economic and Environmental Development, (<http://ceed.alleggheny.edu/>) was, in many ways, my idea, but it was quickly joined by my department, environmental science, environmental studies, and faculty across the college, partly because there was a problem in the community but mostly because this was the best way to teach undergraduates. And I still believe, after a decade of this, that this is the best way to teach undergraduates. And finally, what I want to say about where I live now, as opposed to where I grew up, which is in Spring Valley, New York, just south of here and just west of the Tappan Zee Bridge, so my heart is still here in the Hudson River Valley, and part of the challenge, of course, is being a native New Yorker, that doesn't play well in northwest Pennsylvania. To let you how hard it is to play that card in northwest Pennsylvania, I live in a very red county of a blue state, the kind of place that in the 1960s turned down federal block grant money because it was considered federal intervention, and we didn't like intervention. It's a town that still has a pirated, still has because they've tried to close it down a couple of times, militia radio station, patriot radio station, that plays right on top of my national public radio station, and everybody knows where the transmitter is and the FCC went over to say, "Mr. Civic, you know, that's an illegal transmitter" and Mr. Civic came to the door with his shotgun and said, "you're going leave here?" And FCC left. They have arrested six militia people in the last year, mostly for selling homemade stun guns and bazookas, and things like this to undercover cops. It's not a place you can say, "Hey, I'm from New York. I'm an environmentalist, and I'm Jewish, trust me." And yet, my belief is, if we can do this in Meadville, Pennsylvania, if we can bring sustainability to Meadville, Pennsylvania, you know, it's not Ithaca, it's not Madison, it's not Burlington, it's not Portland, you can do it anywhere.

So, this is mostly a visual presentation. To give you a sense of where we are in Allegheny College, we are in the very northwest corner of the state, only about 15 miles from the Ohio border, anybody who's tried to drive there from New York, and thinks, "oh, I'll just go across Pennsylvania," knows that it's an eight hour trip from Philadelphia to the northwest corner. It's 2000 undergraduates only, which means we don't have some really key components. We don't have an engineering school. We don't have a business school. These are things I really wish we did have and anybody who has worked with undergraduates knows that they're very good at getting right to the point of understanding what needs to be done, but not really doing it.

Again, to let you know where we are, Meadville is the upper circle, we're a hundred miles north of Pittsburgh, a hundred miles southwest of Buffalo, a hundred miles east of Cleveland, that puts us right in the bulls eye of the Rust Belt. And when those communities declined, Meadville went with them and that's a big part of our history.

We have some interesting history. George Washington came through town, John Brown, had a tannery not far from Meadville, Pennsylvania. The birthplace of oil in Oil City is 23 miles east of Meadville, Pennsylvania. The railroad industry was critical to the growth of Meadville. We're just about 450 miles from Chicago and 450 miles from New York City. It was Erie Lackawanna and then Conrail, brought all of their locomotives to Meadville Pennsylvania to repair them and work on them. Talon Zipper was manufactured in Meadville for close to 65 years. Quick, look at your zipper. What does it say on it? Does anybody have anything that doesn't say YKK? Let's see, what did you get? Talon, in the 1960s, had the opportunity, somebody offered them a patent to a new product called Velcro and they said, "ah, it'll never go." They turned it down. It was \$20,000.00 at the time. About a mile from campus, although most people don't know it, is the Avtex-Rayon Fibers factory, or was. In it's heyday, you could see it employed an enormous number of people. Meadville had a population of close to 20,000 people, this factory was 44 acres of construction space, 1.4 million square feet of construction space.

Agriculture. It's a small town with all of these problems of both rural areas and urban areas combined. Agriculture is the second largest industry in the county. I don't know what the first one is. It's a black cherry, and oak capital of the universe. The logging companies came through Pennsylvania after they had cleared out New England about a hundred years ago, and went off to the Pacific Northwest. Got tired of battling the environmentalists in the Pacific northwest and now, a hundred years later, have come back to Pennsylvania where they're offering really poor people about \$5,000 for a careful cut on the land where they're clear cutting the whole forest. On rare occasions when they bring consulting foresters to check the value of their timber it turns out to be 40,000 dollars worth of timber or 80,000 dollars worth of timber, none of which gets value added in northwest Pennsylvania. It either gets put on trucks and sent to South Carolina, or it gets sent to Italy and then gets sold back to us as expensive furniture.

One advantage is that we have a remarkable little river that runs through Meadville, Pennsylvania, the French Creek, as they call it out there. It's really a river. It's 117 miles long. Every species of fresh water mussel that was there at the time of the European conquest except for one is still in the stream. Twenty-seven species of fresh water mussels. Ninety species of fish. It's the kind of town where bald eagles and ospreys fly over town because it's that remarkable. The most biologically diverse river east of the Mississippi comes through town, and north of Meadville. One of the advantages of poverty is that there hasn't been enough industry and agriculture has been prolific enough to cause much contamination. When The Nature Conservancy drew up its original list of "Last Great Places" in North America it contained the usual suspects: Yellowstone, Yosemite, the Everglades and French Creek. We consider the French Creek watershed our laboratory. And so this promotion of sustainability is this 1800 square miles, a quarter of a million people who live inside the watershed.

So in the 1930s, when the rest of the country had a depression, Meadville had zero unemployment they were hiring women, they were hiring grandmothers, they were hiring people from 25 to 30 miles away. This was done in the 1930s, and then the 1980s, these three companies [Avtex, Talon and Erie Lackawanna/Conrail] all folded and they've been in decline since the 60s, but when the Rust Belt when down, so did small businesses in Meadville, Pennsylvania; 8,000 people lost their jobs in a county of 16,000 people. Unemployment was somewhere around 22% when I moved to town in 1987. You can imagine what happens to a town with that kind of loss of jobs. It's not just the industries that closed, but the local stores closed with them.

[See PowerPoint maps] That was the Avtex plant after it closed in the 1980s. It became the first Superfund site to be cleaned up in Pennsylvania. That's the Talon Zipper factory in the late 1980s. The red line is the actual price farmers are getting for milk. And the blue line is what it costs to produce milk and so we have seen a steady decline in agriculture every decade since the 40s, so small farms are on their way out. The only benefit is black cherry coming up in those older fields. And then the staggering statistics about poverty. The attraction they sell for Meadville to incoming faculty is that it's a great place to raise children. Which it is, it's a safe community, neighborhood schools and this sort of thing, if you have all of your teeth and you don't weigh 340 pounds. In other words, poverty there, in a statewide survey, the poverty rate in Philadelphia, in inner city Philadelphia was 33.4%. In inner city Meadville it was 33.2%. One in three kids were living below the poverty rate. Roughly one in six people in the county are poor.

What little development we've seen downtown has been these box and chain, CVS, Rite Aid, have come in and cleared out a couple of vacant lots but there are still plenty of vacant lots. The state of Pennsylvania has 2,562 municipalities, every one of which controls its own land use decisions so within walking distance of Meadville, you cross the town line and so we have sprawl. This tiny little community has sprawl and so outside the town line we have Cracker Barrel, Auto Zone and Wal-Mart and gas stations which you zip through and can buy something to eat at the same time. So what's happened is that unemployment has come down, it is back towards the national average. It's only a point or so above the national average, but it's not the living wage. There may be jobs, but they don't have careers. The population now is down to 13,500 people inside the city of Meadville. It was once nearly 20,000. It is lovely in many ways downtown, if you look in this direction. Down Chestnut Street, down Main Street, and so forth. But if you turn at a right angle and look at the number of empty storefronts downtown, even 15 years after the crash, is still extremely high. The mom and pop businesses are not competing with Staples, with Home Depot, with the good grocery stores out in Vernon Township, out on the edge.

This was a major renovation project, 14-1/2 million dollars, this is big money for our town. What you see here is what was here five years ago, the building on the right is family services, and what's left downtown are the service agencies. Family services, women's services, retarded citizen services, those are the people you see downtown. The kind of people who middle class people try to avoid and drive around town to get out to Wal-Mart without going through to shop. The thrift store, the Salvation Army was here which believe it or not closed and moved way out into the suburbs where people without cars can't get to it, and then this three story building is an old hotel that was boarded up for about 25 years. The good news is that they leveled it and cleared it out. They restored the old hotel you see on the left side, they put the old balustrade up in front. It's actually heated and cooled by geothermal. It's a relatively green designed building and yet all of the storefronts and these beautiful new storefronts are still vacant and they have been vacant for the two years that they've been open. The developer is simply charging more than anybody can afford to pay for them.

The kind of dilapidated housing you see in downtown - it's one of those things that's the quickest for residents to become accustomed to. You no longer see it. It becomes invisible so you have to go out and remind yourself or, this happens to me, you have to go away for two weeks and come back and then see, uh, you know, people living here. More than 50% of the people in downtown Meadville rent their houses. In other words, you want home ownership for people to keep up and maintain their property.

That's the problem.

So enter CEED. The problem is self evident, I think, but the solutions are not. We have to be talking economics. We have to be talking jobs. We have to be meeting people where they are and with what they need. And we're going to have to do it with 18, 19 and 21 year old students.

Our approach is education. What we are, above all else, are educators. So what we need to do is educate the community and our feeling is everyone from kindergarten through CEO. We have three goals. One is to promote environmental education for all ages and abilities, the second is to encourage environmental stewardship, and the third is to support environmentally sound economic revitalization. You live in this pristine watershed, you better take care of it. You don't want to reproduce the past and bring back these big factories. So that was the initial goal of the redevelopment specialist when they came to town. Let's bring Saturn. You know, not the planet but the automotive factory, to town. And let's make the new economic revitalization environmentally sound.

So what I'm going to do is list the CEED projects and go through them one by one, and talk a little bit about how we do them. There is the Arts and the Environment initiative, public health, we are just starting out the local foods network, Creek Connections, ecotourism, one on energy, forestry, teaching environmental management for the existing businesses, and the writing program I just talked about.

I think I said in one of the workshops yesterday, I got my start as a natural scientist, a soil scientist by training and moved across the divisions, one of the joys of small liberal arts colleges is you don't have to remain locked in to a discipline. My closest collaborator was a sculptor. My sense now is that the

solutions for this community, and many other places, is going to come from changing the way people think about themselves, think about the community, and the belief system needs to change, and that comes from the humanists, not from the natural scientists. It's not that the natural scientists don't have something to tell us about what's in French Creek or what's in the air, but making us care about what is going on is going to come from the humanists.

Art and the Environment. We got our start over at the Avtex site, over at that factory which is a reclaimed brownfield, which has about 22 businesses with 1200 workers in it, and no place at all for them to take a break. And we decided to work with the people who ran the industrial park there, and said, let us put in what we called a green room. We put it up, and I'll say this one more time, we, the students working in collaboration with the community and the faculty, we put up a very large mural, we built furniture from reclaimed materials for people to sit at, from the materials that were abandoned by the original factory site. We put up photographs of the history of that factory so people could see where they were now and how it related to what they were doing, and we brought every opportunity to put something up on the banks of French Creek to remind people where they are in terms of the natural environment.

We went out from there to a collaboration with the Department of Transportation for historical reasons we had a planting. I had a class whose assignment at the very end of the class was to go out and find the ugliest place in Meadville. That's a real challenge. One group of students decided it was the Department of Transportation which was right along Route 6, the famous Route 6 that goes across the country. At the gateway to Meadville it has its storage yard, the big piles of sand and gravel, and all the machinery. These three students went to the director of the Department of Transportation and, this is the regional director for 12 counties, said to him, "can we speak to you?" And he came out and they said, "you know this is the ugliest place in the city of Meadville and we want to screen it off." I didn't know this. When I heard the story afterwards, I laughed but, this is not what you necessarily want to have happen when students go out. But the director said, "Wow, you know, I've been wanting to do something about this for a long time and I hardly have the time. You guys come back with a plan. I'll give you 5000 bucks to make it look cleaner." So we passed it from my class to an Art in the Environment class and they came up with a set of drawings and plans for a series of native plants to put out in front that would screen the storage yard. The native plants would attract butterflies that would look good on the windshield as you drove by, and we had a series of judges, including the Department of Transportation, come over, and we planted it. And you know what? We took their \$5000, we took the student plans and we put it in the ground and it looked awful for three years. It was just terrible. I mean, it just couldn't survive the salt that was getting piled on it. We thought of that. We planted salt tolerant plants but being salt tolerant and being buried in salt for eight months of the year are entirely different things and the artists said we got to rip that out and replace it. But, really what happened was the Department of Transportation was going to redo their parking lot and, at a major intersection at the gateway to the community. And they called me and said would you install some artworks in our new parking lot when we redesign it. Which makes me the only person on the planet to receive a call from the Department of Transportation for aesthetic assistance. And we said sure. And this was our first work, there's some really wonderful pictures on the website. These are signs that were being discarded by the Department of Transportation, turned into these flowers which you can see are 10 to 15 feet high. They glow in the dark when they reflect light from automobile headlights. The soil that was used to create these undulating mounds was taken from the department of transportation highway projects that they cleared out the soil. The mulch that we put down was recycled tire mulch. In other words, this is sustainability in action in a fairly whimsical way. This mural, which is approaching 1200 feet in length, OK, and is between 8 and 12 feet high, it's become the new icon really for our community. It's the new gateway to our community. It recalls the natural historical features of our community, people stop here every day to have their pictures taken in front of it. To take pictures of it. Again, to give you some indication, the central photograph, this is a ferris wheel. We have an old amusement park. It's like a hundred years old, a wooden roller coaster, not far from here, and so it's a ferris wheel to make reference to the amusement park, and it turns three times a day, during rush hour, morning, noon, and in the evening. It's powered by a reconstituted solar sign board that the department of transportation use to have say, "construction 500 yards ahead." They rebuilt one of those and now it spins the ferris wheel. Every summer, about six to eight art students, mostly women, work side by side with the guys in the hardhats and the cups of coffee to build these.

Creek Connections. If you live in this watershed, you've got to make people think about this watershed.

Creek connection goes out, we supply college students to teach high school teachers how to go out and measure water quality, and the difference is, that most environmental education for high school students is they get one day a year, they go to the nature center, they stand there and they say there's an earthworm, here's a bee, and that's it. They go back. And these kids have to measure water quality in French Creek or the tributaries to French Creek, from the headwaters in New York State, all the way down to Pittsburgh where we have 20 innercity schools every three weeks, all year long. You get to know what's in your water if you go out there every three weeks and measure the quality. We reach about 6000 students a year in the watershed doing this. We do teacher workshops, 52 schools, about half in Pittsburgh, half of those are inner city, dozens and dozens of teachers. In addition to measuring water quality every three weeks, they are also doing some additional projects. They measure chemical parameters but they may do something special like a macro invertebrate study where they deal with three dimensional models or something like this. And then we do two symposia every year in the spring where we bring together all the students in the upper half of the watershed at Allegheny College and 600 students and we each place one in Pittsburgh for all those students to share their data.

They have educational modules, loaner modules, you get to borrow for three weeks at a big tub like this one on the bottom if you want to do something on groundwater, do something on pollution, something on run off, you get a special module with all the equipment inside, there's a manual that's been written by college students. We even send a college student with the package. You get to keep him for three weeks. And then you return the student in the package and we go on from there.

Ecotourism Project. If you've got this beautiful area, this beautiful rural area, how do you generate income and protect the area at the same time? Ecotourism., We've constructed a bunch of driving tours which we know is not sustainable, it is not how we want people to come, in individual cars, so we also have bus tours, and if you're interested in any of these things on this list, we tell you where to go and how to be a good ecotourist and where to spend your money on the local economy. I wish I had the numbers about how much money we are making for the community. I don't. All I know is we get 50 web hits a week or something like that. How many of those people were coming back or actually coming I don't know.

The Meadville Community Energy Project. If you're going to save money in the community, this is a good of a way as any because to do it, it's obviously a win-win situation. It's good for the community, it's good for the economy, it's good for the environment. The challenge here is the home ownership business because we have more than half our residents are renters we have to educate tenants, say to them it's worthwhile to put plastic up on windows and this a compact fluorescent light bulb - when you move, take it with you. We also rate landlords. If you're a five star landlord, you can charge a little more for rent, because your energy prices are going to be lower. If you're a two star landlord you're an energy pig and we tell the tenants don't go to those guys because it's going to cost you a fortune to do that.

But we're also doing energy conservation at every level of society so low income residents, landlords, homeowners, store owners, businesses, large institutions like the medical center and the city government and so forth. This group actually is one of our success stories. It has actually spun out of CEED, it is no longer a part of CEED. As of this fall it is joining the Pennsylvania Environmental Council and they're going to be reproducing what these guys do around the state. Which is a relief to me, I don't have to supply the funding for these guys any more.

The Forestry Project. Again this is another project that has spun out of CEED, which is really what we would like to see happen. We have an independent organization called the Northwest Pennsylvania Woodlands Association. You can see it has about 130 landowners, about 10,000 acres of forest which seems like a lot but there are hundreds of thousands of acres of forest in northwest Pennsylvania in our county, so it's not really a lot, but these are 130 or so people who are committed to getting their forest certified for sustainable management. The students prepare workshops. They keep the website up to date. They bring in consulting foresters, they help coordinate the Woodlands Association and then we discovered only in the last two years, that these guys were all willing to get their forest certified, which is like an organic food label. It goes on wood but the organic food label has to travel all the way through the commodity chain. The logger has to be certified. The sawmill has to be certified. The lumber yard has to be certified. The furniture maker has to be certified. Does anybody know what the leading green building city in the country is? Pittsburgh. There are more green buildings and LEED buildings, both by square

foot and number of buildings, in Pittsburgh than of any other city in the country. But the architects say, "we're going to design this a LEED certified building and the construction managers want to put up trusses, we want those to be certified wood." And they don't plan ahead, so they run out to the lumber yard and say, "you got certified wood?" And the lumber yard says, "no." And some place along the commodity chain, the wood that's getting dumped in on this side was lost over here. So our current project is trying to match the needs of green builders to growers, trying to shorten that commodity chain. And you can see some of the partners that we are working with, the Rainforest Alliance, the Wilderness Society, and CEED.

We welcome existing businesses to try and increase their competitiveness through pollution prevention. Anybody who knows economics knows that if you are a businessman and you're paying for something that you then send up a stack or have to pay for somebody else to return this hazardous waste, it's a waste of money. Why pay for waste? And so we send students into companies and say, "we'd like to develop a waste management plan for you and a waste reduction plan." We got five companies now in our area that have won governor's awards for environmental excellence based on their pollution prevention plans. I don't know how much money the company saved, I wish I did.

The writing is mostly used in our regional area to get people to think about what matters to them and how do you feel about French Creek, what was important about the history of this community, what would you like to see the future of the community be.

Just starting this summer coming up, we have a grant from the EPA to do a lead contamination study. You have very low income population. You have a housing stock that is more than 75 years old. And you have 50% of the population that are renters - 50% low and moderate income by federal standards in the community. There has to be a lead contamination problem because of those three things together, there has to be, nobody's ever looked at a rural area. It's always been considered an urban problem. So we're the first community to try and examine if there a lead contamination problem here. Yes, there has to be and if it's in Meadville, it's got to be all up and down Appalachia.

We have the oldest continuously operated farmers market in the State of Pennsylvania in downtown Meadville. The Market House started 130 years ago and four years ago there were only two farmers there and they weren't really farmers. You could go down on a Saturday morning and Malkovitch was in one stand out in front, and the smoking sisters were two old ladies on the corner were the other. And neither of them farmed. They were both going to warehouses and buying stuff wholesale and bringing it in. You couldn't buy bananas but you there was stuff that was coming from Pittsburgh warehouses like tomatoes from Florida so they weren't really local farmers. CEED helped to organize a local farmers coop and we now have 30, all local, mostly organic, farmers, and the farmer's market has become the new destination downtown, right next door to that renovated hotel and the empty storefronts in the next door. It's been a real challenge. People don't want to live downtown, because there aren't any businesses and businesses don't want to locate downtown because there aren't any consumers. The revival of the Market House means maybe there's going to be a market here someday, maybe somebody will live here and start this. Either the businesses or the consumers has to come back to town, and maybe the farmers market will be the chicken. Or the egg.

This is our local foods dinner at Allegheny College. I can't say that so far we have managed to get a local foods dinner once a year. Welcome to working with Sodexo.

I'm going to stop here, if you want to know what comes after this, you'll have to come to Marist on Monday where we're going to talk about where we're going to be in the next five years. This is a very ambitious plan for really taking on downtown Meadville, but I'd much rather answer questions that you might have about how we do what we do and why we're doing it.

Michael Tannenbaum (Marist College): Can you tell us a little bit about how you get the students involved, how do I impress upon the students who want to know what's in it for me? Is it for credit, is there pay, is it part the required curriculum or elective curriculum?

Eric Pallant: It's part of the curriculum. How do we get students involved? Junior seminar, senior projects, independent studies, and internships. In other words, it's all for credit. They pay us to go work for free in

the community. And, why do they do it? Because they have to. It's part of the curriculum. My experience is, I have always gotten better work from every level of student if they believe that the product they are preparing goes to somebody beyond me in their lives. They're actually going to have to make a presentation before the mayor or the city council. Or they're actually going to have to make a presentation before the administrators of the school board or businesses downtown, or something like this. It scares the pants off them more than getting a B minus. So they work much harder.

Dean Button (Rensselaer Polytechnic Institute): Could you talk a little bit about the impact that you feel that your engagement with the community has at the community level. The people who are growing food for the food market, the people who make the signs and the sculptures, and what kind of impact does it have on their daily life?

Eric Pallant: This is hard to assess, of course. We did do a formal assessment. We called an outside objective consultant to come in and survey two groups. One was our graduates. I wanted to know five years out, after you've worked for CEED, were you still doing this kind of thing? And that one was very straightforward. It turned out 99% of the students who had worked in CEED that we interviewed were still doing community work in their company, in their schools, in their churches. They were still at it, and they said CEED had something to do with it. And then, we asked our community partners the same question. And it was not quite as high. Yet, they still thought it was a good thing for students to do. Nevertheless, my personal assessment is that the big transformation in Meadville in the last 10 years of what CEED has done has not been economical. And that's evident by the number of vacant storefronts downtown and the poverty rise downtown. For which I don't take full responsibility. Revitalization agencies haven't done any better than we have. But the big change that I observe is in the consciousness of the redevelopment agencies. The fact that we at CEED can walk into any meeting from city council to the Meadville Redevelopment Agency to the Crawford County commissioners, and they're all talking at us about sustainability. Ten years ago they didn't know what that meant. And so, my hope is, my hypothesis is, that the first step is this consciousness change. So these guys now are no longer taking jobs, any jobs, we don't care what they are. They're starting to think about quality of life. They're starting to think about protecting the environment as part of what's going to sell our community. We're not just competing with Titusville and with Sharon for new jobs. We're competing with Burlington. With Madison. No, we're really competing with Beijing, with Pakistan, and with Nicaragua for jobs. And if you're going to come to Meadville it's going to be because something here is attracting you, this is our argument, and it's not just about some special tax package. It's we've got a community that cares about the environment and a core set of values. Would you buy this package of CEED's? We're really trying to push that now. You can invite me back here in five years and we'll see if that's caught on or not.

Michelle Land (Pace University): What role did Allegheny College's administration have in supporting both your vision and then the implementation?

Eric Pallant: The college was supportive from the get go to apply for grants. Halfway through we came back to the college and said, "look at the amazing things we're doing for the college, and we're having more difficulty raising grants because funders want you to work for three years and then demonstrate that you're independent." What we discovered is the most important things to get money for were first for summer salaries for students, who got a lot of our grunt work done. But most importantly were mid-level administrators so there's somebody to run the Meadville community energy project when the students graduated, who are still in touch with the people in the community. Somebody to just be home all the time at CEED. I'm still teaching classes, who is going to administer those other projects? Would you please pay for those administrators? The college coughed it up and they said, "yes, we will," and then three years ago took a portion of it back. In all honesty, I'm on my fourth dean since starting this project. And this one has been the most difficult to educate about the importance of civic engagement. She understands it, in principle, but not in practice. She was a scholar of some 18th century Austrian poet and that's really what she understands about academia and she doesn't understand how much work it takes to do this. As all of you probably know, it's a lot of work. So that's the current challenge with educators. The good news is that the board of trustees has taken our ideas of the last five years and incorporated them as their own to finally come back and say, "hey, we got this great idea." It finally is occurring to them that as Meadville goes, so does the college. And as the colleges goes, so does Meadville. If the sum of these two things are related, than no one is in a better position than CEED to make that connection, so I am cautiously optimistic of where we are going to be in terms of the support from the college.

Panel 1:
**The Role of Higher Education in the Development of an Environmentally-
engaged Civil Society**

Moderator:

John Cronin

Director, Pace Academy for the Environment
Pace University
Managing Director
Rivers and Estuaries Center on the Hudson

Panelists:

David J. Hess

Professor of Science and Technology Studies
Rensselaer Polytechnic Institute

Kenneth Reardon

Chair and Professor
Department of City and Regional Planning
Cornell University

Nadinne Cruz

Practitioner, Author, Advocate

John Cronin

Good morning everybody. It is nice to see you all here. Nadinne, that was wonderful. I was really happy to hear Nadinne's reflections about democracy. And one of the things that we forget is that democracy doesn't just provide an opportunity for civic engagement, democracy is a product of civic engagement. Civic engagement causes change. Democracy doesn't just provide us with the tool for change, democracy is a product of change. And this is something we have to remember in our education. Education is at the center of democracy. In this past week we celebrate the life of Rosa Parks who in December of 1955, well I was going to say took her stand, but actually took her seat or refused to leave her seat. Great mythologies and stories revolve around figures like Rosa Parks. It's true, one day she got sick and tired of having to sit in back of the bus, and one day she took her seat in the front of the bus and refused to move. But what is not told about her story is that in July of 1955, Rosa Parks attended the Highlander Folk School, organized by Myles Horton, in Monteagle, Tennessee. There she attended a desegregation advocacy and activist workshop and learned what it meant to resist and learned what it meant for an individual to stand up for change. Five months later, she put those tools to work in her own individual way. And if Rosa Parks was still with us and we had a chance to talk to her, she would speak

simultaneously about her own individual decision and about the education she received at the Highlander Folk School. Education was the start of Rosa Parks' individual action.

Ernest Boyer, one of America's great innovators in higher education, once wrote, "to be truly human, one must serve." He viewed schools as communities within communities and believed that their highest calling was, "to be involved in the civic future of the nation." But, this is what he said about higher education, he said that higher education was becoming a private benefit, and not public good. He said that higher education had a moral responsibility to be relevant to the nation's most pressing civic, social, economic and moral problems.

Another great thinker, Thomas Berry - around whose philosophy Pace Academy for the Environment is built - is a friend of mine, and author of *The Great Work*. He said that of society's major institutions, only higher education incorporates within its mission the critical thinking, the intellectual rigor, the multidisciplinary talent, and the duty of community to advance the human relationship to nature. And if you think about it, it is true. Of all the institutions - government, church, and business - none of them incorporate all these individual pieces into one large mission. It is only higher education. So we are duty-bound to examine what that means, which is one of the reasons we are having this conference today.

In another essay that Tom wrote, entitled *The Hudson River Valley: A Bioregional Story*, he said "This is the moment of change, from a sense of the Valley as subservient to human exploitation, to a sense of the Valley as an integral natural community which is itself the basic reality and the basic value, and of the human as having its true glory as a functioning member, rather than as a conquering invader of this community. Our role is to be the instrument whereby the Valley celebrates itself." If the human's true glory is in fact to become a functioning member of the Hudson River's natural community, colleges and universities have to be central to making that happen.

I've been working on the Hudson River for 33 years now, and like most of you, I think the most demanding issue, the most difficult issue we face on the Hudson River has been the PCB contamination of the river. In August of 1975, in the *New York Times*, Richard Severo wrote the first article that said that the Hudson River is contaminated with PCBs, and that changed the course of the Hudson River's history. But what have we talked about since 1975? We've talked some about science, but we talked mostly about politics. We've talked some about health, but we've talked mostly about politics. Unstudied in all this time are the psychological implications for the current generation of 30-year olds whose life long memory is a Hudson River notoriously contaminated with an insidious toxin. Unstudied are the cultural impacts of the elimination of Hudson River commercial fishing and commercial fishing families, a tradition as old as the human habitation of the region itself. What are the consequences of those Hudson River communities that have lived under the cloud of toxic contamination for three decades? We've delved into none of this. Yes, the PCB issue is a health issue, it is a science issue, it is a political issue, but it has had a devastating impact on our opinions, on our psyche, on our culture, on our economics, on our communities, and we know nothing about it. I can tell you a lot about commercial fishing, I can tell you when I was a fisherman, there were 150 fishermen, and during this past season there were 10, and their families are going away, and in five years there will be none. An unbroken tradition going back to Native Americans, fishing for trade and commerce on the Hudson River, is about to end because of PCB contamination. I can tell you the facts and I can tell you the details. I have not studied the cultural impacts, and neither has anyone else. I have not studied the economic impacts, and neither has anyone else. Nobody has studied the only documentable human impact of the PCB issue, which is the devastation of this piece of our culture. And we have no understanding of the cumulative effects on the economic, political, and social wellbeing of the entire region, a close-knit region, the Hudson River Valley.

Who is to do this work? Who is to accomplish this work? There is only one institution that can do it, and that is higher education. Somebody tell me another. It is not the Department of State that is going to do it, it is not General Electric that is going to do it, it is not the Roman Catholic Church. Pick out another big institution that is capable of this work. It is about our past, it is about our present, and it is about our future.

The good news is that amongst us here, we have the talent. Amongst us, individually, we have the desire. One of the great things about the Consortium is the number of people that have found each other. But our

challenge has been from the beginning: what can we do collectively that we cannot do individually? And I hope that one of the things we can talk about today, during the course of this conference, is that theme in relation to civic engagement. What can we accomplish collectively that we can't accomplish individually. And by that I mean we can't accomplish it individually because we don't have the resources at individual schools, or perhaps the skills at individual schools, or perhaps the administrative support at individual schools. But the Consortium has the opportunity to stand outside that and help something happen collectively that we can't do individually. I say it is our responsibility. We have bright lights to look to for inspiration such as Ernest Boyer and Thomas Berry, Myles Horton and Rosa Parks, the people on this panel and all of you in this room. Another, Freeman Dyson, a hero of mine, a physicist, has written seamlessly on science and spirituality and education, and he too says that this is a role for education. In his autobiography, *Disturbing the Universe*, this is what his warning was, "We delude ourselves if we think that the ideology of 'green is beautiful' will save us from necessity of making difficult choices in the future." He wrote those words in 1979, and they are truer today than when he first wrote them. Higher education has a duty to place itself at the center of the pursuit of the answers to these difficult choices. It is our duty, it is not just an opportunity; it is a great opportunity. It is not just a reason for us to work together; it is a great reason for us to work together. It is a moral responsibility, because it is in the charter of every single school that is represented in this room. We have a duty to community, we have a duty to knowledge, and you cannot have a duty to community without effecting change, without being part of the evolution of society. And I can think of no greater laboratory or classroom for doing this work than the Hudson River Valley. It is a laboratory and classroom for the social sciences, for the natural sciences, economics, politics, history, law, culture, arts, archaeology, writing, literature, and anything else that you can think of.

In my third semester of college, I flunked out, and I decided to become a dancer. I was a worse dancer than I was a college student. But any male who wore a leotard and walked in a straight line got a scholarship in those days. So I quit that, and I rambled around the country, and then I came back to New York. And the opportunity that changed my life was the opportunity to volunteer for an environmental organization, Clearwater, who put me to work, doing meaningful work - investigating polluters. I discovered I had a talent for it, and all of a sudden I had a career when I wasn't looking. But it was the opportunity to be placed there, it was the opportunity to do community service, it was the opportunity to be civically engaged outside my normal life, outside my education, out in the world, and become part of a group of people who are affecting significant change. The first project I worked on, but became the first successful prosecution under the 1972 Clean Water Act in New York State.

At Pace University I had a chance to run an experimental undergraduate clinic. At a group meeting with the students, we decided what to work on a bill in the New York State legislature that had been there for 25 years, introduced every year by the New York State Assembly, and every year it went nowhere. And what that bill said was that it was going to create a requirement that all the waters in New York State will become 'no discharge zones' for boats. So we went to the Assembly and said we've got this clinic, we've got these committed professors, if you allow us to change the language of this bill from 'all waters of the state will be a no discharge zone', to 'the Hudson River will be a no discharge zone for boats,' we will get it passed and you can go home and brag about it. They let us do it. We put a group of twelve students to work on it, and we created a war room in the university with maps of where all the marinas were, and who were all the legislators we had to speak to. Somebody did the research about boats, somebody did the research about marinas and pump out stations, somebody did the research about the other waterways where they instituted similar laws, and somebody did research into the economics of it. We put it together in a package, and we marched it around to the individual legislators and after that 25-year history, our twelve students got a bill passed that made the Hudson River a no discharge zone for boats. This was accomplished because they had the opportunity and they were directed. And I want to tell you, this is not a group of students that walked in and said, "oh, we can't wait to do something great, give us a law to change!" It was a group of students that walked into the room and 90% of them thought, "Hey, there's probably going to be no exam in this class. It's a clinic, how can you have an exam?" And they worked hard; they worked harder than any other class they took before. And they got jazzed about this, and they got psyched about this. And nine months later they stood with the Governor, on the banks of the Hudson River, where he waived that signed bill that my students got passed. They did it, all we had was an idea, but they did it.

Throughout the Hudson River Watershed, we have thousands and thousands of students as well as hundreds and hundreds of faculty. If we can make this match, if we can turn this into a cadre, an army if you will, of civically engaged students who get some of their education off the campus, who get to apply their knowledge, apply their studies, apply their discipline, in ways they never had the chance to do before, then simple things like turning the Hudson River into a no discharge zone for boats will be a cake walk. And we will be filling a gap that needs to be filled because there is nobody else available to do that work; there is nobody else that has the kind of commitment that higher education is supposed to have.

We have great diversity on the panel. David is going to talk to us about technological opportunities and challenges. Kenneth has got some great practical stuff to talk to us about, especially based on his recent experience at Cornell. I want to ask the whole panel to reflect a little bit if you can on Nadinne's points, and then Nadinne, at the end of their presentations, perhaps you can reflect back on some of the things that they talk about, and then maybe we will have time for some questions and discussion from the audience.

David Hess

[transcript unavailable]

Ken Reardon

The first rule of public speaking is never follow Nadinne and another guy from Cornell. So, after listening to Nadinne I've abandoned my notes and I'm going to do something a little bit different.

One of things that I am struck by in listening to folks who've been involved over a long period of time in transformative change efforts is how much smarter than me they appear, how much more courageous and thoughtful and insightful. Often when I come to a service-learning event, I'm just staggered by what they're able to figure out early on and put together and move forward on. I can tell you that my journey in service learning doesn't look like that.

My first undergraduate internship when I was in a small business college in Trenton, New Jersey was with a Congressman Bob Roe. I remember the first day going up the steps to the Capital Building. I actually thought I was the congressman and he was assisting me. He taught me that famous bromide: there are two things you should never watch being made -- legislation and sausage. I think we should add a third -- successful community/university partnerships. In doing this type of work we are bringing together, in many instances, some of the most privileged elements of our community and communities which have often been marginalized, left behind, and in some ways, demonized and excluded from mainstream participation in the new economy and the new politics of our nation which seem so shrill and contentious.

So, I'm going to tell you a little story about how, not the brightest bulb in the Cornell box, fumbled his way into a project that has really helped me think differently about my responsibilities as a tenured member of a faculty at a great university. And here's the way the story goes.

In 1990 I finally finished my PhD at Cornell where I was working as a lecturer in a field-based community service program, called the Field and International Study program. I got my diploma from Frank Rhodes, our previous president, and a week later I was fired from my job in the Field and International Study Program, a victim of the then budget cuts that were affecting state universities at that time.

I was unemployed, married, with a mortgage, and needed a job. The only position I saw open was as an assistant professor in city and regional planning at the University of Illinois. I hoped and prayed that Urbana-Champaign was part of the greater Chicagoland suburbs. I was wrong, my wife was right, and I showed up in 1990 as the youngest assistant professor in the Department of Urban and Regional Planning where I was informed that I would be the director of a new university led outreach effort in East

St. Louis which was a mere 188 miles away from the campus. I asked, "why me?" and my chair was very honest, a great guy, Lou Hopkins, he said, "because I can't get any of the tenure professors to do it."

So I showed up in the fall of 1990, in a church basement, in the Emerson Park neighborhood of East St. Louis, where I was introduced to eight remarkable women who I came to refer to as the blue-haired brigade, led by a woman by the name of Ceola Davis. In 1964 these eight women had been recruited by the NAACP Youth Council to go south as part of freedom summer (thinking about Rosa Parks), where they were in the great voter registration drive in Ruleville, Mississippi, working there with the great civil rights leader, Fanny Lou Hamer. And these eight, 16 to 19-year old women, several of whom were already mothers, on the way back on the Greyhound bus, promised to each other and in front of their sisters, and in front of their god, that they would create a civic revolution in East St. Louis that would finally deliver economic and social and political justice and equality for their community. That was in 1964.

Fast forward to 1990, I get directed by our department to go to East St. Louis. Well what happened in that period? These eight women came back to their community, they organized 40 black congregations into a group called the Black Ministerial Alliance, and they began doing short-term visible environmental improvement projects. Clean ups, scrape ups, paint ups, et. cetera. Their first project was to take down three three-story brick buildings, by hand: organizing local residents, recycling all the material, the bricks, the lead pipes, and the interior ornamentation of the building. They then took the materials in a truck over to the Cherokee Street Antique District in St. Louis where they got \$7,500, they then came back and for a year organized a program called 'Don't cook tonight, call Ceola,' and they had chicken and fried fish dinners. They got their amount to grow to \$15,000. They then found their way over to the charitable giving department of a company called Ralston Purina, who then matched their \$15,000 with \$15,000, and they built the first, brand new playground in East St. Louis.

At my first meeting these eight women told me the story and I decided that I needed, for my own personal and professional development, to work with these incredible women who are making the impossible happen in a place where most professionals had decided that trend was destiny and that the downward spiral of the 60-year failing economy would do nothing more but continue. But they had a different idea. As we began to talk about what we might do together, they then brought out four milk crates filled with 61 reports produced by the University of Illinois between 1959 and 1990, and on the outside of each milk crate, there was a price tag. Three million in the 50s. Six million in the 60s. Fourteen million in the 70s and 21 million in the 80s, and that was the amount of externally funded research projects which the University of Illinois and other sister schools in the region had secured to study the nature of persistent urban poverty in East St. Louis. With that sobering observation, they said we have a different sense of how we'd like to work together in the future. Most of this money went to you, it required us to spend time being informants, guides, providing you church basements, feeding you, making sure you could find your way back to the bus stop, and showing you what parts of the neighborhood were safe and unsafe.

And they then presented five simple statements which we came to refer to as the Ceola Accords.

First, we decide on the issues to be worked on, not you or your funding source.

Second, we want to be involved in every step of the research, planning, design, and development process, from jump street, they said. So that not only your students and you are acquiring knowledge and better skills about how to understand and intervene in complex urban systems, but we are as well.

Third, we're not interested (I love this) in a one night stand with the University of Illinois. We want a five year commitment after your probationary year.

Now in high school I had an unfortunate experience, which Nadinne is not surprised at because she knows me, with a Blessed Virgin statue in which the poor lady lost her head, and for that I became familiar with the Morris County Probation Office. But I had to ask in this context, "well, what do you mean?" And she said well, university folks are great at talking the talk but they're very weak on walking the walk. We want to see that you come up, you listen eloquently, as Myles Horton asked us to do at Highlander, and then provide the kind of useful assistance that we need. So that was our third.

Fourth, we want parity in all external funding. We think that the first thing you're going to do as soon as you get back in the car is think about which department in the state or federal government, which foundation can help you support your work to extend the quad into the center of the commons. And just as the university needs extra resources to make that extra stretch, the community needs extra resources to address the costs that will be involved with having university folks here.

And last but not least, we want you to help us set up an ongoing, non-profit, community based research institute that can also do demonstration and implementation projects so that we can continue this work after the shine goes off the apple within higher education, when service learning is no longer the key transformative initiative.

So with this, they said, "we'd like you to go home and think about this." And I did. I went to my Dean, who's a terrific woman, Kathleen Conlin, and said, "there's good news and there's bad news." I told Kathleen about these women taking these three buildings down and transforming it into a drop dead beautiful park. She lit up. And I said, "that's the good news; that these people are deeply committed. The bad news is that they're a hell of a lot more serious about this work than we are," and I then gave her the five point accord. All the blood drained out of her body. She then chuckled. She said obviously these people have worked with higher education before. Give me that piece of paper.

So with that, we began a project called the East St. Louis Action Research Project and I'll just give you the three minute shorthand on this. We began by doing a neighborhood plan for the poorest neighborhood in the city. 78% of the families had nobody in full-time employment. The poverty rate was over 60%. One-third of all the land vacant. One-third of all the housing deteriorated, lead paint was a huge problem. Thirteen young people had been shot in this small city the year before we started the work. And we began doing a bottom up, bottom sideways process of involving residents and collecting what they already knew about the neighborhood and developing the kind of analysis that would help make the case. This plan involved lots of folks, from children doing Spike Lee murals, to senior citizens at nursing homes telling us about the history of successful community innovation. We produced a plan that won the national Best Plan of the Year Award from the American Planning Association. We got the award from the then vice-president of the United States, Dan Quayle, came back to the region with this amazing award-winning plan, and 39 public and private funding agencies then told us they wouldn't invest in even implementing the smallest effort. With that I did my first Powerpoint presentation to show the community all the places we had gone. Halfway through the list, Ms. Davis realized I was very uncomfortable. She came up and she gave me a big hug. She said, "What did you expect? A damn check?" I said "yes," a middle class white guy from New York City whose father played on the Knicks, yeah, I did expect a check. Not even my wife rejected me 39 times. I think it was seven.

But anyway, with that Ms. Davis said, "we're going to implement that plan." A hundred and forty pages, the first part of which was environment protection and enhancement, which included a variety of things that John would know quite a lot about, given the nature of environmental racism that has subjected urban communities of color to just devastating difficulties that undermine their health and well being. And I didn't know what she was talking about. And she says we're going to implement the first element of the plan this weekend. How many of you have shovels, rakes, plastic bags, access to trucks, or know somebody who might have them and would be willing to come down on Saturday to help us clean up the 10 worst lots in this neighborhood. A hundred hands went up in the room. She then turned to me and said, "and you'll get a hundred people from the university to help us, right?"

So we implemented the Emerson Park Plan on a Saturday in the fall, after we had done the initial work in the spring, 200 people did show up. We cleaned up 10 lots. Everything was going great. Of course, we had no money to take the garbage anywhere at which point Ms. Davis then said, "we're going to now implement a program called the Centerline Storage System." Which we then took 895 bags of garbage, which were tied up in a red bow, and we put them in the middle of the two yellow lines down the middle of the street. Six feet high, 150 feet long, three feet wide. In the middle of this my dean, Kathleen Conlin, said, "Ken, is this illegal?" And I said, "yes, as long as you put it in-between the two yellow lines." So the garbage got thrown in the middle of the street. At the last moment, when actually Dean Conlin was putting the last bag in, NBC TV showed up. I don't know how it happened. It was an amazing thing. I think Ms. Davis called them. It was on the evening news. The news said, "neighborhood leaders, religious officials,

and university professors break law to save neighborhood, news at 11." With that, we got \$25,000. They decided to organize a volunteer effort to basically clean up the 1400 lots that had illegal dumping on them. They used the \$25,000 to pay the shipping fees and get the garbage to the dump.

With that, they then invite us to a big party to celebrate the cleanup at the end of the year, which they had mostly done. The university professors showed up. A group of the seniors parked their cars around us and said we're not letting you go until you promise to build a playground at the center of the main intersection to symbolize a new emergent Emerson Park. We then recruited a large number of kids. We had them do the design and build the Emerson Park Playground. We came back, we were invited to another party. We then realized that this was always a prelude to the next asking.

They then said "houses look like hell," so went back to the university, we had no money. We got the maintenance department, good union guys, and asked them if they had any old paint laying around. Yes. That was the good news. The bad news was that the University of Illinois colors are orange and bright blue and we then painted 30 houses bright blue, through an amazing volunteer effort. If you ever want to know where this neighborhood is, look for a drop dead beautiful park at the center of an area surrounded by blue houses. Ten years later we got HUD funding to paint the houses a different color. Nobody wanted their house color changed because to live in that house means that you were you were part of the first effort for civic revolution in East St. Louis.

We started doing the painting. We then had a state treasurer who offered to allow us to basically negotiate with local banks to put state deposits of all tax funds into the bank that was giving us what he called the biggest float, that is what the state minimum required on their interest for tax funds, and what we can negotiate by creating competition among the banks. We were able to create a \$175,000 revolving loan fund. We could then purchase materials and began moving to a point where architecture planning students could do assessments of the homes that needed more substantial work, access this no-interest fund, rehab houses. We did 50 of these and then Habitat came along. We then began identifying and raising funds to build new houses in between the areas that we had rehabilitated. We did about 25 of these houses.

At 5:00 in the morning on my birthday, 1998, I got a phone call - usually it's my mother explaining to me how I ruined her life in 1953 at Miserecordia Hospital at that hour. This year it was Ceola Davis who said, "Ken, wake up! They're going to build a railroad from St. Louis Lambert Field down into St. Louis central business district. Can't we get through Senator Simon, the railroad extended out the Scott Airforce Base and run this railroad through the four poor census tracks serving African Americans in East St. Louis? And if we can do that, they can access living wage jobs at the airport, but at the same time we're going to have to rebuild adequate housing, real public schools that work, and access to public health in order to not lose people as they begin to rebuild their credit at living wage jobs and then move out to the suburbs."

So with this, we did a campaign called the 1001 reasons why regional transportation plan for East St. Louis region sucked. It included architects, landscape architects, archeologists, health physicists, planners, and we did 1001 reasons why all good environmental science, economics, politics, humanities, history would suggest a different route - we called it the laser line. Miss Davis recruited 300 people to meet one night with the mayor. We put the mayor in the middle of the room, and he had to listen as teams of students and the faculty got up and argued why there were 1001 reasons why we needed another rail line. To make a long story short, after about 14 of these, he jumped up, said do you have route? And two young people pulled a cord coming down off of the curtain, unveiling the new laser line. The mayor was asked to sign his name on that and sign the contract in front of NBC that he would support the people's route. As soon as that happened, developers then realized that there would be a new, elegantly laid out light rail line connecting large areas of vacant property, which at this point we had acquired through community land trust and an industrial development authority grant, that were now owned by the community based organization. And the developers wanted to be near the arch, near the TWA dome, near Union Station, near Busch Stadium, and the developers became very interested and the community had the land and was able to negotiate a 24 million dollar project in which they split the development fees. 360 units of new housing - single family duplexes - a limited equity co-op. As the neighborhood would begin to get value, people could gain equity and then move into single families, and deeply subsidized but very well designed public housing.

At the same time, we were able to get a million dollars from the US Department of Housing and Urban Development for a YouthBuild contract to train people in construction jobs, in the community that they were living, and now 78, mostly African American women, are part of what was previously an all white, all Italian, all male, Carpenters and Joiners Local from Belleville, New Jersey as a result of this. And with it, we were able to also build a Montessori school and middle school which is named after Fanny Lou Hamer. And it's a school whose curriculum is completely dedicated to empowering young people through community organizing, planning, design, and development. So kids want to go to school on Tuesday because they're designing a playground for their cousin. They want to show up on Friday because they're doing environmental assessments on a playground that may serve another segment of the community. The entire curriculum is integrated into the community building process in the neighborhood and they have the highest attendance record of any secondary school in the greater St. Louis area. They also made the most dramatic progress towards standardized test score performance. I asked her, "how do you get these kids to come? Are you giving out turkeys? Why do they show up?" They explained that if Johnny doesn't show up in the morning, one of the school staff, which are members of the neighborhood organization, knock on the door with a beautifully hand-woven Mennonite food basket, filled with fresh food and say, "we noticed that Johnny wasn't here this morning and we can only assume that either he's sick, someone else is sick, or there's some other reason that's preventing him." Most of the mothers who answer the door, or aunts or grandmothers, burst into tears because their experience with the public schools is that A), no one notices and that B), they assume that this is an intentional decision on the part of this family that is doing something other than education and community. To have the school assume that there's a reason and that they're there to sort of help push that away to get them reintegrated has been really transformative.

In short, what's the project? It's an example of resurrection where very few people would think it's possible. And it was a result of the combination of a commitment of long time civic leaders, a commitment of the university; and the benefits have been mutual. The residents have had a neighborhood largely rebuilt in an area that no one would have expected that it was possible, and all the positives that come to that. For the students it has been a transformative education. In architecture, landscape, and planning, where only 5% to 10% of the students prior to this project were choosing to work in low income communities of color, for either non-profits or public agencies, that number is now up to almost 40%. Today, if you travel to the Enterprise Foundation in NYC, the whole staff are graduates of East St. Louis Action Research Project. And for the University, we've been able to attract better students, we've been able to get faculty excited about interdisciplinary work and to focus on issues that really matter. We've been able to generate a very successful track record of externally funded research. We have a marvelous publication record, and all of that has enhanced the status of the College of Fine and Applied Arts, which was never a high status unit at the University of Illinois. The work that the unit's been able to do has also built much broader political support within the state legislature, among labor, and also the Illinois legislative black caucus and that's enabled the University to actually get lined funding across a number of colleges to support the kind of scholarships of engagement that so many of us feel is a necessary requirement for the kind of transformative experiences that we want ourselves as teachers and learners, and we certainly want for the next generation of civic activists.

Thank you.

Panel 2:
**Hudson River Tributaries as Resources for Pedagogy and Civic Engagement
in the Hudson Valley**

Moderator:

Ann Davis
Professor of Economics
Marist College

Panelists:

Nancy Cozean
Mayor
City of Poughkeepsie

Thomas Lynch
Professor of Environmental Science
Marist College

Patrick Bean
Student
Marist College

Andy Bicking
Director of Education and Volunteers
Scenic Hudson

Ryan Palmer
Environmental Associate
Hudson River Sloop Clearwater, Inc.

Stuart Belli
Professor of Chemistry
Vassar College



Photo by Donald A. Moore, Rensselaer Polytechnic Institute

Ann Davis

[See Appendix C for presentation.]

Mayor Cozean

Remarks Unavailable

Thomas Lynch

[See Appendix C for presentation.]

Patrick Bean

The Fall Kill project is undoubtedly the best and most important experience I have had at Marist College. The project has provided me with research experience and real world applications for the variety of information I had learned during my previous years at Marist. The project incorporated just about every science class I had taken at Marist, and my other experiences at Marist helped provide the foundation for a great experience. As a student, I sometimes fail to see the value of learning a topic for 3-4 hours a week during a semester. Working 30 - 40 hours a week in the summer and 9 -12 hours a week during the fall semester has refined my educational experience and is a perfect senior-year supplement to prepare me for life after Marist.

Looking back to the beginning of the 2005 summer, I never imagined the responsibility that I would be given on this project. I initially thought I would be conducting water sampling and assisting Dr. Tom Lynch with the work. However, Dr. Lynch let me take the project and run, and I saw the interconnection of my various classes in this one project, a real life situation. Although I thought I had forgotten most of the information I learned in my previous classes, the information was merely waiting to be used. These classes include:

▪*Environmental Issues* - As an entry level class we learn about pollutants and the impacts on ecosystems. Taking one look at the Fall Kill is enough to realize the ecosystem is impacted, and obviously polluted. The principles in this class caused me to pose questions for the reason the creek was being polluted and by whom.

▪*Chemistry* - Chemistry helped me draw conclusions about the pH, conductivity and heavy metals found within the creek.

▪*Geology* - Getting into this project I never thought geology would play a role. However, as my work progressed I realized that the soil and bedrock could affect the stream flow and chemistry. As it turns out the soil characteristics of a residential development along the creek played an important role in flooding and fecal coliform contamination.

▪*Environmental Economics* - This class looked at the theory of public goods and social costs in which we tried to show the public that there is value in this creek and that they could use it as a public good. Using the values of this class, we hoped to show the public that the creek is a prized possession and by dumping garbage into the creek, they are hurting their community. Dr. Ann Davis taught this class, so it helped that I was familiar with her in terms of this project as well.

▪*GIS* - The experience from my GIS class was extremely important in this project. One of my responsibilities was to map and analyze the Fall Kill watershed. Since I had taken the GIS class during my first year at Marist, I was nervous that I would not remember how to use the program. Surprisingly, it only took a few hours of playing around on ArcView at the Marist GIS lab to get back into the swing of things.

▪*Ecology* - Dr. Lynch taught this class and during the lab we learned the basics of water sampling, macroinvertebrate sampling, stream discharge, conductivity and dissolved oxygen sampling. I used the same equipment and procedures during the Fall Kill project. The lecture also provided an understanding of stream ecosystems, and what we would like to see from the Fall Kill as opposed to what we are currently seeing.

▪*Environmental Assessment* - This class by Dr. Lynch taught me how to connect data with the impacts or possible impacts. Because of this class, I knew what type of data I needed to collect, what agencies to contact and how to draw conclusions based on aerial photos, USGS maps, soil surveys, habitat types and scientific data.

▪*Political Science Classes* - In addition to my degree in Environmental Science, I am also working on a minor in political science. Before this project I thought the political science classes would go for naught. It always seemed as though we were theorizing on how things should be. There was no real life application or experience with the classes. The Fall Kill project required community involvement and from my political science studies, I knew what worked and didn't work in terms of getting people involved. A major part of the project is the Watershed Management Plan, and within the report, policy changes are recommended and the political science classes helped me understand the processes involved in such undertakings.

During my junior year at Marist, I completed an internship with Scenic Hudson. Working at Scenic Hudson helped with this project because Scenic Hudson was involved and I knew many of the other people involved in this project. I felt comfortable contacting people because we had previously worked together.

Looking back on the project, I would not consider this a job and definitely not a class, but rather an apprenticeship. If I had stepped into the workforce and taken this project as an entry-level position, I am convinced that I would have been fired because of all the questions I asked Dr. Lynch. I knew what I was doing, but I needed reassurance and confidence in my work, and that was provided by the guidance of Dr. Lynch and other faculty at Marist.

Once I had confidence in what I was doing, Dr. Lynch let the reins go, giving me more independence on the project. I appreciate that greatly, and I think it was very important because it gave me confidence in the work that I was doing and I could have fun with it. He didn't have to watch me like a hawk, and if I saw something in the results and wanted to go out and take a sample from a different site, I could do that. Working indoors and outdoors as well as the variety of responsibilities, such as GIS mapping, fecal coliform analysis, and report writing, made the project more interesting because of the lack of repetition. The opportunity to co-author a Watershed Management Report with Dave Burns and Dr. Lynch is very exciting and an unbelievable feeling as an undergraduate student.

The Fall Kill project has also opened up doors to other opportunities. Not only did I get to learn from great professors like Dr. Lynch, but also from professors I never had class with before. It was a great feeling when other professors approached me with interest in the project, and went beyond their calls of duty to help me further understand the chemistry and microbiology of the Fall Kill. I was able to meet and create valuable relationships with members of the community and other organizations such as the Dutchess County Environmental Management Council, the NYS DEC, Dutchess Health Department, the Poughkeepsie Journal, Scenic Hudson, Clearwater and many others. Not only that, but I learned about other research projects and got to hear Dr. Lynch's fishing and zebra mussel stories.

My fellow classmates will be the first ones to tell you about the advantage I have over them because of this project. Not only have I refreshed and refined the information learned at Marist, but also I improved my writing skills, public presentation skills and I have increased my network of contacts. In my opinion, the only negative aspect of the project has been the slow process of creek rehabilitation. Looking at the Fall Kill can be very sad, and I came in like a gun-slashing cowboy hoping to fix the problem immediately. I am young and energetic, and like to see results. I was ignorant to think that things could change overnight, but I realize that the opportunity that Dr. Lynch, Marist and the NYSDEC has provided me will make a difference on the Fall Kill one day. It has certainly made a difference on me. Andy Bicking For those of you who are not familiar with who Scenic Hudson is as an organization, we are an environmental non-profit group working in the Hudson Valley, from Manhattan up to the foothills in the Adirondacks, primarily in the communities that are immediately along the Hudson River corridor and on the tributaries that enter into the Hudson River. We are working to protect this landscape as a public resource and as a natural resource. To accomplish this, we bring a lot of diverse strategies to bear - land protection through the Scenic Hudson Land Trust, expertise of our staff in ecological restoration, urban and rural planning, as well as people whose focus is on community engagement, public participation and cultivating a spirit of volunteerism around the environment and the communities where we work. The project that I want to talk about today is called Scenic Hudson's Great River Sweep, and it is what initially got Scenic Hudson involved in the Fall Kill Creek. Our office is based in Poughkeepsie, and we look at the Fall Kill very much as our own backyard, literally. Our staff members walk along it for lunch, and it is a part of our community that we see on a daily basis, so we really try to embrace it as part of our organization's mission. The Great River Sweep is our annual volunteer clean up of the river. It is a regional event; it takes place not only in the Fall Kill Creek, but literally at hundreds of waterfront sites throughout the region. It has been successful in involving hundreds of communities; last year alone it engaged 7,000 volunteers who removed about 200 tons of trash from the region.

The program is based on a few key principles, and I want to go over these because I think they are germane to some of the civic engagement questions we are looking at during this conference.

The number one thing we are looking to do at the Great River Sweep is to empower residents in the Hudson Valley to take a more active role in their waterfronts: whether it is a planning issue, whether it is an environmental issue, or a litter issue, we want them to be substantively engaged. The adage of "it is better to teach someone to fish than it is to feed them for a day" comes to mind. We do not go out there and do the clean up ourselves, but we recruit and try to empower an army of volunteers to go out and recruit more volunteers. This has a real viral multiplier effect to the project where we work very closely with about 100 to 150 volunteers, and they are the people who are the conduits to the community that bring more bodies to the table, which essentially means more people engaged with the river itself.

The other story that comes to mind, if you've read Tom Sawyer, is white washing fences, and picking up trash, believe me, is not a very glorious act. But, the idea of getting enthusiastic people out there who can be on the riverfront, loading up trash bags, loading up dumpsters, looking good about it, looking excited about it, has a way of drawing other people in. So we are looking for people, groups, and organizations on the local level that can embody that spirit of positivism.

Finally, and this just may be to the generation which I belong, I grew up with the D.A.R.E. to keep your kids off drugs program in my schools, and I heard a lot of discussions about gateways this, and gateway that. We look at the Great River Sweep as gateway environmentalism. We deal with very complex issues in the environmental field, and it is hard for people to conceive of the total recovery of the water resources, the habitat of the Fall Kill Creek, let alone picking up the tons of trash that line its banks. We

really believe the place to start is with something tangible, something people can wrap their minds around, and that is picking up trash. So by getting people out there to be engaged and fill those trash bags, they have an opportunity to build an appreciation for the resource, and we have an opportunity to move them on an involvement path of becoming greater stewards for the Creek, as you've heard about from some of the other partners.

We have strived as a non-profit organization partner to bring a lot of other things to the table. Primarily our professional staff has been a resource to the Fall Kill Creek project, our planners, our ecologists, and the land trust have been watching very carefully as this project has evolved and thinking about how our mission can dovetail with the goals that Mayor Cozean so articulately laid out. We are also beginning to look at other environmental education opportunities with the local school district, internship opportunities, and running interpretive tours through our education program along the Creek as a way of moving along the community's awareness.

Key to all this is partnerships. As I was thinking about the conference earlier in the week, and was thinking about what materials to bring, I made a decision not to bring any fancy slides, but to just come up here and ad lib. And that was for the reason that our organization is just beginning to engage the higher education community and thinking about how they can be involved in the work that we do. If there is one thing that has been apparent to me at today's conference, it is that, and I say this with due respect, I think there is some kind of disconnect between the higher education and the not for profit world in really understanding what each other's needs are for organizational development. And that goes both ways, and there is a lot I have learned at the conference today.

To that end, I want to just touch upon a few themes that we have learned at Scenic Hudson, our needs, and a few things that we have observed in working with partners.

The first thing is accountability to partners. When you make a commitment, you really need to stick to it. That may sound like very simple, good practice, but it is something we all need to be attentive to. It is important to understand what everyone's needs are for an organization.

We are all committed to a higher goal, and that is the mission of this project, that is the goals that we have articulated, but making that a reality sometimes requires organizations going back, discussing who their business model interacts with, where their funding sources exists, and how we can be mutually supportive of each other's efforts and not in competition.

The other major theme is that student participation and these kinds of issues really help us, as a non-profit organization, advance all of our community engagement goals. This gets back to the white washing fences concept, that when you have an enthusiastic student, like Patrick Bean, who is out there in the community, who is really making waves, that has a real ripple effect and others begin to appreciate the resource as well. In a sense it helps us reach a tipping point where we can leverage more support for the goals of the project.

Finally, another take home message is to really know your partners and develop relationships with them before you jump in and start doing work. It is often, in a general sense, where Scenic Hudson gets an inquiry from and institution of higher education, but we do not have a working relationship with the staff at those schools. That sometimes makes it very difficult to jump start something when the lifespan of a project might be a semester or two, and our project timelines can often be years or decades. So having that dialogue and that relationship ahead of time I think is a really important thing that can ensure success for everybody.

Thank you.

Ryan Palmer

I am an Environmental Associate with Clearwater, a non-profit environment group based in Poughkeepsie. We do environmental action and education work. I wanted to start by talking about my perspective as a member of the non-profit community, in respect to everything that we've talked about today.

First, let me describe the work I do specifically. I mainly work in watershed protection, both at a regional and local scale. Regionally, I'm involved in coordinating the Hudson River Watershed Alliance, which is a group not unlike the Consortium. We are based on the ideas of networking and collaboration to further the watershed protection work that all of our groups are doing.

Locally, I work on targeted tributaries like the Fall Kill, the Fishkill, and other creeks. The focus there is on promoting community based volunteer watershed protection, empowering citizens to protect their local streams.

In general, I believe that non-profits can serve as a great resource to all of you in your service learning programs. The reason I say that is because the non-profits are out in the community, they are entrenched in the issues that are going on. Just in their daily routine and work, they know what the community wants and I think with any successful service learning program, it should be the first priority to be sure you are satisfying the needs of the community.

Non-profits will give students an opportunity to get out into the real world, something everyone so highly desires their students to do. I was happy to hear John Cronin mention his early experiences at Clearwater, serving as a catalyst, if you will, for his career. It is such a great example of how just having an interest sparked can lead to such great things in somebody's life.

However, there are some pitfalls that you may run into as you get into the non-profit world. The first is that, as far as I can tell, all non-profits are nearly maxed-out in terms of work. I've never seen anyone in the non-profit field who isn't busy all the time. They will often tell you they are understaffed, busy in their own projects, reacting to community issues, and also in a never ending cycle of seeking funding for projects. Therefore, many non-profits are not going to come and seek you out and offer their services. If you take anything home with you from my talk here today, I would say you should go out and talk to a non-profit. Take the initiative, seek them out, sit down with them, and try to develop a mutually beneficial program. This could involve maybe applying for joint funding, finding ways to share the work load of doing programs, etc.

I'd like now to talk more about topic on hand: tributaries as a resource. My experience in this field has been working with watershed protection groups throughout the Hudson River watershed. These are local community based volunteer groups made up of average citizens working on their time off towards watershed protection. There has been a growing interest in these groups and in watershed protection in general. As you probably all know, now as the Hudson is becoming cleaner and less of an issue, people's attention and interest is going to the tributaries.

These groups are volunteer groups and need the help of outside people, like myself, and other environmental professionals. They could benefit from and serve as a great resource for service learning opportunities for students. Some of the things that these groups are involved in are field work, on the ground projects, such as stream walk programs (which are a physical assessment of stream bodies), chemical and biological water quality monitoring, stream bank restoration projects, dam removal and restoration projects, and invasive species surveys and eradication, to name a few. They are also involved with education and outreach work, including designing websites and discussion groups, creating brochures and PSA's, and hosting forums and meetings.

The point here is that these groups can provide excellent opportunities for students with diverse interests and backgrounds. I encourage you to incorporate these groups into your service learning programs.

That being said, I just also want to speak about the Hudson River Watershed Alliance that I mentioned in the beginning of my talk. We are a coalition group, similar to this consortium, and I would like to offer the opportunity for everyone to utilize the Alliance to share your experiences and tell a slightly different audience about the work you are doing. It would help us along with a major Alliance goal, which is to promote successful models of what is working out there. We want to hear about your experience and what works so we can replicate these projects.

Thank you.

Stuart Belli

Remarks unavailable.

Panel 3:
Integrating Civic Engagement and Service Learning into the Life of a Small Liberal Arts College

Moderator:

Ken Scott

Director of Community Services
The College of Saint Rose

Panelists:

David Szczerbacki

Provost and Vice President for Academic Affairs
The College of Saint Rose

Nate Davis

Director of Urban Community Environmental Programs
W. Haywood Burns Environmental Education Center

Claire Andryshak

Student, Education Major
The College of Saint Rose

Ken Scott

Good morning. My name is Ken Scott, and I am the director of Community Service at the College of Saint Rose in the Pine Hills neighborhood of Albany, New York. Seated next to me is one of our treasured students, who is very active in the community service office, and an education senior at The College of Saint Rose, Claire Andryshak. Next to her is one of our great community partners, Nate Davis of the W. Haywood Burns Environmental Education Center, and at the end, our Provost and Vice President of Academic Affairs, Dr. David Szczerbacki who will lead off our panel presentation. He will tell you more about who we are at Saint Rose, why we are here today, and some of our hopes in service learning, especially with a partner like the W. Haywood Burns Environmental Education Center being available to us.

David Szczerbacki

Thank you, and it is great to be here today and to be a part of this program. It is an impressive program, both yesterday and today. Listening to Eric [Pallant] talk about Western Pennsylvania, I was reminded how I too am a New Yorker who went to school in Western Pennsylvania, and I have also fished in

French Creek, and hung out with people from Oil City and Meadville. I understand the cultural economic dynamics that he is facing at Allegheny.

My perspective on the topic at hand comes from three frames of reference. I am currently Provost and Vice President for Academic Affairs at The College of Saint Rose - a relatively small liberal arts college. We enroll about 5000 students, not quite as small as Allegheny. For the previous 24 years I was at Alfred University, which, indeed, is small with about 2000 students. Both of these institutions have had a longstanding commitment to civic engagement and service learning. As a graduate student at SUNY Buffalo in the late 1970s, I worked for their School of Architecture in their Environmental Planning and Design program. In that role, I managed student projects in the City of Buffalo as well as for the surrounding region that sound remarkably similar to the projects that Eric was just talking about. Thus, I have seen many different sides of this topic since civic engagement and service learning have been a large part of my professional life in academia. As I move through my remarks, I will try to respond to some of the questions that have been raised relative to faculty and curriculum issues given this perspective.

In thinking about today's talk and about the assigned topic, I was reminded of a book by Derek Bok, formerly President of Cornell University. Right after he retired he published a book called, *The Trouble with Government*. The last chapter of the book is devoted entirely to civic learning and civic engagement. I'm going to read you a quote from that work and then lay out some challenges which flow directly from the following observation:

"Seldom have universities tried to define the goals of civic education or to consider what courses and forms of instruction must best fulfill them. Seldom have they tried to figure out how to integrate different aspects of civic education to enhance their overall effectiveness. Faculties rarely make any substantial efforts to link community service to course work so that students can understand how the conditions they observe in homeless shelters and housing projects connect with larger questions of public policy. Worse yet, almost all courses and activities directly related to civic education are voluntary. Few college faculties have thought about how to reach those students who do not choose to participate. Like so much else on campus, citizenship and citizenship education is looked upon as merely an option, along with choral singing and intramural sports."

President Bok provides important perspective as we consider how to integrate service learning and civic engagement into the academic mainstream. If we are going to talk about how to integrate service learning and civic engagement into a small liberal arts college, or any college or university for that matter, we first have to understand the context. Why might integration be problematic? Why make a big deal about this integration business?

Let's assume that Derek Bok is correct, and I think he is. I argue that academic institutions represent a particular species of organizations - a professional bureaucracy - having attributes that must be accounted for as challenges if we are to successfully pursue the kind of programs discussed by the previous speaker.

What are some of those attributes? We know that professionals, whether they are faculty, student affairs and housing professionals, advisors, counselors, or religious life staff have considerable control over their own performance standards. These professionals have developed external sources of legitimacy relatively separate from the administration. We know that these professionals function somewhat autonomously and sometimes at odds with administration. We also know that many of the core tasks of what we all do on a daily basis are indeterminate in nature. Many of these tasks are non-linear, organic, and idiosyncratic. These attributes of task indeterminacy contribute to integration challenges even where the various "moving parts" of the organization actively work to coordinate.

There are, indeed forces in professional bureaucracies that stifle coordination. We know that there is a high degree of personal autonomy in these organizations. Indeed, the potential for personal autonomy is why many of us ended up in this profession. Personal autonomy gives rise to personal regimes, organizational encapsulation, and sub-optimization. We are all familiar with silos and both department and program proliferation, and we should recognize that as organizations our dominant design theme is one often described in terms of loosely coupled systems and processes - on a good day.

Finally, higher education values the diffusion of power and authority. When we place a premium on process and shared governance, we simultaneously create an integration problem. Indeed, a dominant characteristic of organizations like ours is the disintegration of decision making and authority systems. If you spent a year or a month (or a day?) in higher education, you know that. I have spent 25+ years in higher education and this is at least my impression.

In sum, academic organizations, typically have loosely coupled systems and structures. They are ambiguous in their authority structures, and they have multiple competing and conflicting operational goals. This tends to produce drift on some occasions, and importantly, given today's discussion and this particular panel topic, this mitigates against integration in any number of planning and program development areas. So that is my optimistic and upbeat point of departure about the challenges that we have in front of us [laughter].

What might we do to integrate civic engagement and service learning into the core lifeblood of our institutions? Is there any hope? Well, we see in the Allegheny case study just reviewed, there obviously is hope. Innovation occurs every day in these vary same complex operating environments.

I am going to suggest four ideas that in my experience and observation, seem to hold some promise for success.

First, when it comes to civic engagement and service learning everything we do ought to be rooted in the curriculum or to the co-curricular experience. Initiatives should inform and link to the academic mission in three ways. First, any programming ought to have some linkage to theory, technique and/or a conceptual framework. Second, anything we do ought to have linkage to a community of practice "out there." Finally, to cement the academic linkage around these experiences, there ought to be reflective, critical thinking "moments" explicitly structured into the learning experience.

Second, to the extent that integration represents a "herding cats" problem, one cannot overstate the importance of developing programs rooted in participatory, mission based planning. Programs that resonate with widely held core values are more readily accepted as legitimate; more readily assimilated; and more convincingly incorporated in the institution's brand. In short, mission matters as does tapping legacy to inform vision.

Third, if the integration problem in these complex professional bureaucracies is one of apathy, or disinterest, or mistrust, or competing priorities, how do we combat what some would call this sort of "whistling past the graveyard" conundrum that we get into when we try to orchestrate change in the face of apathy or mistrust? I have two ways of thinking about this. One is to find the "cool people" in your organization. We sometimes call these people the early adopters. Identify, cultivate, organize, care, and feed those early adopters, those risk takers, and those program entrepreneurs that show an inclination to invest time and effort in civic learning. We need to find these people and to take care of them because they can provide case study examples of the value of engaging in this type of pedagogy. Also, their experiences are pilot projects that begin to define best practice in our organizations. These individuals, not presidents, or provosts, or deans, are the vital leaders in orchestrating this kind of change.

The other thing that I suggest in terms of dealing with apathy, mistrust, distrust, and competing priorities, would be to look at incentives: economic, social and moral. Economic incentive is the first that comes to mind. Think about stipends, release times and reduced loads, and you think about acknowledging civic engagement and innovative service learning and all the work that entails, in the context of rank and tenure systems. This can be a tough fight, convincing chairs and members of P&T committees to think about this type of work as legitimate academic work. Social incentives call for us to celebrate, acknowledge, show, share and spread the spotlight across anyone who is doing this work. And finally, moral incentives involve linking activities, such as the ones we saw at Allegheny, to core statements of belief, values, mission, or vision, and if possible, link the same activities to some transformative events or crisis. Linkage to the current energy crisis is but one example. Presidents, provost, deans and department chairs do have an important role to play in this regard.

Fourth and finally, let me conclude and talk about platforms, partnerships, performance, and patience. The CEED program at Allegheny is a platform, actually it is a meta-platform, for doing civic engagement and there are a lot of sub-platforms as we heard described. What are these platforms and how do they relate to this problem of professional bureaucracies? Well, one of the things we want to design are sustainable programs so that we don't have to reinvent the wheel every time we get an idea about doing something in the community that has a civic engagement or service learning edge. Administrators and faculty, as we find at CEED, do produce a nice payoff if they can build these sustainable platforms. This is a case of building some structure into the organization. Remember, professional bureaucracies tend to lack structure, they tend to be loosely coupled, by my definition, and I'm saying add some organizational coupling. It is at least a step in the right direction. Build continuity, routine, and experience into the program. This is in contrast to piece meal, ad hoc field placements, last minute projects or programs, and reinventing the wheel. This latter model discourages buy-in from faculty and staff because of the steep learning curve, sometimes a daunting learning curve that one faces when you try to get a project up and running. One of the things I did when I arrived on campus last fall, this is my second year, was to begin an inventory of engaged urban campus initiatives. The first cut was over thirty pages. There are more programs than you could possibly imagine and a lot of these were or are "one-offs," administratively under supported and programmatic orphans if you will. We are working to create some rational array of platforms allowing for more efficient support - without, of course, stifling innovation from our "cool people."

Where do these platforms come from? Platforms upon which we build programs often come from partnerships with community agencies, businesses, governments, associations, interest groups and alumni groups. Partnerships are the glue that holds the platforms together. Partnerships can exploit, and partnerships also need to be maintained, but they are important. Partnerships, by the way, are based upon an expansive view of integration. They acknowledge that the institution is part of a larger community. In our Strategic Plan at The College of Saint Rose, one of our seven goals basically acknowledges the concept of an engaged urban campus. There are 15 objectives that flow from this goal. We publicly acknowledged this goal following a year-long participatory planning process. Now we are adding resources to these objectives and making them come to life.

Performance, or in the popular vernacular of higher education, outcomes assessment, is a prerequisite. It is a prerequisite in building legitimacy and credibility of this particular pedagogy both on our campuses and as we approach funding agencies. We do have to get grants in some cases, and it is an important part of growing programs and growing platforms. As we approach funding agencies and foundations, and governments, it helps to have performance data or at least a performance evaluation plan. To reflect on the previous presentation, if I was Eric and I was looking at this waste reduction plan that was being offered to area companies, I would be computing those paybacks, those return on investment numbers in developing an assessment narrative so that I could demonstrate, at an appropriate point, the performance characteristics of that particular civic engagement program.

And finally, patience! It is okay to start small in the face of resistance to change and the nay-sayers and the like. Use pilot demonstrations as a way to orchestrate change. Look for small victories; take one step at a time. These sound like platitudes, and they are. My message though, is that orchestrating change in complex professional bureaucracies is difficult work. Patience and the willingness to be in it and at it for the long term cannot be overstated.

Thank you for listening this morning. I welcome your questions and comments.

Ken Scott

What I hope would be one of the nice things we offer to you in this panel is this great flip of perspectives that we are now about to do from the challenges of the academic institution which we just heard from David, to one of the great voices in the community we have discovered over the years, and who we have come to appreciate very much when we interact with him, Mr. Nate Davis from the W. Haywood Burns Environmental Education Center.

Nate Davis

Hello everyone, my name is Nate Davis and I am the director of Urban Community Environmental Programs at W. Haywood Burns Environmental Education Center. The Center is a community-based grassroots non-profit organization founded and run by community members. Back in the late 1990's the Center was located in Arbor Hill which is in Albany, New York. It is a low income community, mostly minorities, and the community rallied together to close a trash burning facility called the ANSWERS plant, which was operated by New York State under Mario Cuomo. The Center was successful, with a lot of assistance from the local chapters of Sierra Club, in getting this plant closed and reached a settlement with the State of New York for about a million and a half dollars. What the community thought that they would at the time, instead of giving everyone a couple of bucks . well let me step back for a minute. When this plant was built, it was built in a low income community, which is one of the things that we look at now as one of the biggest lies ever perpetrated on the Arbor Hill community. It was built with the promise of new jobs, and free electricity, believe it or not. What we really got were respiratory illness, contaminants, and explosions at the plant. The smokestacks were built so low in the valley that the smoke could not clear the skyline and you got a lot of soot on people's cars, and on windows. Even the Governor, as much as he would talk about the plant being safe and operating, he woke up one morning, and it was great because it had just snowed, and he had black soot all over his lawn. The community really got together under the leadership and guidance of Aaron Mair who some of you might of heard about, they worked together and got this plant closed. Instead of giving people a couple of bucks, they thought it would be best to put some agencies into place, both watchdog agencies, and environmental education groups. W. Haywood Burns Environmental Education Center and Arbor Hill Environmental Justice Corporation have similar but different functions. One is to educate, not just communities, but policymakers, leaders, and people like you on the needs of the state's low income communities. The other serves a different function which is more of legal redress type of issues when educational and outreach efforts don't work - sometimes we have to take them to court. Both of them work hand in hand and we have been pretty successful to date. What got me involved in this, believe it or not, I simply wanted my three boys to play baseball. Ten years ago when I moved to the city of Albany, we went out to play baseball and found that in low income communities there are open space issues, maintenance, upkeep, and things of that nature which are not the same in more affluent areas. Mr. Mair took me on a tour through the city and showed me the differences based on people's income level, and how public services changed drastically. A few parents got together, including myself, and took a park that had turned to drugs, gangs, and prostitution, and we took it back. And that's how I got involved in this. Later it transcended into some other things.

One of the things I looked at personally as my role in a community based organization like this is not just trying to find areas to sustain my employment, because that's not what it is about for me. What I look at is, how do you get people to care about issues, such as separate and unequal treatment, based on class status and income? When I look at the tragedy of Hurricane Katrina, which really hits home to me, I ask how we, as citizens, can look at something like this and say that we are not responsible, how we can look at citizens, ourselves, and say we didn't have a hand in this. We live in one of the greatest countries in the world, and we put politicians in office. So when something happens if we don't personally say, "I'm as responsible as he is," then we are not really looking at this right. I say this because in a community such as ours, a low income community, we deal with conferences like this all the time. Low income communities around the country, we all have the same issues, people using low income communities as publicity opportunities, opportunities to say, "look what we helped do with the poor folks" and then they are gone. They are not around to see anything through, and they are not around to bring people in the community up. I have no formal training in environmental education and things like this. All my education is on-the-job training. So when I look at universities, like The College of Saint Rose who we met about three years ago to do some projects, they are still around today, they are still working with the community and trying to expand on the programs that we do together. It really makes me feel good. When I think about when I was a baseball coach, it really wasn't about baseball for me, it was about teaching kids in our community to work together, teaching them to coexist and things like that. And this is the same thing when they bring students out from St. Rose, it is not about working at Tivoli Preserve, which is a great park and I love it, but it is more about trying to mold our future leaders, our future decision makers, our future policy makers, trying to get these people to understand things that they need to remember, and

things that they need to look at. Ken Scott and The College of Saint Rose College has been great in reinforcing that after they leave our sites. One of things that I think is very important that we can't lose sight of, is when you go into these communities, people are poor, people are tired, but they are not stupid. We have worked with college organizations before who have come in, they give you a quick pop because they need something, they need to make sense of the million dollar grant they got so they can get a quick "people of color" perspective and then they are gone forever. People are not going to deal with that, those days are long gone. You really have to look at it as a win-win situation. The more you put into it, the more you are going to get out of it. When I listened to the gentleman doing the keynote speech, it's really interesting to me when I see people think outside the box in the academic world. We can't sit back here and keep thinking that as time and technology changes, we are going to be able to use the same approaches that we did in the early 1900's and continue to evolve as a people, as fair minded people, as equally treated people. When you see successful models in place like that, it gives hope for everyone, and I encourage everyone in this room to start thinking about that.

Right now Arbor Hill has three failing schools. Three out of four schools are on the failing schools list for NYS. When you think about what that means, when you think about kids coming from an elementary school, even a charter school going to a middle school already in a failing school what is that going to do for their future. What really concerns me about that, is a lot of these schools, with the Columbine situation, and all these other things that we hear about, have went into more of a disciplinarian atmosphere instead of a learning institution. We don't have individuals going out to Tivoli Preserve and inside the community and doing the civic learning projects, those hands on activities that really get blood flowing for young people. We can sit up here and talk text books all day, but I can tell you from personal experience there is nothing like putting your hands in a bunch of worms or fish or whatever and really sparking people's interest. And that's one of the things we really look at when we talk about our partnership with St. Rose. I know you have to do the textbooks, but it's not all about the textbooks, you really have to get these young people out there and see how people live. A lot of times, we all know this as professionals, when we go to school for years and it hasn't prepared us 100 percent for the job we get. In theory it has, but in actual practices it hasn't. It really is a winning situation when you get people to engage with folks who are dealing with real world problems and real world issues, you try to get them to see it from another perspective. And I think we have been very successful, there is always more you can do, our fearless leader has always managed to stretch a 24-hour day into a 32-hour day with a lot of the activities we do, but it is a good thing. Working with organizations such as St. Rose, working with Ken Scott and his students really gives me hope because I am one of those guys who doesn't believe in a lot of things because of what I've seen in my day. But I do believe in this. The only way your organizations or your universities are going to get into these communities and develop that trust is you have to be willing to go to work with those people in the community. I'm not just talking about from the perspective of when we need something. You really have to make it sustainable and make it long term. There is no way that you can lose if you are committed to it. I really challenge everybody to put more thought into that when you look at doing civic engagement, put thought into ways to develop partnerships with communities, not where they have to be dependent on you or you have to be dependent on them. If you develop these partnerships, everybody wins in it.

Thank you.

Ken Scott

Earlier, David was saying in order to effect the agenda for change, you have to discover who those cool people are, and I think we brought a cool persona along with us this morning. She has always appreciated her learning at W. Haywood Burns Environmental Education Center and at Tivoli Pond, and we've had many conversations following our experiences over there. So I knew that she would be a good fit for us today in terms of a student who finds herself in this academic institution and is looking to be civically engaged and she is very aware of this community organization, Claire Andryshak.

Claire Andryshak

I'm the naïve college student who thinks that tomorrow after she graduates college she can go out and change the world. I am an education major at The College of Saint Rose. I am in the classroom for a full day every Tuesday and Thursday and my concentration is American Studies so I take a lot of classes regarding the issues that Nate has been speaking about. It is one thing to open your text book and read four chapters on low income communities, but it is another thing to open your front door, walk a mile down the street and realize that you have a low income community and you can make a difference when you can go there and teach. This past week I calculated how many hours of community service I did, and I definitely did at least 10 hours of community service this past week. Being in the classroom twice with two full days, writing umpteen amounts of lesson plans, I still had time to do at least ten hours of community service. It baffles me that all students do not have the time to go out and do community service. It doesn't take long, you feel better when you are done with it, you discover a sense of self worth, and I'm not going to lie, I'm addicted to community service. If I go more than a week without doing some form of community service, I'm depressed. It is hard for me to go through my day and find sense and meaning in what I'm doing. I feel that community service is a vital part of my living. I am strong advocate for service learning, and I feel it should be something implemented in every college, in every institution. To graduate high school you need to do ten hours of community service. Why hasn't that continued through college? Students can do ten hours of service in a semester, it can be meaningful, it can be interconnected with their major, concentration or fields they are studying in. I want the fire that I have, and the drive that I have for community service and the effects that community service has had on me, to affect everyone else that I go to school with, and that sit next to me in class. It will just produce better quality human beings if they can just get out there and do community service and put into context the things that they are reading about.

Ken Scott

As the college's community service director, I'm involved with service learning, mostly in the form of small "s" and small "l". We don't have a service learning center, I see us going in that direction, and service learning with a capital "s" and capital "l" will probably be attended to very well at a place like that, when that date arrives. I would like to say a few things about why this relationship with this community based organization works so well for us, and the possibilities it still contains for us at The College of Saint Rose, seeking to be more civically engaged.

The W. Haywood Burns Environmental Education Center is unique as a community partner. We are very fortunate to be an urban campus with a partner like them nearby. They represent a golden opportunity for a wide range of interdisciplinary service learning experiences and co-curricular service learning experiences. I have seen a lot of the benefits in the co-curricular service learning experiences that we have started over the last few years, and we do intend to keep in the years ahead. Nate has been personally critical to me, as a colleague, in facilitating things like a couple of English classes that wanted to come over and do some writing assignments around what could be learned at the Tivoli Preserve. David was also instrumental in finding those funds that we could utilize to bus entire English classes over there. I do a thing called the urban field trip from time to time that I offer some faculty and students, and that is a little ride through the different neighborhoods of Albany. From our own in Pine Hills, to the others on the other side of Central Avenue, such as West Hill, Arbor Hill, and North Albany. And part of it is to show them where our community service students are leading the way for us, and are engaged on their own out there, but the other part of it is to kind of immediately shock them and make them aware of the differences, the separate but equal kinds of neighborhoods that Nate spoke about. I pull right in front of their offices, and right up to the trail head of Tivoli Pond Preserve and I'm able to tell the story of their work, because of what I have learned from my own experiences over there. We now do an orientation for students that are arriving at The College of Saint Rose, out of high school, particularly interested in community service in their careers. We call this the urban launch. We bring these students in, and the first thing they do when they arrive at the College is we give them three to four days of community service experience and Nate has helped me set up an urban launch experience, including a picnic in the community with the students. We have taken faculty and students out on the Hudson River and learned

about the river patrol work that they do. We have Earth Day in the spring that we think of hooking up with them for. We have had peacemaking kinds of observances at The College of Saint Rose. In front of their offices they have one of the few Kaki trees in the world, outside of Japan, that represent peace because those were the trees that were standing in the Japanese cities that were atomically bombed during World War II. From time to time we have simple little work parties that want to go over there for some kind of outdoor experience. We now are hopeful about some new initiatives, some preliminary discussions taking place with people in the School of Math and Science and the staff at the W. Haywood Burns Center.

So why does this work for me as a community service director? Why do I think it works with our college? Why do I think it works for Mr. Davis and his organization? Why do I think it works for our students? It is so close. That is essential. When we try to identify a partner, all of our time is so pressed, that to have somebody close by, and yet somehow seem like you have left your world, and arrived in a very different world, is so immensely invaluable. We find in the staff that they are passionate, they are accessible, they are enthusiastic, eager, flexible and willing. By just picking up the phone, I've found something could be made to happen very quickly, and I can't tell you how much I appreciate that. It is an outdoor experience, and yet it is in an urban setting. It exposes students to this very different world of their own and a very different world of our own that comes with being in academia. It exposes them to such things as environmental stewardship, environmental injustice, environmental non-profit management, and environmental racism. It is a people story, it is compelling, it is real, it is about injustice, but it is also a success story. Mr. Davis tells that story very well, and we are very fortunate to have him speak the narrative to our students when we bring them over there. So I look ahead to those years, we will continue to build upon this relationship and as I do, I think about my colleagues and the faculty because of all the disciplinary options that are available from a site like this for their teaching and learning. And I think about those faculty who want to do this because they somehow understand that kind of learning, that kind of pedagogy that is necessary for our students to learn interactively today, and who understand that something like the Tivoli Preserve provides that kind of learning experience. These faculty also seem to be the ones who understand how dangerous it is if teaching and learning takes place only within the academic walls. And I think about our students, like Claire, and I think about how energized they are when they come back, and how their spirit, their character, their compassion, has once again received a jolt and they have been sustained personally and want to get back at it somehow and start voicing their frustrations that their school and to their peers, that their world is somehow not aware of the needs that need to be met, and as educated people they are falling short. And I think about our institution and about how we are strategically poised to be this engaged urban campus, to do civic service learning, and about how fortunate we are now that we have a Provost and Vice President who are spearheading a movement that is telling us to be more deliberate and more intentional about doing teaching and learning and co-curricular experiences in the community.

Thank you.

Presentations

[See Appendix C for presentation slides.]

“Biloxi Blues”

Patricia Dunne

Program Coordinator

The Beacon Institute for Rivers and Estuaries

“Katrina and New Orleans: Local Knowledge, Culture, Geography, History, Environment and Poitics”

Rachel Dowty

Department of Science and Technology Studies

Rensselaer Polytechnic Institute

“River Summer 2005 Report”

Stephanie Pfirman

Professor and Chair of the Environmental Science

Barnard College

&

Lisa Son

Professor of Psychology

Barnard College



Stephanie Pfirman presents the River Summer report. Photo by Donald A. Moore, Rensselaer Polytechnic Institute

Workshops

A. Initiating a Project



Photo by Donald A. Moore, Rensselaer Polytechnic Institute

ABSTRACT:

When Black Creek was threatened by a 30+ year hard rock quarry, the Town of Lloyd Environmental Conservation Council (ECC) adopted the Black Creek as its primary site for open space, recreation and habitat protection. In 2002, students at Ulster County Community College (UCCC) joined with Highland High School students to help to expand the knowledge of the creek for the benefit of ECC and the many community partners involved in the project. UCCC students completed weekly water quality monitoring for 8 weeks to create a baseline summary of the health of the creek and the human impact areas. Additional research efforts included macroinvertebrate, flow, and water chemistry studies, as well as the use of GIS to build maps and layers using ArcView. A presentation of this case study will set the stage for an interactive discussion on initiating a project. Dr. Eric Pallant will critique their study and present troubleshooting antidotes for the obstacles they faced along the way. Participants will receive a form and guidance from the panel to design their own study.

Co- Facilitators:

Eric Pallant

Director, Center for Economic and Environmental Development
Professor of Environmental Science
Allegheny College

Michelle Rodden

Professor of Environmental Studies
SUNY Ulster County Community College

Co-Presenters:

Michael P. Chahanovich

Science Teacher
Highland High School

Susan D. Frampton

Chair, Environmental Conservation Council
Town of Lloyd

SUMMARY:

Workshop Themes:

What comes first?

Design and goals or do you have partners?

What is the answer? Both?

Overview from Panelists:

Susan Frampton gave an overview of a project that was initiated in Lloyd area.

- Black Creek Watershed it was a bit of both.
- 1995-Town of Lloyd small town across from Poughkeepsie. Sand and gravel mine. NIMBY issue.
- Politician was doing this and resigned from his post to run the company full time. These people had been working on this since 1992.
- Anti-mine Alliance. Not for profit. Hired attorney. Talked to local politicians. Residential area and it had the Black Creek. Raised money. Met legislators, politicians; including Maurice Hinchey. Met with press.
- Supervisor would help the NYSDEC mitigate the idea of traffic. He offered a railroad trail for truck traffic.
- Hudson Valley Rail Trail Association was created.
- Lawyer was very expensive. The attorneys worked together to clarify zoning laws. The town decided that there would be no mine except for farm use of sand and gravel.
- Went to court. Miners offered the land to the town for \$1million. 2 years later it sold for \$87K.

Paul Rubin (unable to attend conference):

- Worked on identifying open space. Put together newsletter. More and more development was coming in. Black Creek - they didn't know much about it. Paul Rubin (hydrogeologist) came in.
- The Black Creek-Plattekill to Lloyd through Esopus-flows North.
- Wildlife-natural setting-John Burroughs lived there, Slab Sides.
- Ecotourism.
- Urban sprawl.
- Concerned citizens - best use rail and canoe trails
- Preservation, protection, recreation, scientific opportunities, watershed protection plan, conservation easement, state.
- Community groups that had the same goals.
- Class projects.
- GIS layouts-graphic support.
- Watershed web page.
- Technical written material in support of community goals.
- Arc-view GIS presentation.

Breakfast on the Black Creek event coordinated by Sue Frampton:

- Continuing to educate the public.
- Black Creek watershed and Illinois mountain.
- EDC concerns and ECC concerns.
- Natural and cultural resources.
- Handed out map of Black Creek water trail.

Initiating a Project using Student Research Team directed by Michelle Rodden:

- Communication with community is very important.
- Get connected with community colleges. You get to be innovative.
- Make connections and take it to the next step.

▪Example: (RST)2 with UCCC and Ramapo College

Science teaching using remote sensing technologies. 1997 very early. Designed a 4 week intensive course that would facilitate interaction with local teachers and community college teachers-and excellent way to find out about the community. Teachers came to integrate this into their curriculum.

▪Example: The Northern Cricket Frog

Paul Rubin worked with Town of Lloyd to help the community understand the vast resource of the watershed. Approached Michelle Rodden to do water quality studies. Water quality students needed to do a project. Michelle let the students become owners of it by having them develop the plan for researching the area. Funding was needed. Northern Cricket Frog- NYS Endangered Species List. The northern most area of their habitat was the Black Creek. Habitat stability and baseline study.

▪Example: Highland High School and Mike Chahanovich (science teacher)

Mike Chahanovich would recruit students from the high school science club and science classes, Michelle Rodden would recruit students from the college to complete the water quality studies. Rodden applied for National Wildlife Federation "Keep the Wild Alive" with support from Representative Maurice Hinchey, but \$7,000 Grant proposal was denied. They completed research anyway-but on a shoe string and not as extensive as originally proposed. Students needed to knock on doors, get to know property owners to obtain access to the Black Creek, and sign waiver to access people's property

•Future Goals: Water quality study. Developing an Ulster County Archive/Library Resource.

Comments from Eric Pallant

- Oppositional project is an easy way to start.
- More challenging to put students to work trying to initiate a different future from the trajectory that you're already on.

Discussion Points

- How do you instill passion into your students?
- Real implementation is important
- You start small and it can grow to enormous proportions.
- Break into small groups.
- Teaching the Hudson Valley grant-journaling, photos and documents.

Comments from John Cronin

- Most economic sectors are not involved!
- No difference -same percentage of people involved in activism across economic groups.
- Issues should not be class based.
- So much work that needs to be done with non-profit groups.
- Connect to the community.
- Know local government.
- Undergraduates can provide the kind of grunt research and work that becomes a service to the community.

B. Implementing a Project

ABSTRACT:

Based on the case study outlined in Workshop A, communication and organization of the case study will be highlighted. The NYSDEC Region 3 played a vital role in this community project, as did other organizations and groups. Dr. Eric Pallant will present a national flavor to the workshop. Participants will receive a list of federal, NYS, and other partnerships that would facilitate their own study. If time permits, a break-out session will connect participants and initiate communication.

Co- Facilitators:

Eric Pallant

Director, Center for Economic and Environmental Development
Professor of Environmental Science
Allegheny College

Michelle Rodden

Professor of Environmental Studies
SUNY Ulster County Community College

Presenter:

Karen Strong

Biodiversity Outreach Coordinator

Hudson River Estuary Program

New York State Department of Environmental Conservation

SUMMARY:

UCCC what did college students have to do?

A surveillance program.

USEPA curriculum developed by UCCC in 1977.

Environmental studies- met requirements to enforce SDWA.

From there it has been adopted across the US.

It has been adopted by Ecuador and Russia.

Students followed ENV 204 Capstone course outline and syllabus.

Includes: goals, historical background, interviewing people, library research, tax maps, how land is being used such as agriculture, business.

On site-water study macro and micro biological studies.

Water quality analysis-included quality assurance protocol for what is required. Interpreted the data that they collected. Evaluate and make recommendations for minimizing human impact on environment. This was student driven and answered community concerns/questions.

Determining the flow of the creek. The creek is relatively small. They figured out the flow of the creek of this very unusual creek. Slow moving and in some areas ripples and falls.

Karen Strong- DEC Hudson River Estuary program-built on partnerships.

Many partnerships with colleges and universities.

Project involvement with the Black Creek- Karen Strong became involved with this project, DEC was investigating habitats in the Hudson watershed.

Obvious significant area- Plutarch Wetland, Swamp.

Special high quality habitat that's unusual in the Hudson Valley because of human impact here.

What kind of projects are you interested in?

What can you do? How can DEC help?

Grant for mapping work. Biological, geographical information.

Walkkill Valley Land Trust was interested in bringing together people who would be interested in this.

Scenic Hudson promotes land conservation.

Wildlife Conservation Society coordinated and researched (Town of New Paltz and Town of Lloyd) and then recorded the diversity of the birds etc.

Internship stipends \$20,000 for colleges and universities to do work.

Discussions During Workshop:

•New trend is "Daylighting waterways", such as the Sawmill.

•SUNY New Paltz; tidal wetlands of the Hudson.

•Geological Sciences; Walkkill River is not too far from the Hudson River. Always looking for opportunities for our students.

•College of St. Rose English Department professor; Network and find in joining Friends of Prospect Park.

•Orange County Community College; wants to know how to get students more involved.

•NYSERDA; environmental & green building projects.

•Bard Center for Environmental Study; has successful partnerships. Students will graduate into the field.

•College of St. Rose; Comparative physiology.

- Japanese shore crab a non-native species introduction into the Hudson River is of interest.
- Conservation Advisory Council; Farm-Walkkill River and Demonstration projects.
- Partnerships with local high schools for demonstration projects.
- Orange County Community College; Water quality monitoring, Land-use planning, Expanding water quality monitoring project.
- Allegheny College; A lot of Natural Scientists in the room!
 Moved across the curriculum to have my work now with sculptors and writers.
 Projects should drive what we do.
 Problem-such as transportation. Then what do we have to learn to solve problems. Teach people how to solve problems.
 Think about problems horizontal.
- American Association for Higher Education; ACTING LOCALLY! A series of stories about college and university faculty and projects that they implemented should be collected.
- Ulster County Community College; Personal goal as a faculty member: Would like to develop a catalogue (database for public and researchers to reference) of all the water quality monitoring projects of the Hudson Valley. Get librarians involved to do this.
 Kingston Daylighting- Where are the hidden streams as seen during Hurricane Gustav last year?
- Hudson Valley Water shoreline and wants to catalogue water quality data.
- Highland High School; Involve High School students in these projects as partners.
- NYSDEC; People enjoy helping kids who are learning.
- Goals-continue on the Black Creek water and land trail. Utilize my school district. Plan and design then build a conservation board walk. Karen Strong will visit groups on the creek. Study Dragonflies.
- New School. The way in which people have viewed the ocean on how people look at art and how it looks at the ocean. Learn something about economics.
- Events planning = Visibility and raising public awareness.

C. Evaluating a Project and Disseminating the Results

ABSTRACT:

Based on the case study outlined in Workshop A, the final product of the study will be presented, along with the current status and evolution of the study. The Town of Lloyd Environmental Conservation Council (ECC), with the help of grants from the Greenway, has developed a design plan for a water trail on the Black Creek. Recently, ECC was awarded an Estuary Grant which will help connect the Black Creek Water Trail and the Hudson Valley Rail Trail. This will provide access to the Black Creek for recreational use and environmental observation. ECC developed a brochure/map (participants will receive a copy) which outlines the design plans and current use of the Water Trail. In the future, ECC hopes to have an educational conservation boardwalk, design portages, and help coordinate land trails through the Burroughs' Sanctuary in Esopus to the Hudson River. Participants will finalize their study design and create a time line for their study.

Co- Facilitators:

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Michelle Rodden

Professor of Environmental Studies
SUNY Ulster County Community College

Co-Presenters:

Michael P. Chahanovich

Science Teacher
Highland High School

Susan D. Frampton

Chair, Environmental Conservation Council
Town of Lloyd

SUMMARY:

[black_creek_2002_water_quality_report.pdf](#)

[See Appendix C for presentation.]

D. Sustaining the Engagement



Photo by Donald A. Moore, Rensselaer Polytechnic Institute

ABSTRACT:

This workshop will allow participants to discuss the trajectory of civic engagement initiatives from several small, disconnected projects to the development of a focused and sustainable strategic plan, covering the exigencies of funding (from start-up to long-term) and explore the challenge of remaining responsive to the community while satisfying the needs of your home institution.

Facilitator:

Kenneth Reardon

Chair, Department of City and Regional Planning
Cornell University

E. Serving Two Masters Well: Citizenship Education that Meets the Needs of Academe and Community



Photo by Donald A. Moore, Rensselaer Polytechnic Institute

ABSTRACT:

This workshop explores the challenging balancing act of designing effective civic engagement/ service learning experiences to ensure scientific validity, pedagogical integrity, and benefits to students as well as to the community. The inherent dilemmas of civically engaged education - for example, between “objectivity” and personal engagement, replicability and relevance - will be examined through case studies including the Inter-Collegiate Energy Audit and Project Pericles, and further developed through discussion of participants’ own experience.

Facilitators:

Melissa Everett
Executive Director
Sustainable Hudson Valley

Mary Ann Murphy
Director
Project Pericles and Center for Community Outreach
Pace University

F. The Integration of Service Learning and Scholarship

ABSTRACT:

This session will consider models for integrating service learning and research into undergraduate curricula. Points of discussion will include the benefits of such integration and the resources needed, including faculty time and institutional commitment. To introduce the discussion, faculty from Columbia will present an overview of a model that is using contemporary urban problems faced by New York City communities as a vehicle for integrating service learning and research into freshman and senior engineering design classes.

Facilitator:

Patricia Culligan
Professor
Department of Civil Engineering & Engineering Mechanics
Columbia University

G. Service-Learning: Reflections on the Vision, Promise and Reality of a Pedagogy for Personal and Social Transformation



Photo by Donald A. Moore, Rensselaer Polytechnic Institute

ABSTRACT:

In the keynote address, Nadinne Cruz, a pioneer practitioner, author and advocate of service-learning, shares her perspectives on a pedagogy that has blossomed from the margins of academia to a national movement, how it has measured up to its promise, and why it is worth doing. This workshop is a fluid and open-ended opportunity to ask questions, share reactions, and engage in discussion about civic engagement and service learning with a distinguished leader in the field.

Facilitator: **Nadinne Cruz**
Practitioner, Author, Advocate

SUMMARY:

BASIC TERMS

On this page I offer terms and definitions I have developed over the years as a starting point for talking about a form of teaching that I think is more of an approach, orientation, and way of being as an educator than it is a methodology.

Experiential education
is an institutionally-based,
intentionally designed process of learning through reflection on experience.

In experiential education, we are not talking about any and all experiences. Rather, we are referring to experiences whose selection, structure, parameters, etc., are intentionally designed as part of a whole curriculum of learning integrated with service.

Community service
is the application of one's gifts, skills, and resources,
to provide something of value for communities who articulate a need or desire for that service and who participate as partners in the process of both service and learning.

Service-learning
is an intentionally designed (course, program, activity, etc.),
and is a process of learning through reflection on the experience of doing service.

It is a form or subset of experiential education and community/public service. In service- learning, service is the experiential component of experiential education.

GUIDELINES FOR CAMPUSES:

1. Develop personal relationships.

In the context of the community project, develop and nurture relationships that engage and connect you personally to partners.

2. Develop sustainable relationships.

Develop and institutionalize a structure for ongoing inter-institutional relationships through shared mission, vision, and programming work that implement these.

3. Integrate the community "voices" or perspectives into the design of the course or project.

4. Design the project to achieve outcomes and goals to which all partners or participants have agreed.

Learning outcomes? Value or benefits to community?

If there is no clear consensus, what kind of process is set up to keep working on common vision and purpose?

5. Be accountable.

Develop a structure for accountability among all parties for each of the following:

•learning outcomes •value to community / community impact [for example, translate community host's feedback into grades]

Posters



Photo by Donna Kowal, Pace University

TITLE: **Citizenship, Community Service and Environmental Awareness through Scouting**

AUTHOR: Brendan Blendell
8th Grade, Farnsworth Middle School
Guilderland, New York
BSA Troop 24, Guilderland, New York

ABSTRACT: This poster will examine how Boy Scouts fosters Citizenship, Community Service and Environmental Awareness. It will also explain the specifics of Scouting including the development of leadership skills, civic awareness, community service and volunteering. It will also discuss Scouting's outdoor program which exposes Scouts to the outdoors and promotes respect for the environment through being conservation-minded and environmentally conscious.

GOALS: Participants should come away with a better understanding of the Scouting program.

TITLE: **The Use of Youth Development Organizations to Promote Leadership Skills, Environmental Awareness, and Active Citizenship**

AUTHOR: Karl A. Blendell
Adjunct Professor
Department of Educational & School Psychology
Lally School of Education
The College of Saint Rose

ABSTRACT: This poster presentation will focus on Youth Development Organizations and how they can be used to foster active engagement and help develop leadership skills in youth. Organizations such as Boy Scouts, Girl Scouts, and 4-H will be discussed. Issues such as Leadership Development & Training, Community Service, Citizenship, Environmental Awareness, Health and Fitness, Personal Responsibility, and Character Education will be discussed. Linkages and support from educational & psychological research and theory will also be examined.

Brofenbrenner's theory of Human Ecology will be examined as a model to understand the linkages between the individual, local communities, and the broader culture, and how Youth Development Organizations can provide positive support for youth in understanding and carrying out civic responsibilities.

GOALS: Participants should come away from this poster presentation with a better understanding of the structure and functioning of Youth Development Organizations and how they can

be used as an effective adjunct to help youth be engaged, develop leadership skills, and in turn be more responsible and effective citizens and leaders for the future.

BIO: Karl Blendell is an Adjunct Professor of Educational and School Psychology in the Lally School of Education at The College of Saint Rose in Albany, New York. He has taught at the undergraduate and graduate levels for more than 20 years. With graduate training in Counseling and Educational Psychology at Penn State and Cornell, his teaching, writing, and research have focused on human ecology, counseling and life span development, and the training of teachers and other professionals in education. He also maintains a private practice in counseling and consulting.

TITLE: **Hudson River Watershed Alliance, a Regional Network of Organizations Working to Protect the Water Resources of the Hudson River Basin**

AUTHORS: Manna Jo Greene and Ryan Palmer
Hudson River Sloop Clearwater

TITLE: **The Intercollegiate Energy Audit Program**

AUTHORS: Manna Jo Greene and Ryan Palmer
Hudson River Sloop Clearwater

PRESENTER: Sean Ritchey

ABSTRACT: This program invites students from Marist College, Vassar College, Bard College, the State University of New York (SUNY) at New Paltz, Dutchess Community College (SUNY Dutchess) and Ulster County Community College (SUNY Ulster) to research their schools' energy use and conduct audits to assess energy efficiency, in a collaborative effort guided by Hudson River Sloop Clearwater's Environmental Action staff. One of the central goals of this program, now in its second year, is to discover and recognize innovative techniques and programs that have been implemented to promote conservation, energy efficiency, and renewable energy use at our area colleges. In addition to performing hands-on research, the students also attend a training course in energy management, which covers topics such as performing energy audits, basics of lighting, appliances, HVAC, and building performance, as well as geothermal systems, wind energy, solar power, and NYSERDA incentives. The student's then compile their findings and recommendations into a report, which is turned in to school officials for review and presented at a forum on campus.

[See Appendix D for poster.]

TITLE: **Hurricane Katrina and Siena College**

AUTHORS: Amnat Hong-Chittaphong, Director of Multicultural Affairs, Siena College
Silvia Patalano, Siena College student, organizer for Platanos and Collard Greens
Yalitzia Negrón, Siena College student, member Saints and Ghouls
Susanne Brodeur, Siena College student, member Saints and Ghouls
Kimberly Vassilato, Siena College student, member Saints and Ghouls
The Siena College Katrina Relief Team
Corresponding Author: James Booker, Department of Economics, Director of the Siena Program for Sustainable Land Use, Siena College

ABSTRACT: The Siena College community was confronted with a new tragedy at the opening of the 2005-06 academic year in September: the devastation and displacement of an entire metropolitan region by hurricane Katrina. A diverse set of responses emerged and are continuing. We describe selected efforts of the campus community, highlighted by students, to support disaster victims and to incorporate the lessons of the hurricane into the classroom experience. From the work of the College's Katrina Relief Team to fundraising for victims at the campus visit of the Off Broadway production *Platanos* and *Collard Greens*, from a Halloween benefit party to an income mapping project by an introductory economics class, service and classroom learning revolving around Katrina has been a dominant theme on the Siena campus.

TITLE: **The Use of Undergraduate Marine Biology Laboratories to Answer Biological Questions Relevant to Local Communities, While Developing Student Research Skills**

AUTHORS: Wendy J. McFarlane¹, Maria Pozzuto¹, and Brian Jensen²
¹Department of Biology, *Manhattanville College*
²Department of Physical and Natural Sciences, *College of Saint Rose*

ABSTRACT: Undergraduate laboratories have always provided a hands-on dimension to college courses in biology. However, they may also provide an exceptional opportunity to engage and educate local communities. Although a work in progress, at Manhattanville College we are aiming to integrate locally important biological questions into our Marine Biology curriculum, and our Senior Research program. The Marine Biology class at Manhattanville College previously completed a study to assess the impact of installation of a water purification system (Gunderboom) on marine organism abundance and species diversity in Mamaroneck Harbor (Mamaroneck, NY). Findings led to more questions concerning species diversity, and eventually the evolution of a related Senior Research project investigating the impact of the invasive shore crab on other locally found crab species. As well as monitoring and collecting data from a local site in Rye, NY, the project expanded to include other sites along the northeastern Atlantic coast. The Marine Biology class this year will be performing an intertidal species diversity study at the Marshlands Conservancy in Rye, NY. Researchers at Marshlands have noted changes in the species assemblage seen at that site, relative to other closely located areas, and are searching for answers. Investigations will begin with our undergraduate Marine Biology class, and will undoubtedly continue to evolve into our Senior Research program. Research-oriented courses benefit students as they aid in the development of their hypothesis-driven research skills, yet they also benefit local communities as the projects can be targeted to answer specific questions of concern in a finite/short amount of time (~1 academic year). Furthermore, results may be clearly presented to various communities in a written and/or presentation format. The challenge ahead lies in conveying this information to the general public.

TITLE: **Monitoring Amphibian and Reptile Diversity: Opportunities for Student Learning**

AUTHOR: Jennifer Merriam
Instructor of Biology
SUNY Orange County Community College

ABSTRACT: This poster describes a project to stimulate student learning by monitoring amphibian and reptile diversity on and near the campus of Orange County Community College. Initial monitoring started in October 2005, and will continue in the Spring of 2006. This project will provide base-line data that can be used for the required independent student projects in General Biology II. Additionally, students interested in service-learning can use the

techniques they learn in this study to monitor amphibian and reptile diversity on land trust property in Orange County.

TITLE: Bringing an Organic Community Garden to Our Schools

AUTHOR: Benjamin Montross
Environmental Studies Major
Siena College

ABSTRACT: This project is based on an internship by a Siena College student, majoring in Environmental Studies, assisted by a second Siena College Environmental Studies major. The project consisted of the creation and maintenance of an organic community garden at Blue Creek Elementary School in the North Colonie School District. The focus of the project was two-fold: To educate the students about organic farming and to incorporate local community members in the planning, implementation and maintenance of the garden.

The intent was that the children would have a better understanding of the work involved with their food production, and what it takes to properly care for plants. In addition to the care and maintenance of the plants, the children learned about the ways the early local settlers would have cultivated the soil and grown their crops in keeping with local Shaker tradition. This project took the generic peapod project to a whole new level; one the children were able to see every day as they come into school. The garden will have lasting effects and continue to draw both the school community and the local community together.

This project succeeded due to long hours from a select, dedicated few; in order to have a successful community project, strong leadership and division of responsibilities is necessary. Grants were awarded from the National Garden Association and the General Electric ELFUN society which funded this project; once successful, the Parents and Teacher Association agreed to write the garden into their budget.

[See Appendix D for poster.]

TITLE: The Rivers & Estuaries Center Cultural History Program

AUTHORS: Roger Panetta¹, Brigid Driscoll², Patricia Dunne², Amanda Swan²
¹Department of History, Marymount College of Fordham University
²Rivers & Estuaries Center, Beacon, NY

ABSTRACT: Among the Rivers & Estuaries Center's recently established science and education programs is The Cultural History Program, whose goal is to collect, preserve and exhibit a wide variety of materials that demonstrate the vital connection between rivers and estuaries and human communities. It is envisioned as a major resource for researchers, students and all those seeking a deeper appreciation of how rivers shape – and are shaped by – each generation. Initially, the Program is focusing on creating oral histories to deepen the human connection to rivers and estuaries through the first-person histories and stories of those individuals whose life's work has been dedicated in large and small ways to rivers. The oral histories will give voice to those critical shapers of river's histories – public and private figures, environmentalists and polluters, fishermen and artists – whose individual contributions, though often hidden and neglected, should be preserved and studied by future generations. Given the length of the Hudson and its tributaries, and the consequent diversity of the regions surrounding them, the Program is seeking collaborative partners to carry out its mission. We are reaching out to members of the

Hudson Valley Consortium of Colleges and Universities to solicit their cooperation. Faculty members are asked to identify oral history projects that would be appropriate to the history and culture of their particular geographic area. Faculty and students interested in pursuing such projects are invited to join us and will receive training and support.

TITLE: Prospect Park

AUTHOR: Meisha Rosenberg
Vice President, Friends of Prospect Park
Lecturer, English Department, College of Saint Rose

ABSTRACT: The Friends of Prospect Park in Troy, New York, is a nonprofit group dedicated to the promotion of the park as a place where the public can find refreshment for body and spirit. Prospect Park provides spectacular, 20-mile, panoramic vistas to the south, west, and north. Rare species of trees, like the Catalpa, European Beech, and Magnolia grace its grassy expanses; and its history goes all the way back to Uncle Sam. Prospect Park was designed by Garnet Baltimore, the first African-American graduate of Rensselaer Polytechnic Institute.

Since 1998 the Friends have worked to improve the park, and RPI and Russell Sage students have given their time in painting the basketball backboard; planting 1,000 bulbs; and doing regular cleanups. We want to draw more members of the college communities in Troy to the park, at the same time that we protect the environment and cater to the urban population.

Of the many things on our wish list are several that provide opportunities for students and teachers: We need an engineering class to evaluate the early 20th century pool; botanists and environmentalists to help plan trails, identify wildlife, create demonstrations, and network with environmental organizations; historical researchers; web tsars; creative souls to bring music, art, and dance into the park; and technology experts to design a comprehensive lighting plan. The park's birth marked a creative and synergistic moment in Troy's, and RPI's, history, and we envision more such dynamic cooperation for the future.

TITLE: Obstacles in Collecting Specimens and Getting Funding for an Environmental Project in a Small College

AUTHORS: Anna Yeung-Cheung, Ph.D and Nadilynn Melendez, Student
Department of Biology
Manhattanville College

ABSTRACT: In 2002 a water filter, Gunderboom® BPS™ (Beach Protection System), was installed in Harbor Island Park, Mamaroneck to lower bacterial levels in swimming areas and preventing constant beach closings. In 2003 and 2004, the beach was again closed numerous times. In our study, water inside and outside the Gunderboom® was tested beginning October 2004 to estimate the relative amounts of *E. coli* and coliform bacteria. Soft-shelled clams (*Mya arenaria*) living in both these areas were also tested. In comparison, water was also tested from a constantly closed beach-Hudson Park, New Rochelle and from a "pristine" beach, Read Sanctuary, Rye. Funding challenges and obstacles, such as access to testing sites, will be discussed in this poster.

[See Appendix D for poster.]

TITLE: **Incorporating Stream Monitoring into an Environmental Issues Course**

AUTHOR: Joseph G. Zurovchak
SUNY - Orange County Community College

ABSTRACT: I modified my Environmental Conservation course (non-majors) in the 2005 Spring semester to focus on water quality issues using an active learning approach in lecture and by collecting real data on the water quality of an on-campus stream. I partnered with Orange County Soil and Water Conservation District (OCSWCD), which loaned us monitoring equipment and connected us with the Hudson Basin River Watershed (HBRW) program. We conducted physical, chemical, and biological assessments of the stream throughout the semester according to the HBRW Guidance Document. The data generated from these assessments were shared with OCSWCD and incorporated into the HBRW database, and, thus, were a significant contribution to existing databases of regional water quality which will be used for judging compliance of area waterbodies with existing water quality standards. Within the context of the course, our monitoring activities provided a basis for class discussion of water quality issues, such as types and sources of pollutants, nonpoint source pollution, linkage of water quality with surrounding land use, and measures that can be taken for improving water quality. The response of the students to the course was overwhelmingly positive. They enjoyed becoming versed in water quality issues that are relevant at the local level, and appreciated that their stream assessments were “real data” used by organizations outside the college environment.

[See Appendix D for poster.]

Biographies

Claire Andryshak,

Student, *The College of Saint Rose*

[biography not available]

Stuart L. Belli

Associate Professor, Department of Chemistry, *Vassar College*

Stuart L. Belli is interested in the environment, both on a scientific and a humanistic level. His education in chemistry includes a B.S. in chemistry from the University of California at Riverside, a Ph.D. in biophysical chemistry from the University of California at Santa Barbara, and a postdoctoral fellowship in analytical chemistry at the University of Delaware. His training focused on studying the environment at a molecular level.

Dr. Belli's primary research interest is in the behavior of heavy metals in both fresh water and sea water. His ongoing projects include investigating copper interactions with humic substances and developing methods for measuring copper in the aquatic environment. He has published papers in *Analytical Chemistry*, *Marine Chemistry*, *Electroanalysis*, and *Analytica Chimica Acta*.

Dr. Belli holds that perhaps more difficult than understanding the chemical processes is understanding human relationship to the environment. His interest in our interaction with nature has led him to an involvement with the Environmental Studies Program at Vassar. He serves on the steering committees for both the Environmental Studies Program, and the Environmental Sciences Program at Vassar.

Andy Bicking

Director of Education and Volunteers, *Scenic Hudson, Inc.*

Andy Bicking is the Director of Education and Volunteers for Scenic Hudson, Inc., a not-for-profit environmental organization working to protect, preserve and restore the Hudson River and its riverfront as a public and natural resource. He has brought a pro- environmental message to tens of thousands of individuals – ranging from young school children to community leaders and elected officials –since he created Scenic Hudson's volunteer programs in 1998.

The largest and most effective of the projects under his direction is Scenic Hudson's Great River Sweep, an annual volunteer litter cleanup of the Hudson River. In 2005, the Sweep engaged more than 7,000 individuals and resulted in the removal of more than 81 tons of trash from the shorelines of the River. The project has received numerous commendations, including an Environmental Quality Award from the U.S. Environmental Protection Agency, Region 2, and the Clearwater Citizen's Award from The Waterfront Center.

Andy is a strong force for empowering Hudson Valley residents to take action. He has been involved in Scenic Hudson's campaigns to cleanup toxic PCBs from north of the Troy-Albany Dam, stop St. Lawrence Cement Plant from being built in Columbia County, expand New York State's beverage container redemption law (a.k.a. "the bottle bill"), and most recently, launch an initiative to restore the habitat and public's access to South Bay, in the City of Hudson, Columbia County. His staff also reach a diverse array of valley residents from Manhattan to the foothills of the Adirondacks through conducting school programs, adult education and volunteer stewardship events, community forums on land-use and development issues, outreach to minority populations, and internet advocacy and letter writing efforts.

Andy holds a Bachelor of Science degree from the College of Agriculture at Oregon State University and has been involved in leadership roles in a variety of community-based

organizations. His hobbies include cycling, blacksmithing, music and gardening. He lives with his wife and son in Esopus, Ulster County, New York.

Michael P. Chachanovich

Science Teacher, *Highland High School*

Mr. Michael P. Chachanovich has been teaching sciences at Highland High School for 32 years. Mr. Chachanovich has taught in the disciplines of chemistry, biology and currently earth sciences. He has a Bachelor of Science and Master of Arts in biology with certification in chemistry, math, earth science, and geology. In the last several years, Mr. Chachanovich has been involved in watershed studies partnerships with groups like Hudson Basin Riverwatch and Scenic Hudson. He has also worked with students on the Highland High School campus conducting stream studies.

Nancy Cozean

Mayor, *City of Poughkeepsie*

Nancy Cozean currently serves as Mayor of the City of Poughkeepsie. As a business woman she has more than 30 years experience as an award-winning broadcast journalist and public relations professional, specializing in programming, presentations, and advocacy development.

Ms. Cozean has created and produced broadcast programs, reported and anchored newscasts in major television markets, and currently serves as a media and public relations advisor for private and not-for-profit organizations. She has also served as regional communications director for tourism and public relations director for a regional health organization. As the founder of Cozean Communications, Ms. Cozean provides public relations and media services for local, regional, and area businesses and organizations. Additionally she produces and hosts Hudson Valley Views, an award winning local program on Mid-Hudson Time Warner Cable.

As a professional broadcaster, Ms. Cozean was a reporter and anchor for major markets, including Washington, D.C., St. Louis, Missouri, and Albany, New York. She also helped launch the area's first televised tourism program, Hudson Valley Magazine's GETAWAY (broadcast in New York, New Jersey, and Manhattan). Previously, she was part of a start-up team for the Hudson Valley's first commercial television station, WTZA-TV (RNN), and also developed and produced weekend programs for Cablevision's first 24 hour news station in New Jersey, News 12 New Jersey.

Since 1990, Ms. Cozean has also pursued public relations interests. She was the Public Relations Director for the Northern Metropolitan Hospital Association, the second largest hospital association in New York State. There she developed and implemented community awareness, advocacy, and media programs.

Additionally, she served as the Director of Tourism Communications for New York State's Department of Economic Development Regional Office, where she coordinated and developed tourism projects, as well as marketing and public relations programs for the Hudson Valley as part of the "I Love New York" program. While at NYSDED, Ms. Cozean headed a joint news conference with several other state agencies as part of the successful 25th anniversary of Woodstock II.

Ms. Cozean is a graduate of the University of Missouri School of Journalism, where she earned her M.A. and B.J. She is also a graduate of Stephens College in Columbia, Missouri, where she received a B.A. She has been an adjunct professor at Dutchess Community College, State University of New York-New Paltz, and Marist College. Ms. Cozean resides in the City of Poughkeepsie with her husband Donald Jacob, a retired Pfizer executive and the Executive

Director of the Neuropathy Association. Their daughter, Josephine, graduated from Fordham University last May and is working in the area.

John Cronin

Director, Pace Academy for the Environment, *Pace University*
Managing Director, *Rivers & Estuaries Center on the Hudson*

John Cronin is the Director of the Pace Academy for the Environment at Pace University where he also serves as Resident Scholar in Environmental Studies in the Philosophy and Religious Studies Department. Cronin is a founder of the newly formed Environmental Consortium of Hudson Valley Colleges and Universities. He also helped to initiate the Environmental Litigation Clinic at Pace University School of Law where he was active for 14 years.

Cronin currently serves as the Managing Director for the Rivers and Estuaries Center on the Hudson where he directs the planning for a global research and education institute created by Governor George E. Pataki. He serves on the executive committee of the New York State Biodiversity Institute, is the founder and president of the Hudson Fisheries Trust and is a trustee of Building Bridges, Building Boats.

Cronin was the Hudson Riverkeeper for 17 years and has also worked as a lobbyist, commercial fisherman and legislative aide. He has also served as the full-time Environmental Director for Clearwater and as the Business Agent for the New York State Commercial Fishermen's Association. Cronin worked as an environmental policy specialist for Congressman Hamilton Fish, Jr. and for the New York State Legislature, where he worked on a special investigative task force on Love Canal. He has also worked as a Hudson River commercial fisherman.

Nadine Cruz

Practitioner, Author, Advocate

Nadine Cruz is an internationally respected speaker, author, and consultant on public service education. As associate director, then director of the Haas Center for Public Service at Stanford University, Cruz founded the Public Service Scholars program, taught service-learning courses for the Program in Urban Studies, and served as Resident Fellow to build community across diversity at the Okada Asian American Ethnic Theme Residence.

Before Stanford, Cruz was the Eugene M. Lang Visiting Professor of Social Change at Swarthmore College, where she piloted service-learning for the political science department. For 10 years, Cruz served as executive director of the Higher Education Consortium for Urban Affairs (HECUA), where she provided leadership for community-based learning programs in Minneapolis-St. Paul, Latin America, Scandinavia, and other parts of the world.

Cruz has also contributed to the service-learning field through numerous keynote presentations and workshops. Among her publications, Cruz is co-author with Timothy Stanton and Dwight Giles of *Service-Learning: A Movement's Pioneers Reflect on Its Origins, Practice, and Future*, San Francisco: Jossey-Bass, 1999.

Cruz holds numerous honors, including: an Honorary Doctorate, *Humanis Causa* (1991) conferred by Mount Senario College, Ladysmith, Wisconsin; the University of Massachusetts-Amherst Honors College Distinguished Citizen Scholar Award (2001); the 2003 Richard E. Cone Award for Excellence and Leadership in Cultivating Community Partnerships in Higher Education; and the 2003 Experiential Education Pioneer of the Year Award presented by the National Society for Experiential Education. Most recently, Cruz was visiting scholar at Brown's Swearer Center for Public Service and named founding member of the newly created Ella Baker Fellowship program sponsored by the Antioch New England Graduate School. She was also recently awarded the 2005 Alec Dickson Servant Leader Award by the National Youth Leadership Council.

Currently, Cruz is consulting on various projects including some with California Campus Compact, writing a book on service-learning, and mentoring former students, staff and emerging young leaders in the field.

Patricia Culligan

Professor, Department Civil Engineering & Engineering Mechanics, *Columbia University*

Dr. Patricia Culligan is currently a professor at Columbia University in the Department of Civil Engineering and Engineering Mechanics. Her professional and research interests lie in the field of geo-environmental engineering and focus primarily on the experimental and numerical modeling of flow and contaminant transport processes in geologic systems. Dr. Culligan also has experience in the design of disposal sites for the storage of waste materials. She is actively engaged in K-12 education as well as outreach to citizens who are concerned about the remediation and redevelopment of contaminated sites in their neighborhoods.

Patricia Culligan received her Bachelor of Science from University of Leeds in 1982, her Master in Philosophy from Cambridge University 1985, from where she later earned her Ph.D. in 1989. She also holds a Diplome de Langue, Litterature et Civilization which she received in 1993 from Université d'Aix-Marseille III. Prior to her tenure at Columbia, Dr. Culligan was an Associate Professor at Massachusetts Institute of Technology, a University Research Fellow at the University of Western Australia, a Research Fellow at City University, and a Research Assistant at Cambridge University. Over the years, she has received numerous awards including, most recently, the Arthur C. Smith Award for Undergraduate Service, the NSF CAREER Award in 1999, and the INEEL ACE Faculty Fellowship in 2001.

Ann Davis

Assistant Professor of Economics, *Marist College*

Dr. Ann Davis was the founding director of the Marist College Bureau of Economic Research, a position she held from 1990 through June, 2005. In that capacity she has produced the "Quarterly Report of the Hudson Valley Economy," a widely quoted compilation of trends in the regional economy. She has been called upon to consult on economic analysis for regional groups, including Mid-Hudson Pattern for Progress, Scenic Hudson, Hudson Valley Economic Development Corporation, the Hudson Valley Technology Development Corporation, the Hudson River Valley Greenway, Dutchess County Economic Development Corporation, the Council of Industry of Southeastern New York, the United Way of Dutchess County, the Dyson Foundation, Dutchess County Workforce Investment Board, and Dutchess County Industrial Development Authority. She has recently completed studies of the economic impact of historic tourism in the Hudson Valley, the impact of philanthropy in Dutchess County, the impact of the Arts in Dutchess County, Business Confidence Surveys, and four industry cluster studies of the Hudson Valley. Near completion is a study of measures of sprawl with Scenic Hudson. Dr. Davis and Bureau reports have been quoted in the New York Times, Business Week, U.S. News and World Report, the Albany Times Union, Industry Week, as well as regional newspapers, radio, and TV stations.

Dr. Davis also has numerous scholarly publications and presentations. She is currently active in preservation of the Fall Kill, a Hudson River Tributary, a member of the board of directors of the Hudson River Sloop Clearwater, the Family Partnership Center, and a board member of Mid-Hudson Pattern for Progress. She is also a member of the Greenway Agriculture Committee, and a member of the board of the New York Main Street Alliance. She has been a member of the Dutchess County Economic Development Corporation, the Board of Directors of the Poughkeepsie Institute, a consortium of five colleges in Dutchess County, and also served as the faculty representative to the Board of Trustees at Marist College, while also serving as Chair of the Faculty Affairs Committee, 1997-1999.

Dr. Davis received her Ph.D. in Economics from Boston College, a Masters Degree in Economics from Northeastern University, and her B.A. in American Studies from Barnard College. She has taught at both the University of Massachusetts at Boston and Vassar College before coming to Marist College where she is currently an Assistant Professor of Economics. Her fields of teaching and research are International, Regional, and Labor Economics. Originally from Knoxville, Tennessee, she has lived in Dutchess County since 1978, where she and her husband raised their two children.

Nate Davis

Director of Urban Community Environmental Programs
W. Haywood Burns Environmental Education Center

[biography not available]

Rachel Dowty

PhD Candidate, Dept. of Science & Technology Studies, *Rensselaer Polytechnic Institute*

Rachel Dowty lived 27 years on the northshore of Lake Pontchartrain, at the crossroads between Baton Rouge and New Orleans. Her family still lives in and around the New Orleans area. She earned her bachelor and master's degrees in wetland biology from Southeastern Louisiana University. Her master's thesis designed ways to clean up oil and toxic spills in the wetlands surrounding New Orleans. She began designing and teaching university biology and environmental science courses in Louisiana and the State University of New York (SUNY) at Plattsburgh. She is now a PhD candidate in RPI's Department of Science and Technology Studies (STS).

Patricia Dunne

Program Coordinator, *Rivers and Estuaries Center on the Hudson*

Patricia joined the Rivers & Estuaries Center in February, 2004, just as it opened the doors of its administrative offices and gallery on the West End of Main Street in Beacon, NY. Patti grew up in Beacon, received a BA in film and media arts from Emerson College in Boston, MA, and a certificate in conservation biology from the Center for Environmental Research and Conservation at Columbia University. Before joining the Center, she spent eight seasons working with the Hudson Valley Shakespeare Festival, a non-profit, critically-acclaimed theater in Garrison, NY.

Melissa Everett

Executive Director, *Sustainable Hudson Valley*

Melissa Everett is Executive Director of Sustainable Hudson Valley, which helps local and regional decisionmakers with economic development geared toward environmental and community benefit. She is an experienced nonprofit professional who directed fundraising and grant administration for Global Action Plan, served as Executive Director for Hudsonia, and founded the Sustainable Careers Institute to explore the workplace trends and issues connected with sustainable development. Since 1995, Melissa has also maintained a career counseling practice focusing on public interest paths in business, nonprofits and government.

Melissa is author of three books and many articles on social issues and the psychology of socially responsible decision making. Her *Making a Living While Making a Difference: The Expanded Guide to Creating Careers with a Conscience*, was named one of "twenty books that can change the world" by Common Ground magazine. Melissa teaches Leadership for a Technological Era at Rensselaer Polytechnic Institute, working with undergraduates to develop collaborative leadership skills. She is finishing her PhD through the International Off-Campus PhD Program of Erasmus University in Rotterdam. Her research focuses on sustainable community development issues and complex organizations in eastern New York.

Harvey K. Flad

Emeritus Professor of Geography, *Vassar College*

Harvey K. Flad is Emeritus Professor of Geography at Vassar College in Poughkeepsie, NY where he has taught in the Department of Geology and Geography and in the multidisciplinary programs in American Culture, Environmental Studies, and Urban Studies since 1972. He was Chair of the Department of Geology-Geography from 1988-1998 and Director of the American Culture Program from 1998-2001.

Dr. Flad's scholarship has focused on cultural and historic landscapes, conservation history, and environmental and urban planning in America. He has published numerous articles on 19th century landscape design theory and practice, especially on the work of pioneer landscape designer Andrew Jackson Downing. His research and planning efforts have included historic and open space preservation, small town and urban waterfront revitalization, urban history, and the social and spatial components of place. His testimony on the potential environmental and visual impacts of proposed large-scale developments in the Hudson Valley, including a nuclear power plant, has been cited as instrumental in stopping their construction. He has done research and lectured internationally, including Dominica, Lithuania, and Kyrgyzstan, Central Asia.

Dr. Flad received his BA from the University of Colorado and Ph.D. from Syracuse University. He is the recipient of a Fulbright award and the Russel Wright award for environmental preservation.

Susan Frampton

Teacher, *New Paltz Central School District*

Susan is a founding member of the not-for-profit group called "The Anti-Mine Alliance." She is also Chairwoman of the Lloyd Environmental Conservation Council and a Trustee on the Board of Hudson Valley RailTrail Association (HVRTA). Susan is the former events chair for all HVRTA events and currently serves as Event Chair for Breakfast on the Black Creek. She is currently a teacher at the New Paltz Central School District.

John P. Harrington

Dean, School of Humanities & Social Sciences, *Rensselaer Polytechnic Institute*

Dr. John P. Harrington is Dean of the School of Humanities and Social Sciences and Full Professor of Humanities at Rensselaer Polytechnic Institute. Previously, Harrington was Dean of Humanities and Social Sciences at The Cooper Union, a unique lower Manhattan institution that offers full-tuition scholarships to all students. He has written extensively on Irish literature and culture, including the books *The English Traveller in Ireland* (1990); *The Irish Beckett* (1991); and *The Irish Play on the New York Stage* (1997). He edited W. W. Norton's anthology *Modern Irish Drama* (1991) and co-edited with the sociologist Elizabeth Mitchell a collection of interdisciplinary essays published as *Politics and Performance in Contemporary Northern Ireland* (1999). While continuing to teach and attend academic conferences, he also lectures frequently on theater and Irish culture in non-academic settings such as Center Stage Theater (Baltimore), Lincoln Center Festival, Primary Stages (New York), New York Shakespeare Festival/Public Theater, and others. He was President of the American Conference for Irish Studies from 2003-2005 and is now Past President and International Representative.

Harrington was educated at Columbia University, University College, Dublin, and he earned his Ph.D. in literature from Rutgers University. In Troy, New York, Harrington is a Member of the Board of WMHT public television and radio and of the Ruben Community Fellows, a foundation devoted to the interaction of higher education and civic institutions.

David J. Hess

Professor, Department of Science & Technology Studies, *Rensselaer Polytechnic Institute*

David J. Hess is a professor in Rensselaer's Department of Science and Technology Studies. He holds a bachelor's degree in economics from Harvard University and a master's and doctorate in anthropology from Cornell University. He is the recipient of two Fulbrights, a Social Science

Research Council fellowship, and the Diana Forsythe Prize, and he has been a PI and co-PI on multiple National Science Foundation grants. His research focuses on the anthropology, history, and sociology of science, technology, health, the environment, and social movements.

Thomas Lynch

Associate Professor, Environmental Science, *Marist College*

Dr. Thomas Lynch came to Marist in 1991 as an Associate Professor and served for ten years as Program Director and Department Chair of the Environmental Science Department. Dr. Lynch was Acting Dean of Science for the 1997-98 academic year. He spent twelve years on the faculty of the Biology Department at the New Mexico Institute of Mining and Technology, six of them as Chair of the department.

Dr. Lynch has researched and published on the bioavailability of polychlorinated biphenyls, the fate of metals and pesticides in large reservoirs, the impacts of mining on chemical and biological characteristics of mountain streams, the sensitivity of high altitude wilderness lakes to acidic precipitation, zebra mussel ecology, PCBs in the Hudson River, and water quality monitoring of surface water for fecal and chemical contamination. Dr. Lynch has served on the boards of the Dutchess County Environmental Management Council, Cornell Cooperative Extension, and the Hudson River Environmental Society. He has served on the Hudson River Estuary Program Advisory Committee, is a member of the Wappinger Creek Watershed Protection Committee and is the current chairperson of the Town of Poughkeepsie Conservation Advisory Commission. Dr. Lynch helped write the Aquatic Resources Protection Ordinance for the Town of Poughkeepsie and is a member of the Comprehensive Master Plan committee.

Dr. Thomas R. Lynch received a B.A. and an M.S. in biology from the University of Bridgeport and a Ph.D. in Aquatic Toxicology from Michigan State University.

Mary Ann Murphy

Director, Project Pericles and Center for Community Outreach, *Pace University*
Associate Professor, Department of Communication Studies, *Pace University*

Dr. Mary Ann Murphy is an Associate Professor in the Communication Studies department on the New York Campus of Pace University. She also serves as the Director of Project Pericles and as the Director of the Center for Community Outreach at Dyson College of Arts and Sciences at Pace University. Her research has concentrated on elaborating the relationship between social cognition and communication displays. She has published in *Human Communication Research*, *Communication Research*, and the *Journal of Business Communication*. Her current research interest center on the following: assessment of community-based learning outcomes and the role of community-based learning in educating for citizenship. Dr. Murphy received her Ph.D. from the University of Illinois in Urbana-Champaign.

Eric Pallant

Professor, Environmental Science, *Allegheny College*
Director, Center for Economic and Environmental Development, *Allegheny College*

Dr. Eric Pallant is currently a Professor of Environmental Science, Allegheny College and Director of the Center for Economic and Environmental Development (CEED), Allegheny College, Meadville, PA.

He helped create the CEED and is responsible for fundraising, budgeting, and administration of nine projects, 14 directors, and 247 community partners. CEED engages Allegheny College students, faculty and the community in partnerships to achieve environmental stewardship and creative regional revitalization. CEED promotes sustainable forestry, agriculture, energy, land use, curriculum, and industry. Work with artists and planners to create a sustainable vision for the future. Dr. Pallant was also a Fulbright Scholl in 2001-2002 at the Arava Institute for Environmental Studies, Ketura, Israel where he taught sustainable development techniques to

graduate and undergraduate students from around the Middle East. He also serves as a member of Arava Institute's Advisory Board.

Dr. Pallant is also active as a Curriculum Program Development Consultant to colleges and universities across the country, and is active as a speaker on sustainability where he served as an advisor to the President's Council for Sustainable Development (1998-99), and as a panelist for Sustainable USA at the National Town Meeting for a sustainable America on "The Role of Formal Education in Sustainable Community," (Detroit, 1999.)

The CEED, which Dr. Pallant helped create, won the Pennsylvania Governors' Award for Environmental Excellence in 1999. The CEED was launched in 1997 with a goal of demonstrating how the economy and the environment, too often perceived as being in conflict, can actually form a constructive basis for economic empowerment. The Center provides the leadership and vision to create sustainable community development within the French Creek watershed.

The Center's fundamental mission is to teach every generation and segment of society how sustainable community development can be achieved by integrating environmental protection and economically sound policies. It encourages both a thriving economy and a healthy community by working to promote economic and environmental sustainability. The Center shifts the focus of regional planners and governments from short-term economic gain to long-term economic, social and environmental stability.

Ryan Palmer

Environmental Associate, *Hudson River Sloop Clearwater*

Ryan Palmer is an Environmental Associate for Hudson River Sloop Clearwater, a non-profit environmental education and advocacy group based in Poughkeepsie, NY. His work is focused on coordinating the Hudson River Watershed Alliance, a regional watershed protection coalition of environmental groups, agencies, citizen groups and others, as well as actively promoting local citizen-based watershed protection throughout the Hudson River watershed.

Stephanie Pfirman

Chair, Department of Environmental Science, *Barnard College*

Dr. Stephanie Pfirman, a specialist in the study of environmental changes in the Arctic and is the Hirschorn Professor and chair of the Department of Environmental Science at Barnard College, which she joined in 1993. Pfirman is a member of the Environmental Consortium steering committee and co-chair of the River Summer program.

Throughout her career, Pfirman has been involved with researching the Arctic environment, environmental policy and funding, education and public outreach, and interdisciplinary curriculum development. Current interests include environmental aspects of sea ice in the Arctic, and the development of women scientists and interdisciplinary scholars. The first chair of the NSF's Advisory Committee for Environmental Research and Education, Pfirman oversaw analysis of a 10 year outlook for environmental research and education at NSF. Pfirman also chaired NSF's Office Advisory Committee to the Office of Polar Programs.

Prior to joining Barnard, Pfirman was senior scientist at Environmental Defense and co-developer of the exhibition "Global Warming: Understanding the Forecast" produced jointly with the American Museum of Natural History. She was research scientist and coordinator of Arctic programs for the University of Kiel and GEOMAR, Research Center for Marine Geoscience, Germany; staff scientist for the US House of Representatives, Committee on Science, Subcommittee on Environment; and oceanographer with the US Geological Survey in Woods Hole, Massachusetts. Pfirman received her Ph.D. in Marine Geology and Geophysics from the Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Joint Program in Oceanography and Oceanographic Engineering, and a BA in Geology from Colgate University.

Kenneth Reardon

Associate Professor and Chair, Department of City and Regional Planning, *Cornell University*

Dr. Ken Reardon joined the Cornell faculty as an associate professor with tenure after leaving the Urban and Regional Planning Department at the University of Illinois at Urbana-Champaign. For his role there in establishing and directing the university's highly-regarded East St. Louis Action Research Project, he was awarded the 2000 American Institute of Certified Planners President's Award. His research interests focus on community-based planning in severely distressed urban neighborhoods, alternative approaches to community development, urban social movements, and municipal government reform. At Cornell he is working with the Colleges of Architecture, Art, and Planning; Human Ecology; and Agriculture and Life Sciences to strengthen urban outreach activities in Ithaca, Rochester, and New York City.

Dr. Reardon received his Ph.D. from Cornell University, Master of Urban Planning from Hunter College and his B.A. from the University of Massachusetts, Amherst.

Michelle A. Rodden

Associate Professor, Environmental Studies, *SUNY Ulster County Community College*

Professor Michelle Rodden is an Associate Professor of Environmental Studies at SUNY Ulster County Community College located in Stone Ridge. She has been teaching water quality monitoring, analytical chemistry and environmental science at UCCC since 1991. She has been Project Director for many distinct research teams at the college and also has partnered with universities, municipalities, and community groups. Rodden earned a Master of Science degree in Chemistry from Appalachian State University in 1989. She is an active member in the local section of the American Chemical Society and recently received its nationally recognized "Salutes to Excellence" award for five years of service as National Chemistry Week Coordinator.

Ken Scott

Director, Community Service, *The College of Saint Rose*

Ken Scott is Director of Community Service at The College of Saint Rose. The College is committed to being an engaged urban campus in the city of Albany and the Community Service Office functions as a resource to students and faculty seeking to do so. Scott is a life-long resident of the Capital Region and co-Pastor of the Two Rivers of Peace, United Methodist Church in Cohoes, NY.

Lisa Son

Assistant Professor, Department of Psychology, *Barnard College*

Professor Son is Assistant Professor at Barnard College in the Psychology Department. She conducts research that examines various studying approaches for effective long-term learning. She has examined strategies in elementary school, middle school, and college-aged students, focusing on study-time allocation and spacing schedules, in addition to the optimal and non-optimal choices made during study. The goal of her research has been to see how people's metacognitive judgments during study help to guide study behavior, and to see if awareness and application of particular strategies enhance learning. Based on her research, Lisa has given several pedagogy workshops for K-12 teachers over the past year, and will continue these sessions on a yearly basis, aimed at helping to bridge the gap between the traditionally separated domains of science and education.

Karen Strong

Outreach Coordinator, Hudson River Estuary Biodiversity Program, *NYSDEC*

Karen Strong is the Hudson River Estuary Biodiversity Outreach Coordinator for the NYS Department of Environmental Conservation and Cornell University. She works with Hudson Valley communities to incorporate biodiversity into land use planning. Karen established the biodiversity outreach program for DEC's Hudson River Estuary Program in 2001, also coordinating the efforts of her program with other outreach partners and state agencies.

David Szczerbacki

Vice President of Academic Affairs, *The College of Saint Rose*

David Szczerbacki has been Provost and Vice-President of Academic Affairs at The College of Saint Rose since 2004. Previously (1981-2004), he had served as Faculty Member, Dean and Provost at Alfred University. He received a Ph.D. in Public Policy Studies from SUNY Buffalo, and both an MA (Urban Systems Analysis) and BA (Political Science) from Gannon University. His professional work has focused on the fields of urban and regional planning, economic development, environmental management, strategic management, and organization development. His research has included work in the area of active learning and pedagogical innovation.

Conference Photographs

Photos by Donald A. Moore, Rensselaer Polytechnic Institute (unless otherwise noted)



From left: John P. Harrington, Dean, School of Humanities & Social Sciences, RPI; Eric Pallant, Director, Center for Economic and Environmental Development, Professor of Environmental Science, Allegheny College; Nadinne Cruz, Practitioner, Author, Advocate; John Cronin, Director, Pace Academy for the Environment, Pace University, Managing Director, Rivers and Estuaries Center



Nadine Cruz delivers a keynote address to participants at the Heffner Alumni House at Rensselaer Polytechnic Institute.



Panel - The Role of Higher Education in the Development of an Environmentally-engaged Civil Society



Panel - Hudson River Tributaries as Resources for Pedagogy and Civic Engagement in the Hudson Valley



Panel - Integrating Civic Engagement and Service Learning into the Life of a Small Liberal Arts College (photo by Donna Kowal, Pace University)



During lunch, attendees gathered to hear about River Summer, piloted in 2005.



Stephanie Pfirman, Professor and Chair of the Environmental Science Department at Barnard College, is the founder and co-chair of River Summer program.



Workshop Series: Initiating a Project, Implementing a Project, and Evaluating a Project and Disseminating the Results



Workshop: Sustaining the Engagement



Workshop: Serving Two Masters Well: Citizenship Education that Meets the Needs of Academe and Community



Workshop: The Integration of Service Learning and Scholarship



Workshop: Service-Learning: Reflections on the Vision, Promise and Reality of a Pedagogy for Personal and Social Transformation



The poster session enabled participants to mingle with students, faculty, and members of organizations, each highlighting service learning and civic engagement from their own perspective. (photo by Donna Kowal, Pace University)



An elegant dinner was held at Bush Memorial Center, Russell Sage College where presentations were made by Patricia Dunne, Program Coordinator, Rivers and Estuaries Center and Rachel Dowty, PhD candidate in the Department of Science and Technology Studies at Rensselaer Polytechnic Institute.
(photo by Donna Kowal, Pace University)

Appendix C: Slide Show Presentations

[Presentations currently unavailable online. For inquiries, email
info@environmentalconsortium.org.]

Eric Pallant

“Keeping Civic Engagement Civil for Students, Faculty, and the Community”

Ann Davis

Panel 2 “Ecological Learning”

Thomas Lynch

Panel 2 “Fall Kill Watershed”

Patricia Dunne

“Biloxi Blues”

Rachel Dowty

“Katrina and New Orleans: Local Knowledge, Culture, Geography, History, Environmental and Politics”

Stephanie Pfirman & Lisa Son

“River Summer 2005 Report”

Susan Frampton

“Workshop C Summary”

Appendix D: Posters

[Posters currently unavailable online. For inquiries, email info@environmentalconsortium.org]

Manna Jo Greene & Ryan Palmer

“The Intercollegiate Energy Audit Program”

Benjamin Montross

“Bringing an Organic Community Garden to Our Schools”

Anna Yeung-Cheung Ph.D & Nadilynn Melendez

“Obstacles in Collecting Specimens and Getting Funding for an Environmental Project in a Small College”

Joseph G. Zurovchak

“Incorporating Steam Monitoring into an Environmental Issues Course”



Environmental Consortium
of Hudson Valley Colleges & Universities

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