Making an Opportunity by Ignoring History

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The nuclear crisis, one of the many human and environmental crises resulting from the deadly tsunami, provides a unique opportunity for environmental education. Flooding, alteration of landscapes, shifting of the built environment—these and other important issues could be addressed through critical environmental education. The question is: can environmental educators overcome historical roles and expectations to become true advocates for good education about, in, and for the environment?

Following the tsunami and the resulting destruction, Japan entered a period of dealing with the crisis before beginning reconstruction and rebuilding through the Citizen's Disaster Relief Network Japan and the RQ Volunteers (RQ Citizens disaster relief network Japan, 2011). Starting in September, 2011, many efforts were initiated including workshops for local communities' recovery efforts, training seminars for restoration, and the recording of local wisdom through dialogues, sharing of traditions and culture. Ecotourism is being used to bring money into the region, along with philanthropic giving and development. There is currently a plan for reconstruction including a museum/visitor center, a Trails for Disaster Education effort, and construction of ten recovery centers (Yamada & Kobayashi, 2012). As Japan begins its work toward developing disaster prevention education, it might be wise to consider lessons learned elsewhere.

This paper will identify select historic events in the United States and the response of the field of environmental education. It will critically consider responses or lack of responses to environmental issues and resulting outcomes of action/inaction. And it will challenge environmental educators everywhere to thoughtfully reflect on how we should advocate for the environment.

Two Cases

Love Canal In the 1920s an excavation outside of Buffalo was turned into a chemical and municipal disposal site for several companies and the City of Niagara Falls. After 1953, the site was covered with soil and deeded to the Niagara Falls Board of Education. It was the late 1950s when homes were

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built in a development called “Love Canal,” adjacent to the landfill, even though the Hooker Chemical Company had records documenting what had been disposed there. There were 97 residences and a public elementary school in the development. Through the 1960s, complaints of odors and residues arose and during the 1970s, a change in the water table brought containers and leached materials to the surface of the soil cap (Herdman, 1978; EPA Region 2, 1981). In 1976, testing of the area began, but it wasn’t until 1978 when Lois Gibbs raised the alarm that the land was leaching toxic elements and creating health problems in residents and school children that the issue received local, regional, and national press (Center for Health, Environment & Justice, ND). Love Canal is often hailed as an important marker for accountability of past industrial practice and as a rallying point for citizen engagement in environmental health issues (Zaremba, 2004).

What was Environmental Education’s response? Love Canal, an issue of toxic waste and community health, was not included in mainstream EE as it was seen as political more than environmental. Activists, not educators, became the dominant voices leading to bifurcation of societal response to this issue.

In 1976, John Hug suggested that environmental educators wear “Two Hats” —one of educator and one of advocate for the environment. In this short piece, Hug argued educators should not impose their agenda on students. This sage advice came to be interpreted as “we cannot be activists. We cannot advocate.” Today, there is fear among environmental educators around advocacy—even when advocacy is legal, appropriate, and necessary.

This fear paralyzes environmental educators. In the historic example of Love Canal, there was a clear separation between education about the issue and advocacy for human and environmental health. It was not EE that responded to an environmental issue that had tremendous impact on human health and well-being, but a homemaker frustrated with the lack of response on the part of government. Even during extended hearings on chemical dumping, there was no clear response from the EE community to challenge and examine like issues in other communities. Rather, it was the continual revelation by citizen groups that led to such movements as environmental justice which grew in the 1980s and 1990s to become more integrated into EE today.

The “solution” for Love Canal was political: the creation of the Superfund through the U.S. Environmental Protection Agency. As the report during the crisis from the US EPA Region 2 (1978) notes:

the lessons we are learning from this modern-day disaster should serve as a warning for governments at all levels and for private industry to take steps to avoid a repetition of these

tragic events...we must improve our technological capabilities, supplant ignorance with knowledge and be ever vigilant for those seemingly innocuous situations which may portend the beginning of an environmental nightmare.

What remains is the question asked metaphorically by Dr. Seuss in *The Lorax*: Who will speak for the trees? When environmental crises are pushing the limits of a society, is the role for environmental education to speak for the metaphoric trees?

Hurricane Katrina. Hurricane Katrina was the costliest hurricane to hit the U.S. in recorded history. That is, it was costliest in terms of loss and damage to human built environment. But is Katrina, Hurricane Andrew, Ivan, Charlie, or any of the others that are considered the worst disasters by economic standards (Epicdisasters, 2012) really the worst? The real question is to ask what metrics are being used for determining what is "worst." Rarely do we think of the long-term environmental impacts of a weather event. The focus clearly is on human impact, suffering, and recovery. Whether a flood, a hurricane, a tornado, a hailstorm, a blizzard—media surrounding any weather event remains on the humans and the impact on the built, and often significantly altered environment. Post-Katrina, one focus was on the impact on New Orleans, the city built in what was the natural delta of the Mississippi River.

What was Environmental Education's response? Educators used Hurricane Katrina as a tool to teach about weather, and how hurricanes happen.

There is a strong movement within the EE community in the US that subscribes to the need to provide hope, especially for children, in teaching about the environment (e.g. Hicks, 1998; Lueck, 2007; Wheeler & Bujer, 2000). Just as individuals who experience trauma can repress their emotional response or even the recall of the trauma, repression can also work on a societal scale (Staub & Green, 1992). Lifton (1982) introduced the concept of psychic numbing, or the tendency for a society to withdraw its attention from large scale experiences that were traumatic and current issues that are perceived to be of great risk. This is also true where acute uncertainty is heightened by high-consequence risks, or risks over which individuals have no control (Giddens, 1991). Repression and denial play major roles in people refusing to acknowledge the true state of the world, its suffering, and its peril (Walsh, 1992). Hope, many argue, is the anecdote to psychic numbing, especially for younger learners.

And while I agree that hope is necessary, there is danger in the avoidance of clearly understanding 1) the severity of various situations caused in part by human action, and 2) the limitations on any single

individual's behavior such as in climate change or in “disasters” caused by weather. Avoiding the hard messages can certainly lead to a shallow understanding of the human role in turning phenomena into disasters.

There are innumerable other examples of environmental education not addressing a situation directly, but reacting to the situation and avoiding the difficult, challenging, and frightening role of trying to balance the messages of hope, push-back, human role, empathy, social responsibility, and social reform.

Stages of EE in a Crisis

There are common factors in formal and informal education—including media—around natural phenomena that add intensity to the human-perspective of crisis. The “crisis life cycle” related to media coverage originally offered by Fink (1986) had four distinct phases: prodromal, acute, chronic, and resolution. To this, others added a second phase before acute crisis, that of probing or preparation (Barton, 1993). In order to frame traditional response patterns by EE, I suggest these five stages can be applied to the intentionality of education and communications of crisis. In many situations, these become default: the biasing of the crisis through language, increasing fear throughout the phenomenon, focusing on human adversity, focusing on human triumph, and then reverting to pre-crisis mode.

Prodromal: Shaping the potential crisis through language. Why is a flood, a hurricane, a tsunami, an earthquake, a tornado, or a volcanic eruption, to name a few of many, called a disaster? They are not disasters, they are natural phenomena. The challenge is that they often “interrupt” the lives of humans where they occur. If they occur in a remote place, they are not considered disasters because they are only affecting other animals, and plants, and landscapes. Language is a powerful tool in communicating about crisis and risk or in creating expectations and emotions. Environmental education can have a tremendous influence in shaping potential crises through how we choose to frame what it is we teach. Looking critically at systems, and how intervention in a system can alter the ramifications of anomalies is one role for EE. Perhaps a more important role is in challenging thinking about how humans engage with nature and how we can learn to work within natural systems to benefit human life and nature.

Preparation/probing: Growing the fear. The preparation/probing phase of crisis management is where the popular media focus far less on preventative management and safety than they do on images and stories immediately prior to and during an event. The drama of the event unfolding can be riveting and repeated images of the emerging or past, and similar phenomena can increase

anticipation, expectation, and dread. Conversely, they can also numb the intensity of the emotion. Media manipulation theories suggest the audience is powerless to resist persistent, pervasive, and emotionally sophisticated persuasions of an interlocking media-political-economic establishment; likewise, the media dependency hypothesis suggests media have the potential for significant influence because they are so central to the functioning of society and to an individual's ability to acquire information (Neuman, Just, & Crigler, 1992). Both these bodies of study suggest that the unfolding of a crisis can be tremendously shaped by how the media present the issue over the time the crisis is emerging.

The growing of fear is often void of responsibility or collusion in the tragedy to come. In one study of Spanish media, for example, the analysis revealed a focus on construal of high risk and on construal of politicians and nations as scapegoats with no responsibility attributed to consumers or other individual players such as corporations (Jensen, 2004). This finding is echoed in criticisms of government preparedness for the crisis to come while putting little or no onus on individuals or communities.

As a crisis is unfolding, environmental education could focus on needs assessments and community engagement in those areas under stress. Reducing unnecessary fear, replacing it with appropriate respect for natural systems including appropriate caution and fear, and critical examination of individuals' roles in adding to the potential impact of the phenomenon are potential roles for educators in the crisis area and beyond.

Acute: Human adversity. The acute cycle in crisis communications is the shortest and most intense stage of the crisis where the prodromal evolves into the actual crisis (Howell, 2003). One element following the fear-driven recounting of a natural phenomena and its impact on human populations is the human interest story of individuals or communities suffering loss. These are often heart-rending stories, dramatic photos, and sobbing survivors. The stories are designed to pull at our hearts and prompt us to feel compassion on one hand, and to secretly think "thank goodness that isn't me" on the other. In this stage, the necessary role for any educator is to be present to bring balance and appropriate emotion to the moment. Clearly, this is not the time to point out that rebuilding in a coastal area should be different now than it was in the past. Nor is it the time to discuss how indigenous cultures managed through such phenomena even without our technology for warnings, tracking, and assistance. This phase is one that must happen in a crisis, and at this stage the focus must be empathy for and with the communities, families, and individuals affected.

Chronic: Human triumph. The penultimate perspective is that human will and intelligence overcome

the natural disaster. Resilience is the ability of people and natural systems to rise above the moment, and to rebound from adversity strengthened and more resourceful (Walsh, 2006). Celebrating and honoring this resilience in the people most affected by a natural phenomenon is an important phase and one that must continue. There is an important role for environmental education as being shown in studies of resilience of humans, humans and natural systems, and nature (Krasny, Lundholm, and 2010). It is through this ongoing recognition of human ability to address crisis and change that there is hope.

Resolution: Return to pre-crisis mode. For organizations in crisis, resolution is when the situation no longer impacts the organization's operational environment or its publics (Mitroff, 1996). For generalized EE, it is when the issue is no longer the dominant topic, and the curriculum, program, or efforts of the educators can return to pre-crisis topics and programs. In the community most directly hit, there is no return to pre-crisis mode in the short term—there are changes to the landscape, the built environment, who is there, and who is not. But environmental generational amnesia (Kahn, 2011) plays out quickly as homes are rebuilt where and as they stood; communities are repopulated with businesses and residents and grounds are replanted. As populations change in time, only the most visible scars remain, and in a matter of two generations or less, even those become part of the new landscape and the crisis becomes part of the folklore or the mythology of the community.

What Does This Mean?

From hurricanes to floods and tornadoes, environmental education as a field has rarely proactively responded to the societal aspects of crises. Certainly some environmental organizations and education programs get involved. Post the oil rig collapse in the Gulf of Mexico, groups such as Audubon were highly involved in rescue, mitigation, and education efforts in Mississippi and Alabama, as one example. Yet, as a whole, the EE community remains segmented by topic, interest, and geography. Japan and members of the Japanese Society for Environmental Education have a unique opportunity to radically challenge the status quo of EE by becoming a driving force for change in the affected communities and their futures.

There are no easy answers. There are ways of moving past limits of traditional EE efforts and making systemic and systematic changes in response to crises. Community activism, community-based EE, urban EE, community education, radical education theory, liberation theology, feminist ecology, queer theory, and other areas of thought about meaningfully connecting people to physical and psychological spaces can inform the JSEE's choices. What will it take? It will take a radical and different response grounded in theory and practice in order to change how people respond to a crisis where a natural system interacts negatively and critically with a human constructed system. It is

possible if we pay attention to what historically was not done, as much as to what was.

What Do I Advocate?

I am speaking as an individual who has spent over 30 years in academia working with communities around environmental issues. An individual with tremendous passion about this work. But an individual—not a field or profession, not an institution or a think tank; and as an individual I want to challenge you, me, all environmental educators. I want us to become true advocates for the environment and how we, as humans, are part of this amazing system.

Yes, there are challenges, but our indigenous ancestors and our indigenous contemporaries live daily with those challenges and, in most cases, are far better suited to surviving them than are those of us in the lovely condominiums with beautiful views looking out over the ocean. Clearly, we cannot all ‘return to nature,’ but can we not learn from nature as our human ancestors did? Can we not learn to read nature, use nature, and exist with the challenges our home, this planet, provides us?

In this conversation I am intentionally avoiding discussion of human impact on natural systems including climate, but only because time and space cannot allow. Suffice it to say that regardless of how we positively or negatively affect these systems, we must still live within them.

And what do I believe is environmental education’ s role?

- To be honest.
- To speak not of disaster, but of crises and systems and our roles in these systems.
- To critically consider how we facilitate a phenomenon becoming a disaster through our own choices and actions.
- To challenge EE’ s engagement toward, during, and post a natural phenomenon that devastates a community or a society.
- To give people tools to change the future.

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