

## An Overview of Career Development in Environmental Education

When I attempt to conjure the image of an environmental educator in my head, what immediately comes to mind is the vivid robe-clad stature of Sir Francis of Assisi leaning to impart knowledge upon his disciple in a garden of life; as if from some ancient representation within an illuminated manuscript. I imagine I'm not the only one whose brain has a tendency of associating characteristics or experiences with icons; like the green, glowing eyes of the wolf that taught Aldo Leopold a lesson. Other figures such as Henry David Thoreau, Rachel Carson, and Jane Goodall have all influenced environmental education throughout its development. Environmental education started out as a set of initiatives directed towards the importance of nature in education. From there it was transformed into conservation education, then outdoor education, then to progressive education, to finally end up where we are today where environmental education is still a relatively young. (Hudspeth, 2004, class notes)

Environmental education relates to and impacts many disciplines. Contemporary thoughts on how to advocate for environmental education within institutions involve the process of integration of environmental issues into other subjects. Education reform within any organized educational setting can make way for getting environmental education an established place in the curriculum, making its integration less vulnerable to funding priority shifts and more likely to be an area of open discussion in teacher trainings. (Mackinnon, 2000)

Educators play traditionally as well as non-traditionally defined roles. They exist as a living contingency that assures the continuance of information flows from one generation to the next. They serve to ensure that objective social history and natural history are secured prosperity. They ensure that factual information is understood, and embodied in the hope of the future so that natural progression may continue to provide the splendor it does for generations of today. Inherently valuable in its essence, education fuels the progression of principled intellect while scientific methodology continues to branch and open new realms of human perspective.

Environmental education is founded upon teaching the importance, and respect of natural processes. It also focuses on academic achievement, social capital, and environmental quality. Over the past half a century it has developed into a large scale, global effort to educate the world on matters such as: analysis and interpretation skills, knowledge of environmental processes and systems, skills for understanding and addressing environmental issues. "Imagine a very large circle that represents an environmental studies program. It includes several scientific disciplines, focused on solving the problems we are facing in the environment. Imagine another circle that encompasses what you could call nature writing. Imagine that these two circles overlap. In that interface is our theme, which is biophilia, the root of environmental concern.(Russel, 2000)

Environmental educators seek to create interest and enthusiasm in respect to issues that pertain to local *and* global issues such as air, water, and soil quality. Along with the role of teaching comes the role of mentoring, which should be facilitated through

teachings of personal and civic responsibility. Creating values, ideals, and attitudes towards stewardship and environmental ethics is particularly important in youths.

Job opportunities within the field of environmental education exist as a range of possible career paths and field work. Opportunities range from classroom education for children, camp counseling, experiential education through trip leading eg the NOLLS program or Outward Bound, professorship at universities, public affairs education, seminar speaking, parenthood, volunteer work, curriculum development and entrepreneurship, management positions, political, social, and environmental advocacy, to name a few. Environmental education can be formal or informal, structured or unstructured, and can be applied to almost any situation if so desired. Environmental education has just begun its journey within the institutional, political, and industrial realms of American livelihood. People have only begun to understand the significance of environmental knowledge and how our understanding of the natural world affects our future as a species, let alone the broader implications that lie within the inherent effects humans have/will have on our environment as a whole. Environmental education can be applied to the most specific, as well as the broadest of subject matter. In fields as diverse as medicine, psychology, politics, engineering, business as a whole, food production, travel, media, advertising, non-governmental organizations, and so on with an innumerable continuance of foci. Environmental education can be considered pertinent and essential in developing skills in individuals which would not exist without the facilitation of knowledge pertaining to ecosystems and environmental issues.

People who work in environmental education come from diverse backgrounds and have the option to work within almost any demographic that exists. Where one works is

dependant upon where one wants to work, the only general requirement is that people be present to learn. From the arctic to New York City to the Sahara desert, the number of possible locations for careers is endless.

David Sobel has recently developed the groundwork for a form of environmental education called place-based education. At its core, place based education seeks to connect students with their immediate environment in hopes to establish a well-founded rooted knowledge in local, familiar ecology. Through identifying with their local environment, students comprehend a basic-level of knowledge in the ecosystem in their area, and will be able to apply information and understanding to other areas of environmental studies in the future.

Educators are capable of working for the government, non-profits, private endeavors, self-employment, and many other venues. The two integral areas to examine when seeking environmental change with regards to education environmental are the role of local governing bodies and other non-governmental authoritative organizations. With emphasis on well-maintained local environments through regulation and community development, the establishment of environmental education can provide community members with better, healthier, and more sustainable living situations.

The current paradigm identified by focuses on both individual sense-making and collective decision process and under organizational context.

There is an aspect of fluidity within environmental education and who is qualified to teach as everyone should be encouraged to discuss environmental issues. Sometimes teaching opportunities are granted by institutions to professionals who aren't certified to teach in a classroom setting due to their high levels of experience within an

environmental field. Mr. Paul Burns holds the title Executive Director of Vermont Public Interest Research Group (VPIRG), a non-profit environmental advocacy group that has existed in Vermont since 1972. On the organizations website Paul is quoted saying, "When problems arise in our communities, Vermonters know they can turn to VPIRG for help." Executive Director is considered an upper-level job within a well established public interest organization. So with his experience in the field and other credentials Paul was more than qualified to teach a class in environmental activism. The diversity in educational opportunities is really only restricted by the mind and imagination.

Opportunities that lie within urban school settings and public policy reform which requires creating awareness and enthusiasm. One study done on the *Impact of Emerging Market-Based Public Policy on Urban Schools* concluded that the state government should play the main role in creating strategic partnerships to ensure a more collaborative relationship between those with conflicting ideologies in areas with concentrated poverty. The article concludes that given the uncertainty of market based approaches to public policy, changes should be measured and limited but always structured to ensure the integrity of a system of public schools that provide real educational guarantees for all students. (Ridenour, Lasley, Bainbridge, 2001)

Another article in the journal *Environment* examines the role of local governance as it relates to challenges a community faces in the global economy. The three suggestions the article concludes with are:

1. "Any discussion of poverty and environment must be posited within a political economy framework that focuses on the globalization process and its emphasis on the social relations of production and reproduction."

2. “Recognition that local authorities as the level of governance closest to the people, are able to play the pivotal role of educating, mobilizing, and responding to the public to promote sustainable development.”
3. “The issue of local governance has to be given greater emphasis in any program to reduce poverty and enhance quality of environment.”( Mabogunje, 2002)

The final article I’ll use to illustrate the emphasis being put on local governments in relation to environmental education is a study based in Taiwan that holds many parallels to the political and educational issues we are facing in the U.S. today. “Despite its many promises, devolved governance may pose great challenges to environmental conservation, especially in the context of newly democratized politics where local communities tend to be dominated by place-bound clientele networks that pursue developmental interests at the expense of conservation.” Developing countries are stuck somewhere between a hard place and a rock when it comes down to global economics and local development. In this case gravel extraction activities were “backed by local clientele networks of politicians and business interests.” This shows how “challenges of devolved governance can be addressed not necessarily by centralized authority but by connecting grassroots victims of environmental degradation with broader conservation movements supported by networks of civic organizations that transcend narrow geographical interests.”(Tang and Tang, 2004)

At the University of Vermont, new measures are taking place to ensure that the school becomes the leading environmental university. Passed in the spring of 2004 by the Student Government Association was the; “Resolution to Support Establishing Environmental Literacy Standards”: which states “Be it resolved that the UVM Student

Government Association supports that the University: 1. Offer more environmentally based courses within broader fields of study and integrate the environment into departments' curricula 2. Grant students the opportunity to take environmentally related courses by broadening distribution requirements to include such courses within department programs 3. Create a committee to serve the purpose of further implicating environmental curriculum into courses and maintaining momentum in continuing the efforts of creating a substantial environmental literacy standard" Many steps will be taken in the future to ensure that such initiatives are acted upon.

David Sobel focuses on adequate components within developmental environmental education and the need for specialized curricula within institutionalized education. "From Brattleboro, Vermont to Berkeley, California, school children are learning about tapirs, poison arrow frogs, and biodiversity. They hear the story of the murder of activist Chico Mendez and watch videos about the plight of indigenous forest people displaced by logging and exploration for oil. They learn that between the end of morning recess and the beginning of lunch, more than ten thousand acres of rainforest will be cut down, making way for fast-food, "hamburgerable" cattle.(Sobel, 1995)

Vermont standards in education are outlined in detail for educators across the state. Listed under the "Vital Results" section of this extensive list of educational standards and expectations for the classroom is "3.9 Sustainability: Students make decisions that reflect understanding of ecosystems and the relationships (ecological, economic, political, social) within then and an awareness that their personal and collective actions affect the sustainability of these interrelated systems." (Hudspeth, Class Handout)

*Beyond Ecophobia* illustrates clearly Mr. Sobel's concerns with the ethics and values of current generations "...in response whether he liked to play indoors or outdoors better, one fourth grader proclaimed, 'I like to play indoors better 'cause that's where the electrical outlets are.'"(Sobel, 1995) Sobel concludes that "What's emerging is a strange kind of schizophrenia. Children are disconnected from the world outside their doors and connected with endangered animals and ecosystems around the globe through electronic media."(Sobel, 1995) He then examines solutions of the past in educational development in hopes to apply them to the future. Mathematics programs were suffering in creating interest among students until they were able to revive their programs among youth by creative use of concrete materials to help kids apply math to life.

"Mathematics educators realized that premature abstraction was one of the major causes of math phobia among children in the primary grades. Unable to connect the signs and symbols on the paper with the real world, many children were turning off to math."(Sobel, 1995)

In finding answers to why apathy exists, one must figure out what contributes to the development of environmental values in adults. Louise Chawla of Kentucky State University reviewed the childhoods of environmentalists in her study entitled "Children's Concern for the Natural Environment." In many responses her interviewees attributed their commitment to the environment a product of adolescence spent outdoors. We can then suppose that, among adolescents, opportunities to go outdoors and experience nature can contribute significantly to their attitudes and values towards the environment.

When it comes to job benefits and rewards, there are many to be expressed. The first and most obvious reward that's accrued through education is the reward of teaching



someone something new. Although not a monetary or even measurable reward, one can find great satisfaction in creating knowledge and awareness in other people. Within K-12 education, teachers and administrators enjoy lengthy breaks during the spring, summer, and winter seasons. Working with young people is often a largely rewarding experience as an educator can greatly influence the mind of a child. Another sense of satisfaction one can gain is through activism in promoting environmental education. Again, non-profit organizations and working to change public policy are not high-paying jobs, but utilizing opportunities to change our world for the better can be a tremendously powerful life experience.

Mary Holland has a long list of personal accomplishments within the field of education. She got her college degree from the University of Michigan in 1976 which boasted the only naturalist program in the country at the time. Ms. Holland recalled in her experience of choosing a school that Antioch College in New Hampshire which now specializes in the area didn't even exist and the University of Maine was just developing a naturalist program. Within her career, she has worked under such distinguished titles as; Program Director at Laughing Brooks Educational Center and Nature Reserve, a member of the Massachusetts Audubon Society, the Director for Vermont Institute of Natural Science (VALS) Environmental Learning for the Future Program (ELF). She now works as a self-designed contractor in the field of environmental education. She explained that in her career path, the level of education required to work for places like the Audubon Society or other accredited organizations only a B.S. was necessary, but that now most likely Masters Degrees are expected. She mentioned that experience within the field was vital in getting her a job within the field. Ms. Holland volunteered 2 years for

Massachusetts Audubon Society under what would now be considered an internship program. She then went back to college and her B.S. from Michigan. When applying for a job at the Mass. Audubon Nature Center, Ms. Holland went in for an interview and the Director of Programs at the time told her during the interview “We need another girl around here like we need another hole in the head.” She instead resorted to volunteer work for the Center, and while doing so the Director of Programs became a serious influence in her life who she now considers a mentor of the past. This experience and network structuring over time accumulated and resulted in her working into the employment position she had desired. “Education and experience can be crucial to a career in environmental education.”(Russel, 2000)

Upon reflection of her lifestyle, Ms. Holland discussed that the pay was not great, but that the people in her field do what they do out of a love and passion for the environment and education. She explained that Vermont’s small community aspects of working in environmental education create an atmosphere of commonality in cause, she says: “They can tell if you’re in it for real.” David Sobel’s lifestyle reflects that of Ms. Holland’s as he also holds a great many job titles and affiliations while he lives with his wife and two children in New Hampshire. Ms. Holland also mentioned that once you have experience in the field you can organize your own programs and become self-employed creating programs, lectures, curriculum, and doing other entrepreneurial work. In her opinion environmental education usually involves travel due to outreach programs, state functions, etc. In summary of lifestyles and lifestyle choices she stated: “I’ll generalize and say most Environmental Educators I know have a simple lifestyle by choice.”

## Resources:

Baird, Frank B. Jr. Biophilia (1991) Arousing Biophilia: A Conversation with E.O. Wilson, Winter 1991 issue of Orion Accessed 11-06-04  
[http://arts.envirolink.org/interviews\\_and\\_conversations/EOWilson.html](http://arts.envirolink.org/interviews_and_conversations/EOWilson.html) Copyright © 1991-2000 The EnviroLink Network

Ridenour, Carolyn S., Lasley, Thomas J. II, Bainbridge, William L. The Impact of Emerging Market-Based Public Policy On Urban Schools and A Democratic Society. 2001 (34)(1) 66

Shepard, Dean A., Krueger, Norris A., (2002) An Intentions Based Model of Entrepreneurial Teams, Social Cognition, Entrepreneurship Theory and Practice, 27(2) 167-185

[http://www.vpirg.org/vpirg/\\_vpirg\\_top.html](http://www.vpirg.org/vpirg/_vpirg_top.html) VPIRG Homepage

Mabogunje, Akin Lo (2002) Poverty and Environmental Degradation: Challenges Within the Global Economy, Environment 44(1)8-18

Bridge, Gavin, Smith, Adrian, Guest Editorial Theme Issue: Intimate Encounters: Culture- Economy- Commodity (2003) Environment and Planning D: Society and Space 21(3) June, p.257 [www.envplan.com](http://www.envplan.com)

Class Handout: 08-11-04 Environmental Education: Hudspeth, Tom, Vital Results, Cultivating New Partnerships: Education for Sustainability Project, Draft Standards 8/18/99

Tang Shui-Yan, Tang, Ching-Ping (2004) Local governance and environmental conservation: Gravel Politics and the Preservation of an Endangered Bird Species in Taiwan. Environment and Planning A volume 36(1) January 173-189

Sobel, David (1995) Beyond Ecophobia: Reclaiming the Heart in Nature Education, Autumn 1995 issue of Orion Accessed 11-10-04 TheEnviroLinkNetwork,  
[http://arts.envirolink.org/arts\\_and\\_education/DavidSobel1.html](http://arts.envirolink.org/arts_and_education/DavidSobel1.html)

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