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John J. Lupinacci

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The Southeast Michigan Stewardship Coalition: A *Deep* Design of Eco-Democratic Reform
that is Situational, Local, and In Support of Living Systems

by

John J. Lupinacci

Dissertation

Submitted to the College of Education

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in partial fulfillment of the requirement for the degree of

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Concentration in Urban Education

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Dedication

I dedicate this dissertation to the man who introduced me to nature, to art, and to music; to the man who taught me that animals are our kin and that, above all, love and family will prevail and provide the necessary strength to challenge authority in the pursuit of justice and ethics. I dedicate this dissertation, an artifact of my education, to my father.

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Abstract

Education can have a tremendous impact on how we, as humans, understand and relate to each other and the larger environmental systems to which we belong. In efforts to address the role of education in alleviating and eliminating social suffering and environmental degradation in many of the worlds' diverse communities, the purpose of this critical ethnographic case study is to qualitatively examine the design of an intermediary organization within the context of eco-democratic reform.

The study involved observation, interviewing, and analysis that included personal narrative accounts from 12 key members in the organization and their thick descriptions of the design and function of the Southeast Michigan Stewardship Coalition (SEMIS). The study explores new territories for community-based collaborations and examines the complexity of such initiatives, while focusing on professional development and adult learning framed by an EcoJustice Education approach to place-based education.

The study illustrates the identity of SEMIS as a learning organization with a strong commitment to designing and providing sustained professional development in the region. The *deep* design of SEMIS offers insight into the structure and the complexity of the networks of learning relationships in this intermediary organization. Major contributions from this case study include a) an organizational history of SEMIS; b) an articulation and analysis of the SEMIS sustained professional development; and c) a unique learning model for the development of an eco-ethical consciousness. The study presents the examination and analysis of a unique intermediary organization in the context of eco-democratic reform and illustrates both the design and the complex approach to the work in SEMIS.

The study provides insight into the complexity of partnerships between universities, community organizations, schools, and teachers in the context of a paradigm shifting espoused theoretical framework. The information in this study can provide insight for other organizations as well as a base for future research to understand EcoJustice Education, place-based education, and teacher learning in the context of eco-democratic reform.

Keywords: eco-democratic reform, EcoJustice Education, place-based education, environmental education, teacher learning, professional development, sustainability, social justice, eco-ethical consciousness, pedagogy of responsibility, ecological understanding

Preface

The kind of education we need begins with the recognition that the crisis of global ecology is first and foremost a crisis of values, ideas, and knowledge, which makes it a crisis of education, not one in education. (Orr, 2004, p. 126)

The major problems in the world are the result of the difference between how nature works and the way people think. (Bateson, 2011)

This dissertation is a critical ethnographic case study of the design of a unique intermediary organization in Michigan. The Southeast Michigan Stewardship Coalition (SEMIS) officially began in 2007, and it is their story that will be told in this study. I have had the privilege of not only researching SEMIS, but of also being involved in many capacities with them since their beginning. I have been a member of SEMIS since 2007, witnessing and participating in their growth for the past six years. Before introducing the voices of the participants that present what I call the deep design of SEMIS, it is important that I first introduce myself as a measure of self-reflexivity in an effort to present my positionality as the researcher in this study and as an EcoJustice educator in the organization. In this preface, I will introduce my personal and academic background and then briefly explain how I came to engage in this dissertation research and why SEMIS was selected as its focus.

My background is in education, and as a teacher it is important to me that the kind of education I am researching, writing about, and advocating for in this dissertation is also embodied in the research methods of this dissertation. Therefore, there are a few objectives

to this preface. One objective is to introduce myself as a researcher, a story collector, an author, and also a teacher. The type of education I will be describing in this dissertation requires that as a researcher, I strive to retell the stories of the participants and write their stories in connection with the contextualizing theoretical literature that not only supports their stories but also teaches the readers of this study. My second objective is to articulate and provide a context for an EcoJustice Education framework.

While in many ways the humans in this study come to forefront, the essence of this case study is to recognize the need for us, as humans in Western industrial culture, to rethink how we conceptualize our existence and recognize ourselves as embedded in, dependent on, and in relationship with a larger living ecological system. The idea that we are constantly in relationship with countless numbers of other living species in a complex interconnected set of living relationships is important for a reader of this dissertation to consider. One might even argue that this recognition, or learning to recognize and value this, is at the heart of this study. So, I would like to ask that you, as a reader, take just a moment to think or reflect on the “place” or “places” that have had a significant impact on who you have become as adults. Ask yourself: “What relationships with place have contributed to who I have become?” If you don’t mind, take just a moment before reading on, and reflect on the “place” that has come to mind. Hopefully you could describe this place and all the diversity of living and non-living things that contribute to what that place is, or what makes it different from other places. In fact, it is likely you could go on to explain how that place has impacted who you have become. In other words, you have opened up to the idea that our teachers are not always just the other human beings we learn from. While they are included in the learning process, knowledge is not simply something transferred between people. It is my hope that

as a part of your experience reading this study, there will be interactions between you, the reader, and the participants in the study mediated by me as the author, but within the context of our cumulative relationships within the diversity of influences that have played a significant role in shaping how we understand not only our existence but also the day-to-day relationships in which we engage. This is vital to our remembering and recognizing the ways in which both our human and the more-than-human teachers influence how we construct knowledge.

Having established those two objectives of the preface, I will share with you a bit about myself. I will start by sharing the places that come to my mind when I approach this research and my identity as an EcoJustice educator. The “places” that have and continue to influence who I have become as an adult are my home city of Detroit and the Great Lakes – particularly Lake Superior. These are two very different places, but both have taught me many things without which I would undoubtedly be a very different person. Being born and raised in Detroit, MI, a working class kid, I was exposed to and witnessed social injustice. Growing up I also spent a significant amount of time on Lake Superior, and so I developed a strong connection to what at the time I would have referred to as “nature.” So I was immersed in two places that would instill in me a passion for belonging to these communities and an even stronger passion for justice in relationship to the health and sustainability of the members of both of these communities. As a young person I was drawn toward activism and lived in two separate but similar worlds. I was heavily influenced by the overt classism and racism in Detroit and the surrounding area of Southeast Michigan and found myself involved in civil rights and union organizing as a young teacher. Simultaneously, I had connected with environmental activists who were working to protect wetlands and the green spaces that

were rapidly being lost to new construction. All of this came to a head for me in 1999, when the two worlds of activism melded for me, as friends from both the social justice groups and the environmental advocacy organizations began to organize and deliberate in Seattle, WA, to protest and shut down the World Trade Organization (WTO) meetings. All my life I had grown up hearing different viewpoints on Detroit's politics and economy, but it wasn't until this moment that I belonged to a larger network of activists who all seemed to understand that not only was capitalism a problem for social justice, but that capitalism, and many of its associated values and beliefs, was predicated on a set of cultural beliefs and traditions that perpetuated both social suffering and environmental degradation toward our possible extinction on this planet.

I was in the last year of my undergraduate education at Eastern Michigan University (EMU) and I can vividly recall that just prior to this moment I had taken a course with Dr. Martusewicz that explored the role education can play in teaching for democratic citizenship in diverse, socially just communities. Soon after, I became a teacher and was teaching high school in Detroit. I was learning on the front lines of urban education the injustices of schooling in connection with poverty, racism, and assumptions of ability rooted in a deficit belief that some people just didn't seem to matter in our society—and that a lot of my anger as a young man was a response to my experience as a member of this marginalized community. This realization led me back to EMU where I embarked on a degree in cultural studies in the Social Foundations of Education program with Dr. Martusewicz. It was there that I developed the critical and ethical skills to formally critique the injustices of schooling and identify associated discourses that were contributing to both social suffering and environmental degradation. Throughout my master's work, and while continuing to work as

an activist teacher in Detroit, I learned from other activists and community organizers how to foster learning that was rooted in the local relationships and strengthened the community. This work, in conjunction with my love for theory, led to my interest in working with scholarship in the fields of critical pedagogy and what was beginning to be identified as EcoJustice Education.

This approach to education manifested in the realization that Detroit—or any urban context, for that matter—was in fact a part of nature and that, no matter how buried beneath layers of concrete and concepts, we are always a part of nature. So it was at this point that I finally had the realization that my love for “nature” and my love for Detroit were in fact the same. I had a strong affinity to those places as communities I identified with and loved so much I would dedicate my life to their well-being. Also during this time as a student of the networks of activism in Detroit and while studying the impacts of neoliberalism on education and the globalization of Western industrial culture, I had the opportunity through working with Chet Bowers, Rebecca Martusewicz, and Jeff Edmundson to attend an international working conference in Leh, India, held at the Ladakh Women’s Alliance Center, called “Beyond the Monoculture.” That time in traditional villages and learning from international activists like Helena Norberg-Hodge and Vandana Shiva about pockets of local resistance resulted in the critical awareness of the impacts of globalization in connection with the role that education—or more accurately referred to as schooling—played in reproducing the cultural traps of the social injustice and environmental degradation. All of these experiences both informed and motivated me to work in a particular framework. However, my decision to return to EMU, enroll in the Educational Studies PhD program, and study more closely

with Dr. Martusewicz and Jeff Edmundson what it meant to teach using an EcoJustice Education framework reveals more of my positionality.

I position myself as a researcher with a critical and ethical framework from which, as an EcoJustice scholar, I strive to identify the role that education both plays, and ought to play, in transitioning toward diverse, socially just, and sustainable communities. As a part of the growing field of eco-democratic reform, I frame my research and work as critically and ethically:

1. Examining Western industrial culture and the impacts on social and environmental systems
2. Examining and identifying how to teach or share skills, and habits of mind, that support socially just and environmentally sustainable communities.

Using this critical and ethical framework, the position I hold as an EcoJustice scholar is that I work with others to examine how Western industrial culture has emerged from a specific set of cultural practices and historical events as well as how we can use this framework to inform action to address damaging or unjust effects of these deeply rooted cultural assumptions.

Take, for example, the assumptions that shape and guide us to accept social suffering and ecological destruction as “progress.” Or how these dominant patterns of thinking define success as the accumulation of goods produced through the exploitation and enslavement of our sisters and brothers, the more-than-human community, and the land and oceans.

For people like me—and quite possibly you, the reader—who are disciplined by industrialized Western assumptions of human superiority and individualism, this analysis highlights the importance of the complicated relationship between our language, how we think, and our behaviors, specifically those that undermine living systems and thus contribute

to social suffering and environmental degradation. Examining the role of education, and critically and ethically rethinking the role that education ought to play in our communities, has led me to become deeply concerned with the ways in which we have learned to treat each other in really awful ways. We have learned, as people in Western industrial culture, to live within illusions of being separate and superior to nearly everything with which we come into relationship. We need a very different paradigm for how we make sense of the world and through which we can learn to co-exist on this planet.

It is from that position, as an EcoJustice educator, that I wanted to explore and better understand how folks interested in this type of educational reform engaged in partnership work between University faculty, community organizations, and schools and teachers to work toward education that fosters socially just and sustainable communities. Having been involved in SEMIS since 2007, the opportunity arose for me to take on a different role in the organization and transition from graduate assistant providing support to primarily the development and administering of professional development to researching the history and design of the organization as a graduate researcher. Having been with the organization as long as anyone in the group, I had access to six years of archived materials and established working relationships with all the members of the organization. This positioned me as able to connect and build trust with all of the participants in the study in a way that would have taken someone else much longer or might not have ever been possible. The position as a researcher conducting what Glesne (1999) refers to as “backyard research” required that I discipline my subjectivity and at times identify and bracket relationships in SEMIS. While it presented the difficulty of often having to sort through transcribed verbatim that drifted from the topics of research, I have found that my having been present for some of the events

shared by participants helped recall their experiences from memory without me even needing to ask. In many ways the interviews were very conversational and often required a certain level of socializing, or catching up on what's been going on since we had last worked together.

Because of my background in cultural studies, critical ethnography was a natural fit for me. Due to my training in oral history and interest in non-author saturated storytelling, I decided I would tell the story of SEMIS as a case study of the design of SEMIS and that I would use critical ethnography and oral history to present that story. Identifying emerging discursive themes, I conducted genealogies in order to provide historical context, and used exemplaric verbatim from interviews to illustrate how specific concepts functioned for the participants in relation to their own understandings and social locations. Specifically what I do in this research is trace the roots of the organization and communicate their design through (a) interviews of current and past key members of the organization, (b) observations of the structure and function of the organization, and (c) the identification and analysis of documents archived by SEMIS. Further I analyze the interviews in triangulation with observations, artifacts, contextualizing literature. The overall approach that I take to this research is that I am setting out to tell the story of the organization in order to illustrate a design model transferable to other organizations interested in a similar approach to rethinking education. I illuminate themes that emerge from the thick descriptions (Geertz, 1973) in the story of SEMIS. All of this is to tell the “thick” story or the deep design of the organization.

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Chapter 1: Introduction

In the early 2000s, I was an urban educator in Detroit, Michigan. Here I perceived something disturbing happening in the schools and in the community. Schools were engaging in what I found to be profoundly abusive practices and were reproducing oppressive relationships that made racism, sexism, classism—to name a few—seem inevitable or natural. I witnessed trends in schools, such as high-stakes standardized testing, zero-tolerance policies, and Eurocentric academic content that ingrained and reinforced assumptions of human superiority in many teachers and students. Whether it be assumptions of humans as superior to all other species or certain groups of humans as superior to others, the pervasiveness of framing inequality and unjust suffering as a part of natural evolution or as “human nature” fails to address the historical, socio-political influences on how we perceive ourselves in relationship to one another and the world upon which we depend for life. It became evident to me that being in “school” meant learning to function within and submit to the authority of an institutionalized culture of abuse and exploitation. The industrial model of teaching currently pervasive in schools poses severe problems to the health and wellbeing of our communities as it instills and perpetuates cultural habits of human-centeredness, social inequality, and an acceptance of exploitive economic systems. Schools are preparing students for roles in communities shaped by individualism and consumerism at the expense of healthy social and environmental relationships.

Despite this raw exposure to life for so many students and teachers, there are many efforts in educational reform actively engaging in the reexamination of the meaning and purpose of education. In order to challenge industrial models of schooling, we need educators who are able to critique and respond to the destructive consequences of Western

notions of progress, hierarchical value systems, and individualism (Martusewicz, Edmundson, & Lupinacci, 2011). Our students need mentors to guide them in the exploration of cultural habits of mind and the ethical evaluation of which of these habits support local living systems and ought to be sustained, and which undermine living systems and ought to be minimized or eliminated. There is a great need for teacher education that fosters critical and ethical learning. I hold the position that in this critical moment in history, we need a major shift in how we perceive and interact with the world. If there is any action that can bring about this shift peacefully and with as little unjust suffering as possible, then we ought to explore it and every other potential opportunity for positive change. In this research, I introduce a reform effort, grounded in EcoJustice Education, that explores the potential and power of decentralized, sovereign communities.

More specifically, this research examines the design and implementation of the work of the Southeast Michigan Stewardship Coalition (SEMIS) in its effort to “facilitate school-community partnerships to develop students as citizen-stewards of healthy ecological-social systems” (<http://semiscoalition.org/>). While SEMIS engages with teachers and students on many levels, this critical ethnographic case study closely examines and sets out to communicate the complex design of this unique organization. This study examines how SEMIS, as a local intermediary organization that draws from research in teacher professional development and school change through an EcoJustice Education framework, engages in efforts to support a transition toward socially just, sustainable communities.

Intermediary Organizations: Fostering Agents of Change

For many progressive educators there is a call to action to identify the role that education plays, and ought to play, in transitioning toward diverse, democratic, and

sustainable communities. For the educators and community activists working within SEMIS, there is great concern with the destructive influences of industrialized Western culture on the health and well-being of the diverse communities in Southeast Michigan, the Great Lakes region, and the global ecosystems to which we all belong. On an organizational level, this concern informs the ways in which SEMIS engages in ethical decisions about how to responsibly educate teachers, and this task is approached from two main fronts. First, this organization assists educators in identifying how industrial Western culture influences how we, as members of a community, think and act. Second and simultaneously, SEMIS works to support teachers in the development of ecologically and socially responsible pedagogy. These objectives, however, are much easier said than done, especially when working through longstanding Western structures such as schools and universities. These institutions play the complicated role of being both crucial to the maintenance of status quo while also providing potential spaces within which educators can resist and respond to the undermining of healthy, sustainable communities. As an intermediary organization, SEMIS sets out to engage educators in a network of relationships framed by EcoJustice Education theory to offer support in the development of curriculum, instructional practices, and community partnerships.

An intermediary organization can be described as any organization that operates between policy—or any set of principles—and implementers—or in the case of this research, educators. Typically, intermediaries—a term used to refer to intermediary organizations—are local organizations that work in support of a wide variety of community needs and are often framed by social welfare, public health, and educational policy. These organizations operate in a supporting role, often in the form of funding and professional development for

those providing direct services within the community. Intermediaries are defined by the American Youth Policy Forum (AYPF) as local organizations that engage in one or more of the four following tasks:

- 1) Engaging, convening, and supporting critical constituencies;
- 2) Promoting quality standards and accountability;
- 3) Brokering and leveraging resources; and/or
- 4) Promoting effective policies. (Blank, et al., 2003, p. 3)

Research published by Meredith Honig (2004) titled “The New Middle Management: Intermediary Organizations in Education Policy Implementation” explains how the term “intermediary” is often assigned to organizations that provide professional development. Her work analyzes how intermediary organizations play a role in educational policy implementation and identifies conditions that constrain or enable intermediary organizations in carrying out their work. Honig’s work to clarify what constitutes intermediary organizations, combined with her work to situate intermediaries in relationship to theories of organizational ecology, draws from Berger and Neuhaus’ book *To Empower People: The Role of Mediating Structures in Public Policy* (1977) to define intermediary organizations. Honig (2004) explains:

Intermediaries are organizations that occupy the space in between at least two other parties. Intermediary organizations’ primary function is to mediate or to manage change for both those parties. Intermediary organizations operate independently of these two parties and provide distinct value for those parties beyond what the parties alone would be able to develop or to amass by themselves. At the same time, intermediary organizations depend on those parties to perform their essential functions. (p. 4)

While research on intermediaries provides an important context for understanding SEMIS, it is also important to recognize the ways in which the approach of SEMIS is grounded in organizational case study research on whole school educational reform. In *School Reform Behind the Scenes*, McDonald et al. (1999) present the story of how four of the largest—and most widely documented as successful—organizations engaging in educational reform in the United States formed a partnership called the Authentic Teaching, Learning, and Assessment (ATLAS) program. McDonald et al. (1999) present four case studies of the Education Development Center (EDC), School Development Program (SDP), Harvard Project Zero (PZ), and Coalition of Essential Schools (CES) to illustrate how the unique partnership known as ATLAS works toward whole school reform that is derived from research and the experiential knowledge of positive change from the organizations' senior staff. This educational research situated in teacher learning and educational reform (Shulman, 1987; Darling-Hammond, Wise, & Klein, 1997; S.Lieberman & McLaughlin, 1992; Lieberman & Grolnick, 1996; Lieberman, 2000) explores how reform efforts with a desire to improve education and change the state of schools often function within complex design structures. McDonald & Klein (2003) further make the argument that these efforts emerge from networks of experience and knowledge among the leaders of several organizations. Drawing from this foundational research, it is my intention to examine the complexity of the networks of relationships in eco-democratic reform, and more specifically in SEMIS, as they contribute to an understanding of the complex nuances informing the design of the organization. Whole school reform efforts, like those noted above, have a rich history in educational collaboration supported by organizations that recognize the importance of providing an environment that supports the translation of personal relationships into

organizational action. SEMIS works to provide support for reform through sustained professional development and as an intermediary that identifies as a “learning organization.”

Organizational Design Theory

The concept of a “learning organization” belongs to a body of work that grows out of studying organizational design, and more specifically organizational learning within the design of a group. While several studies have been done to understand and describe learning organizations, the approach that I will take in examining the themes in this study can be traced through the work of Donald Schön, Chris Argyris, and Peter Senge. Schön (1973), a philosopher and recognized researcher on the development of reflective practices in organizations, introduces the notion of “the learning society” in *Beyond the Stable State*. Schön presents the important notion that learning experiences in any organization are likely to be occurring in a constant state of change. Schön (1973) explains:

The loss of the stable state means that our society and all of its institutions are in continuous processes of transformation...we must, in other words, become adept at learning. We must become able not only to transform our institutions, in response to changing situations and requirements; we must invent and develop institutions which are “learning systems,” that is to say, systems capable of bringing about their own continuing transformation. (p. 28)

Building from this commitment to examining the need for learning systems in organizations, Schön partnered with Chris Argyris at MIT where they worked together to study organizational learning. In *Theory in Practice: Increasing Professional Effectiveness* (1974), Argyris and Schön make the argument that people construct mental maps in regard to how to act in social situations and that these mental maps, or theories of action, are often asserted in

place of the espoused theories held by a person or organization. They explain: “Theories of professional practice are best understood as special cases of theories of action that determine all deliberate behavior” (p. 4). In other words, Argyris and Schön propose that there exists a perceptual separation between theory and action.

Argyris and Schön (1974) suggest there is a gap between theory and action and explain this by articulating that in any situation there are at least two theories of action involved: a theory-in-use and espoused theory. The difference between these two theories of action can be understood through the simple example that when a person is asked how they would act in a situation, their answer is often their espoused theory. When asked what one would do they reply with their espoused theory of action or what they think they would do according to a set of beliefs to which they are committed. Argyris and Schön explain that while one articulates an espoused theory of action in the situation, their espoused theory is combined with, or even overridden by, what they call theory in use. In other words, the espoused theory is complicated by the situational context of an event in which the espoused theory or the map a person might identify as shaping his or her actions is often influenced by a more dominant map or set of influences on the resulting action. Argyris (1980) in later research adds that it is often the case that very few people are aware of any theories or maps that influence their actions. For an organization, the implication of this perceptual separation lies in the potential impact of the members’ espoused theories on theories of action.

Any organization may have what they articulate as their theory of action, but there are also the theories in use or the theories of action as they emerge as a collection of the group’s articulated awareness of the maps guiding the theory building process. In other words, organizations like SEMIS are constantly participating in theory building through the

examination and evaluation of what Argyris and Schön identify as “theories-in-use” or the theories that are implicit in what members of an organization do as practitioners (1974).

Theories of action are socially constructed and emerge as a combination of how members engage as practitioners in an organization and how they describe what they do when called upon to speak of their actions to others. The work of Argyris and Schön brings an important contribution to this study because their work closely examines how a learning organization is influenced not only by espoused theories of action, but also by a larger set or map of cultural influences.

Another important contribution from Argyris and Schön (1978) is the assertion that learning involves both the identification of errors or dilemmas and then the correction of such. They introduce the concepts of single and double-loop learning in which the latter is more than simply responding to an error and fixing it. Argyris and Schön present that double-loop learning is when additional attention is given to the cause of the problem or error. Argyris and Schön (1978), describing single and double-loop learning in an organization, write:

When the error detected and corrected permits the organization to carry on its present policies or achieve its present objectives, then that error-and-correction process is *single-loop* learning. Single loop learning is like a thermostat that learns when it is too hot or too cold and turns the heat on or off. The thermostat can perform this task because it can receive information (the temperature of the room) and take corrective action. *Double-loop* learning occurs when error is detected and corrected in ways that involve the modification of an organization’s underlying norms, policies and objectives. (pp. 2-3)

Peter Senge (1994), a student of Argyris and founder of the Center for Organizational Learning at MIT, introduces the concept of a “learning organization” as:

Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. (p. 3)

Senge’s effort to build upon the aforementioned work of Argyris and Schön takes the position that all people have the capacity to learn, and that the structures in which learning is taking place are not always supportive of the type of reflection necessary to shift actions. He asserts that organizations committed to rethinking and imagining their future require a fundamental shift in thinking from their members that comes from belonging to an organization with such commitment.

Senge (1994), articulating different types of learning, explains that for strong learning organizations it is not enough to simply engage in single-loop learning or what he calls “survival learning,” which is accompanied by the resulting “adaptive learning” (p. 14). While he explains it is necessary for an organization to identify needs for survival and adapt accordingly, it is paramount for a learning organization to engage in what he calls “generative learning” (p. 14)—or our collective capacity to engage in learning that enhances our creativity. He acknowledges that learning organizations can be distinguished from typical organizations through their commitments to the convergence of five dimensions: Systems thinking, personal mastery, mental models, building a shared vision, and team learning (Senge, 1994). In summary, Senge articulates that learning organizations provide

the experiences that recognize participants as agents of change—as capable of learning to think and act differently and to rethink the structures and systems in which they are a part.

Whole school reform efforts, as they are engaged in by organizations that fit Meredith Honig’s (2004) definition of an intermediary organization, are influenced by the organization’s theory or theories of action. The ideal result is an organizational theory of action that can be observed or derived qualitatively from understanding the espoused theories of the people influencing the design of the organization. In this dissertation, I examine SEMIS as an intermediary organization working to align their espoused theory of EcoJustice Education with teacher professional development, as they offer a unique design model that builds upon existing research on learning organizations, specifically adult learning organizations and teacher learning, through an intermediary organization with the goal of educational reform.

An intermediary organization, such as SEMIS, has the potential to provide a valuable service in terms of professional development aimed at supporting diverse, democratic, and sustainable communities. SEMIS is a grant funded organization rooted in EcoJustice Education. SEMIS has the following guiding principles:

- A strong and viable Great Lakes ecosystem includes human communities nested within and interdependent with other diverse living systems including water, soil, air, plant, and animal species.
- Stewardship of the Great Lakes in S.E. MI is defined by the ability to connect with and protect one’s “place.” This requires collaboration with others, recognizing connections to larger economic and political systems, and understanding the impact of human cultures on the ecosystems in which they are nested.

- Human cultures create beliefs and behaviors that affect social and ecological systems. Thus, social and ecological justice is interrelated and must be addressed together.
- A sustainable S.E. MI depends upon diversity—both human and ecological—and is thus best served by strong democratic and collaborative systems. (SEMIS, 2011a, p. 1)

This intermediary organization works from the above principles, influenced by EcoJustice Education, to foster the development of educators who work to shift culture in their own lives, their classrooms, and in the lives of students and families. EcoJustice Education, as a theoretical framework, plays an integral role in framing how SEMIS approaches teacher development and adult learning.

Introducing an EcoJustice Education Framework

Education, more specifically the social institution of modern schooling, plays a key role in creating and reinforcing how we, as humans, understand and interpret the world. Learning relationships, both inside and outside the formal classroom, are shaped and influenced by culture's impact on values, patterns of thinking, behaviors, constructed environments, decision-making, and, most importantly, by how we relate to each other and the more-than-human world. Educational theorist C.A. Bowers (1993, 1997) asserts that education, more specifically educational reform, is rooted in a long history of thinking and behaving according to specific cultural traditions. The historical, socio-political influence of educational reform plays a vital role in understanding the manner in which the languaging process carries forward and preserves patterns of thinking. The ways in which these traditions reinforce unjust suffering on the planet as they lead to human instability has become a major impetus for the development of EcoJustice Education. EcoJustice is defined

by Martusewicz et al. (2011) as: “The understanding that the local and global ecosystems are essential to all life; challenging the deep cultural assumptions underlying modern thinking that undermine those systems; and the recognition of the need to restore the cultural and environmental commons” (p. 20). Central to an EcoJustice framework is the importance of recognizing the differences between ecologically-centered cultures and dominant individual-centered cultures. Bowers offers examples of approaches currently being integrated into educational reform that call attention to non-Western ways of knowing as an approach to recovering our senses and recognizing our membership within the local ecological communities to which we belong (Bowers, 1993, 2006, 2011). Bowers’ efforts to call attention to language, culture, and education consistently highlight Gregory Bateson’s idea that as a modern culture, “our survival depends upon a radical transformation of the dominant patterns of thinking in the West” (Bowers, 2011, p. 13).

Understanding how language influences culture and the ways in which culture influences language is essential to understanding how we conceptualize and implement educational reform. Understanding the language/culture relationship allows for the examination of how Western culture has emerged from a specific set of cultural practices and historical events, as well as the need for educators to take action to address these deeply rooted cultural assumptions. EcoJustice educators build upon key contributions from Bateson that frame what has developed into an astute analysis of what are referred to as “discourses of modernity.” Martusewicz et al. (2011) draw from postmodernism and ecofeminism to define “discourses of modernity” as “the specific set of discourses that together create our modern, taken-for-granted value hierarchized worldview” (p. 86). The critical examination of these discourses, or shared cultural meanings, is complex and allows

for the multidimensional analysis of language and culture in connection with taken-for-granted assumptions regarding what is valuable, what is worthless, and how these concepts are applied. The analysis of superior/inferior dualisms allows EcoJustice theorists to identify a powerful group of discourses that form metaphors that dominate how we, as subjects in a modern era, interpret difference and construct meaning. These discourses of modernity consist of individualism, mechanism, progress, rationalism/scientism, commodification, consumerism, anthropocentrism, androcentrism, and ethnocentrism (Martusewicz et al., 2011). For those of us disciplined by modernist assumptions of human superiority and individualism, the analysis of the aforementioned discourses allows for the examination of the relationships between our language, how we think, and our behaviors that undermine living systems. These powerful discourses contribute to the ever-growing ecological crisis—a crisis that Bateson and Bowers help EcoJustice educators to identify and understand as a cultural crisis.

EcoJustice educators recognize how language shapes culture and that culture is understood by how we interpret the “differences that make a difference” (G. Bateson, 1972, p. 315; Bowers, 2011). In other words, we are bound by the metaphors of our language. This distinguishes EcoJustice Education from other pedagogical approaches that engage in a deep analysis of culture without consideration of language and the historical roots of the patterns shaping how we think and act. Language is a process that carries forward ways of thinking from the past. This is significant in that all languaging processes, which include past ways of thinking, are framed by and reproduce the assumptions of the culture. For example, Bateson (1972) writes about the way Cartesian thinking and Occidental—or Western—assumptions create the illusion of a separation existing between mind and

environment. Bowers writes about root metaphors and the master metaphorical templates in reference to how metaphors in an industrial culture differ from metaphors for a sustainable culture; and Martusewicz et al. (2011) explain how the ways that we identify and behave are created through discursive patterns rooted in language that “are complex exchanges of meaning that use metaphor” (p. 66).

Western culture is defined by the languaging processes being passed on, and includes deeply embedded assumptions like anthropocentrism, ethnocentrism, androcentrism, and other life-threatening centric discourses that come from mytho-poetic narratives and prominent “attitude” changing experiences—to draw from Bateson’s criteria for naming major historical cultural events (G. Bateson, 1972). The codes of these mytho-poetic narratives and prominent experiences are embedded into metaphors—and more specifically, root metaphors. These root metaphors work together to shape discourses that provide the framework of a culture. They are passed on generation to generation, having great influence on values, problem solving, habits, and traditions. Through primary socialization, we are shaped by the mytho-poetic narratives, which shape the prominent experiences of our generation (Bowers, 1993).

It is important to address the ways in which we are shaped by language because of its role in discourse as influencing what is marginalized or silenced by dominant root metaphors. Educators using an EcoJustice Education framework emphasize how industrialized Western thinking, and the habits it shapes, contributes to a culture of social violence and ecological destruction. By examining the ways in which language works, Bateson (1972), Bowers (1993, 2011), and Martusewicz et al. (2011), suggest that we ought to work toward alternative root metaphors that replace modern discourses with life sustaining discourses that

are rooted in ecology rather than the Cartesian individual. This is difficult work due to “primary socialization,” or how we learn by internalizing our interpretations of the world through language and experience, especially when experiencing something for the first time (Bowers, 1993; Geertz, 1973). In other words, we learn in relationship to the discursive practices of the culture within which we are embedded. What we learn is governed by the dominant discourses of our culture. Since this learning begins as early as birth, or arguably before, the process of interrupting or rethinking what we learn through primary socialization is by no means an easy task. However difficult it may be, if we can interrupt the dominant modernist metaphors with life sustaining metaphors, then our anthropocentric culture has the opportunity to become an ecological culture defined by metaphors of interdependence that are supportive of perceiving the individual as an embedded member of the larger, complex ecological system.

Bateson contributes key ideas that are foundational for understanding how culture reproduces meaning through the same patterns of thinking that are contributing to both social and environmental injustice—the ecological crisis. Key ideas from Bateson include work to expose the false notion of an autonomous individual and present how information is part of a complex recursive communication system. Bateson (1972) highlights the importance of recognizing how “differences...make a difference” (p. 315) and how Alfred Korzybski’s statement “the map is not the territory” (Korzybski in G. Bateson, p. 455) emphasizes how human languages in the West reproduce the illusion that humans are separate and superior in relationship to the larger ecological system with which they are in constant communication. Most notable is Bateson’s concept of an “ecology of Mind” which builds from the aforementioned key ideas to present the view that the “mind” is actually a recursive

communication system that generates meaning from differences—or “differences that make a difference.” This recursive system of differences describes the complex communicative system that emerges through interactions and relationships with other humans and the more-than-human world (G. Bateson, 1972, p. xxiii). In other words, everything we know is relational. Acknowledging the relational nature of how we, as humans, construct meaning, EcoJustice educators examine the cultural assumptions influencing how meaning is constructed from interpretations of observed and experienced differences.

EcoJustice Education focuses on learning that includes, but is not limited to, the learning that takes place in schools. It provides a framework for teachers to address the consequences of current cultural habits destroying the world’s ecosystems and each other, and helps them learn to facilitate the exploration and implementation of habits that support diverse, democratic, and sustainable communities. EcoJustice Education not only responds to the accelerating degradation occurring in natural systems but also takes a critical, historical, and socio-political lens to the human practice of privatizing and commodifying community resources, also known as “enclosure.” These practices often result in the systematic denial of living systems’ right and ability to renew. It also identifies these enclosures as fundamentally linked with social suffering and injustice. EcoJustice Education critically and ethically examines the intersection of ecological degradation and unjust social suffering.

EcoJustice Education further seeks to bring forth and strengthen an ecological cultural analysis that engages, among other themes, the importance of examining the intellectual, environmental, and cultural practices and traditions in regard to how they either support or undermine living systems. This approach to education takes place within

collaborative learning settings with attention to language, the impact of enclosure on sustainable practices, and the development of necessary community collaborations.

EcoJustice Education addresses the powerful role that our culture plays in the development of our selves, our values, and our relationships.

The Historical Dimensions of Culture: Scholarship Framing EcoJustice Education

The historical dimensions of culture must be taken into account when examining culture in the present. Everything we as humans think has roots in a complex set of historical events and discursive practices. All present interpretations are based on the past and have implications for the future. Given that our histories play a significant role in how we think and act, EcoJustice Education requires that we engage in a “historical ontology of ourselves” (Foucault, 2010, p. 45). It requires that we, as humans, examine how and why we think and act the ways we do. For some, history is a subject, for others a hobby, but for all of us, whether we acknowledge it or not, history is underwriting the narrative of our lives. With every move we make as subjects of and in modern society, we are caught in a tangled web of discourses that have a very specific history—a socially constructed or created way of living.

Human identities shaped in Western culture have become all too familiar with abusing ourselves, each other, and the more-than-human world through a languaging process that works to naturalize a perception that the atrocities occurring all around us are just the “way it is.” Furthermore, the dominant beliefs that emerge from this languaging process gained significant power in Europe during the fifteenth through eighteenth centuries and extend into today’s society. Most notable of these beliefs to EcoJustice educators is the perception that humans are separate from and superior to the natural world. This has come to be seen as a dominant definition for how people in Western culture perceive themselves and

each other as human (Plumwood, 2002). Abusing the land and all earthly beings that inhabit the land has come to be accepted as just what humans do. EcoJustice educators work with members of the community to generate ideas that offer guidance in understanding how and why it is essential for educators to critically and ethically engage in strategies that reclaim living systems from dominant Western mindsets and restore our senses to an ecological intelligence. Scholars such as Derek Rasmussen, Michel Foucault, Carolyn Merchant, and Val Plumwood offer work that illuminates important connections between relationships, power, and culture. Their scholarship contributes to an EcoJustice Education framework that encourages and guides educators as they take the necessary steps towards ecologically informed direct action aimed at dismantling current dominant ways of understanding the world. Rasmussen (2004) writes, “It is incumbent upon Euro-Americans to study what we’ve done to ourselves and the world” (p. 12). By tracing the historical trajectory of Western culture through scholarship like that of Merchant (1983) in *The Death of Nature*, we can see the many ways in which Western European cultures have changed, shaped, and both sustained and destroyed life in the natural world over time.

EcoJustice Education recognizes how a distinct set of historical events rooted in colonization influences the perception, or cultural phenomenon, that some cultures require “rescuing.” Educators are people in positions of power in relation to students and often respond to injustice by reacting from the perspective that children require rescuing. In efforts to better understand this perception as a distraction from equitably addressing relationships locally, Rasmussen (2000) advises:

We believe that we are compassionate. We don't like to see suffering. The Buddha said: ‘Cease to do evil, learn to do good, purify the mind, that is the way of the

awakened ones.’ A couple of hundred years later, Hippocrates included a similar admonition in his

Oath: ‘First, do no harm.’

It seems as if our habit is to rush to do good without first ceasing to do evil. I think that's because the ceasing part doesn't let us maintain the fiction that we are the good guys.

Ceasing to do evil means staying home and addressing the men in suits behind iron fences who make the decisions that lead to dropped bombs, razed forests, drained rivers, or monetized and ‘literatized’ peoples thousands of miles away. (p. 3)

This is why questions asked by Derek Rasmussen, Michel Foucault, and ecofeminist scholars and activists provoke and inspire EcoJustice educators to know our history and its influence on how we are socialized into a very specific dominator mindset. The idea of “doing good,” or “rescuing” cultures perceived as less than, “undeveloped,” or “uncivilized,” has many educators, activists, and scholars caught in a trap of addressing the immediate injustice without seeing the roots of why unjust suffering continues or exists as a deeply rooted part of a dominant culture.

Michel Foucault’s work illuminates how we are disciples of discourse, disciplining each other while being disciplined as subjects. In Foucault’s (2010) essay *What is Enlightenment?* he concludes, “...the critique of what we are is at one and the same time the historical analysis of the limits that are imposed on us and an experiment with the possibility of going beyond them” (p. 50). In this piece, Foucault also raises the need to engage in a “historical ontology of ourselves,” (p. 45) asking these questions: “How are we constituted as

subjects of our own knowledge? How are we constituted as subjects who exercise or submit to power relations? How are we constituted as moral subjects of our own actions?” (p. 49).

Ecofeminism provides important insight into helping us look at how we might engage the above questions. Ecofeminist scholars connect the unjust suffering inflicted upon women with the subjugation and destruction of nature in patriarchal cultures. Karen Warren (2000) offers a specific starting point for the ecofeminist philosophy influencing EcoJustice Education: “The basic starting point of ecofeminist philosophy is that the dominations of women, other human Others, and nonhuman nature are interconnected, are wrong, and ought to be eliminated” (Warren, 2000, p. 155).

The importance of learning about other cultures resides in the need to not only understand ourselves as subjects but also to gain consciousness of how we exercise or submit to power relations. EcoJustice educators engage in this ethical process in order to understand how from positions of power others—and even sometimes ourselves—get excluded, homogenized, backgrounded, incorporated, and instrumentalized (Plumwood, 2002). So in many ways, for many of us as subjects, this is the historical understanding of how we think and act. In order for us to heal from both the atrocities we have experienced and inflicted upon each other and on the “more-than human world” (Abram, 1996), we first accept some often silenced historical truths followed closely with humility and an authentic reconciliation. We must know our history—understand how and why we think and act the way we do—in order to cease doing evil. Then we must learn to do good. While Foucault’s questions provide a strong foundation for the cultural analysis that is EcoJustice Education, ecofeminist scholars, like historian Carolyn Merchant and philosophers Val Plumwood and Karen Warren, bring a well-rounded feminist perspective to what Martusewicz et al. (2011) refer to

as an EcoJustice Education framework. In other words, if we are to critically and ethically understand our history, we must consider how patriarchy has provided a painfully obscure bias in favor of androcentric versions of human history.

Carolyn Merchant's historical work to trace mechanism and rationalism to specific events and thinkers coming from the Enlightenment, the Industrial and Scientific revolution, and the rise of capitalism in Western Europe brings a perspective and insight to EcoJustice Education that traces modern dominant Western culture. Merchant's scholarship debunks the myth that domination is the natural evolution of humanity. Merchant (1983) in *The Death of Nature: Women, Ecology, and the Scientific Revolution* writes:

An ecosystem model presents an earth's-eye view of history. By looking at history "from the ground up," factors having an impact on the earth's resources can be analyzed and a new and different interpretation of historical change developed, based on the assumption that the natural and human environments together form an interrelated system. (p. 42)

Merchant (1983) further explains:

An ecosystem model of historical changes looks at the relationships between the resources associated with a given natural ecosystem (a forest, marsh, ocean, stream, etc.) and the human factors affecting its stability or disruption over historical time periods. (p. 43)

Merchant details a transformation in language and thought from organic metaphors for living systems to mechanized metaphors of domination that reduce living systems to lifeless machines and calls this transformation the "death of nature" (Merchant, 1983).

Ecofeminist philosophy, especially Val Plumwood's approach, offers insight into how important a feminist perspective is to the male dominated field of environmental philosophy. Plumwood (1993) writes:

People suffer because the environment is damaged, and also from the process which damages it, because the process has disregard for needs other than those of an elite built into it... As the free water we drink from the common streams, and the free air we breathe in common, become increasingly unfit to sustain life, the biospheric means for a healthy life will increasingly be privatised [*sic*] and become the privilege of those who can afford to pay for them. The losers will be (and in many places already are) those, human and non-human, without market power, and environmental issues and issues of justice must increasingly converge. (pp. 13-14)

This statement from Val Plumwood may be one of the strongest descriptions of the context within which EcoJustice Education is situated. While several environmental and social justice oriented educators offer arguments for the inseparability of social and environmental justice issues, no other scholar presents this as clearly as Val Plumwood. Her articulation of the role of ecological feminism as it contributes to male dominated environmental philosophy goes deeper than simply casting a positive version of woman as nature. She links the insight of feminism's ability to cast the likening of woman to nature in connection with a culturally constructed negative value for woman that hinges on a negative value for nature and seeing them as together less than human, or as less than the fully human male, as the basis for women's inferiorization and oppression. Most importantly, she does this with a historical understanding of how forms of domination emerge and shape our modern perceptions of relationships. She introduces an ecologically oriented feminism that acts as a promising lens

through which we might illuminate not only the domination of women but also the domination of the more-than-human world. Since the oppressed in modern society are in almost all cases feminized and naturalized, Plumwood (1993) suggests that through ecological feminism, we can perceive how value-hierarchized dualisms—superior/inferior dualisms like culture/nature, reason/emotion, mind/body, and man/woman—work discursively to marginalized women, other human groups, and nature. Plumwood maintains that these dualisms are inseparable from each other and from the root discourses that create and recreate oppression and unsustainable relationships. She examines how forms of centric thinking work to exclude, homogenize, background, incorporate, and instrumentalize life to create what Warren (1996) calls “a logic of domination.” Plumwood calls for ecofeminist philosophy to help guide us toward an ecological ethic and, drawing from the words of Rosemary Radford Ruether, shares: “An ecological ethic must always be an ethic of ecojustice that recognizes the interconnection of social domination and domination of nature” (Ruether in Plumwood, 1993, p. 18).

EcoJustice Education requires a commitment to ecological ethics in order to engage in recognizing the interconnectedness of both social and environmental suffering. Val Plumwood’s work brings to EcoJustice Education a framework for understanding how important an ecological ethic comprised of mutuality and relationality is to a cultural ecological analysis. Plumwood, and ecofeminists such as Ruether, Warren, and Merchant, offer perspectives that serve as guidance in how to navigate dominant discourses undermining life. Their work seamlessly weaves through multiple historical and androcentric philosophical attempts to address human and more-than-human suffering on the planet, highlighting strengths and weaknesses or flaws in those attempts as they illustrate

how dominant discourses, often in contradictory and hidden ways, work to shape approaches responding to environmental and social degradation.

Given this general overview of an EcoJustice Education framework, I would like to focus on the importance of developing an “eco-ethical consciousness” and “a pedagogy of responsibility.” Martusewicz and Edmundson (2005) developed the concept of an “eco-ethical consciousness” that takes into consideration the social and environmental impacts of decision making as inextricable from each other. They make explicit connections between this consciousness and teaching with what they referred to as a “pedagogy of responsibility” in a co-authored chapter in “Teaching for Social Foundations of Education: Context, Theories, and Issues titled Social Foundations as Pedagogies of Responsibility and Eco-Ethical Commitment” (Martusewicz & Edmundson, 2005).

This is important to the proposed research because at the core of the case study research being proposed is the a priori assumption that by engaging in the development of an “eco-ethical consciousness,” changes in teacher understanding, awareness, and practice will emerge. As a part of this development teachers explore pedagogies that challenge the status quo for teaching and learning through addressing life-sustaining connections between the local situated contexts of place and engaging in a local wisdom to strengthen community which result in the practice of a “pedagogy of responsibility.” Martusewicz and Edmundson (2005) explain that “a pedagogy of responsibility asks first to what and whom are we justly responsible?” (p. 84). In other words, through engaging in a transformational commitment to the development of an “eco-ethical consciousness,” teachers practice a “pedagogy of responsibility” which then creates a web of relationships in the community through which a cultural shift toward living in healthy sustainable communities becomes a reality rather than

a theoretical possibility. Martusewicz and Edmundson (2005) explain, “A pedagogy of responsibility looks for sources of moral authority in community traditions rather than individual judgment, while understanding that some traditions should not be maintained if they are oppressive, such as sexism, racism, and nationalism” (p. 84). Now that I have given an introduction to EcoJustice Education, the background is set for a research question that frames the following case study research.

Problem Statement

“How can an intermediary organization be designed to support diverse, democratic, and sustainable communities?”

Educators stand as vital agents of change in preparing future generations of citizens who cease to unnecessarily destroy each other and the rest of the natural world and usher in a cultural shift from a hyper-consumer, industrialized culture to an ecologically-centered culture. I am presenting a case study of SEMIS that examines the design of an organization with a commitment to EcoJustice Education that utilizes theories of teacher development (National Research Council, 2000; Darling-Hammond, Rosso, Austin, Orcutt, & Martin, 2001; Donovan, Bransford, & Pellegrino, 1999; Drago-Severson, 2004, 2008, 2009; Langer, Colton, & Goff, 2003) and organizational learning (Argyris, 2002; Argyris & Schön, 1974, 1978; Senge, 1994). This case study will not only introduce a theory of action for a unique intermediary organization but will also uncover a multitude of diverse influences that emerge through interviews that go deep into understanding the design. While it is not uncommon for case study research of organizations to focus on impact or effectiveness, this research documents the design of a unique intermediary organization with specific focus on member relationships. This qualitative research will focus on communicating the design of SEMIS by

documenting the organization through a set of methods that highlight the complex and diverse relationships in the organization and contribute what I refer to as a *deep* design of SEMIS. While this type of research will be introduced in a more detailed manner in Chapter 2, it is important to note that this approach to a case study provides a rich look into the inner workings of an organization through the articulations of the leaders. SEMIS, like most organizations, is composed of relationships that are complexly situated in a variety of socio-political and economic contexts. Thus, it would be irresponsible and even inaccurate to document the organizational design as separate from the perceptions of the participants shaping the organization. This case study research sets out to communicate the complex network of relationships essential to understanding how the structural design and the connected espoused theory of such an organization can inform the organization's approach to teaching and that supports the eco-democratic reform known as EcoJustice Education (Lowenstein, Martusewicz, & Voelker, 2010).

As established in the sections above, Western industrial culture shapes how we use language and perceive the world (Bowers, 1993, 1997, 2001, 2006, 2011; Bowers & Flinders, 1990; Martusewicz & Edmundson, 2005; Martusewicz, et al., 2011; Martusewicz, Lupinacci, & Schnakenberg, 2010). In other words, our social and ecological relationships influence our identities in powerful ways that work to shape how we make meaning in our existence. Given this context, it is imperative that teachers and teacher educators be aware of not only the effects of *what* they teach and *how* they teach, but also of the specific ecological context in which they teach. This requires that teachers, as adults who have formed strong habits of mind, commit to understanding the historical, cultural, and biological relationships impacting the ecological communities in which they live (Foucault, 2010; Martusewicz,

2001). Within this context, it is critical to address the question of *how* it is that teachers—adult learners—engage in the development of what Martusewicz and Edmundson (2005) call an “eco-ethical consciousness” and how that consciousness manifests in a “pedagogy of responsibility” (Martusewicz & Edmundson, 2005). The research outlined in this proposal will not only investigate the design of a unique intermediary organization but also employ a methodology that presents a critical ethnographic case study of the Southeast Michigan Stewardship Coalition (SEMIS). In order to examine SEMIS role as an intermediary organization in school and instructional reform as framed by EcoJustice Education, I will research the theories of action as they are articulated by key members of the organization.

Purpose of the Study: Eco-Ethical Inquiry to Action

The purpose of this study is not to communicate one grand solution from the story of SEMIS; rather I consider it an invitation to an ongoing conversation that openly works through the importance of understanding the diverse, situational influences affecting how we think and learn. More specifically, the purpose of researching the design of SEMIS is to better understand teacher learning and communicate a need for programs that support the development of both an “eco-ethical consciousness” and a “pedagogy of responsibility.” The conversation and questions generated by working through and responding to the organizations and theories influencing SEMIS puts the research in this proposal on the front lines of educational research. While there exists research on intermediary organizations, there is a considerable lack of transferable case studies that situate the work in theoretical frameworks that emphasize collaborative efforts to equip teachers and students with conceptual tools, introduced by Martusewicz et al. (2011) in *EcoJustice Education: Toward Diverse, Democratic, and Sustainable Communities*. The educators in SEMIS engage in a

critical and ethical framework, EcoJustice Education, through which they work to identify and dismantle the discourses causing social and environmental injustices that limit the possibility for diverse, democratic, and sustainable communities (Martusewicz et al., 2011).

Research Questions

The overarching research question that grounds the proposed study of SEMIS asks: “How does an intermediary organization grounded in EcoJustice Education engage in work aimed at fostering and supporting diverse, democratic, and sustainable communities?” This overarching question can be further understood through research that presents a case study of SEMIS that not only communicates the unique network of relationships out of which these efforts grow but also presents an emerging development framework for an “eco-ethical consciousness” and the related “pedagogy of responsibility.” The overarching research questions can be further clarified by a secondary question that sets a background for the work of SEMIS: “How can/does an intermediary organization work with adult learners to foster the development of an eco-ethical consciousness and a pedagogy of responsibility?”

Organization of Chapters

This study is intended to communicate the many layers and dimensions of school reform efforts rooted in EcoJustice Education. While there exists significant literature on the design and role of intermediary organizations working with schools and teachers, there is a dearth of documentation on such efforts situated within the movement that identifies as EcoJustice Education. Traditional approaches to communicating comparable work dominate the literature and tend to be focused on social justice and civic development. This study sets out to illustrate the design of an organization, SEMIS, as members of the steering committee seek to make explicit the inextricable connections between racism, sexism, class inequality,

perceptions of ability, and other forms of unjust violence that situate social oppression in connection with both environmental degradation and animal suffering. Further, this study seeks to illustrate the unique undertaking of SEMIS as it works through an EcoJustice Education framework with a commitment to identifying how these aforementioned forms of unjust suffering are a manifestation of ideological system that dominates Western industrial culture. This study addresses the need in educational reform, which includes the education of teachers, for support that fosters the development of both a critical and ethical consciousness in educators and their students.

This study seeks to provide insight for readers into how EcoJustice Education shapes educational reform efforts and the necessary structures for engaging such counter-cultural work while deeply embedded in institutional structures of Western industrial culture. The intended audience for this dissertation consists of socially and environmentally concerned educators interested in exploring how schools might offer or complement efforts towards socially just, sustainable communities. The focus of this work is not to demonstrate the existence of social suffering and environmental degradation, but rather to direct attention to the theories and practices enacted by a group of educators organizing and educating in response to the imperative of rethinking how we all might live together on this planet. First, it is important to clearly reiterate that this study is not set up to communicate one grand solution. This research is intended to contribute to the field of EcoJustice Education, as it is situated within a broader movement of eco-democratic reform. This research works to presents a case study that provides rich insight into the structural design, as well as the articulated strengths and challenges of SEMIS.

This chapter introduces the research and provides a brief overview of the study, SEMIS, and EcoJustice Education. It also introduces key definitions and presents summaries of the chapters. Chapter 2, “Research Design and Methodology,” begins by anchoring the study in critical ethnographic case study research and explains the methods for the study as emerging from critical ethnography, oral history, and case study educational research traditions. Given the interrelated nature of language, culture, and history in connection with power and ideology, Chapter 2 details the careful attention required to use research methods that both acknowledge and respond to the ethical importance of communicating a case study that authentically represents the work through the voices of those working within the organization. This chapter introduces what is referred to in Chapters 5, 6, and 7 as a *deep* design of SEMIS. Additionally, Chapter 2 transitions from providing a theoretical introduction to presenting a succinct description of the narrators and procedures in order to establish the respondents as the co-authors of the case study.

In Chapter 3, “Introducing the Steering Committee,” I introduce each of the subjects—which I am referring to as the narrators—in the study as a narrator contributing to the story of SEMIS. The narrators in the study serve SEMIS in a variety of positions within the organization, but they all share the common characteristic that at some point in the history of the organization they functioned as a member of the steering committee. This chapter provides a personal context from which the verbatim used in later chapters can be contextualized and situated through narrators’ perspectives, social positions, and the role they play or have played in the organization. The chapter ends with an author profile and self-reflexive statement that presents my location in relationship to the organizations history, EcoJustice Education, and the research that will follow in subsequent chapters.

Chapter 4, “A Pedagogy of Responsibility and the Development of an Eco-Ethical Consciousness,” provides an in-depth genealogy of the theoretical framework in relationship to specific concepts of “eco-ethical consciousness” and a “pedagogy of responsibility.” This chapter begins with by tracing EcoJustice Education as a theoretical framework that is situated within and grows out of a movement in critical theory and philosophy to consider the connections between language, culture, and history and the interconnectedness of social suffering and environment degradation in Western industrial culture. This chapter establishes the study as rooted in a very specific approach to education and to rethinking deeply rooted cultural assumptions about teaching and learning. Chapter 4 builds from the content introduced in Chapter 1 and goes deeper into how EcoJustice Education focuses on the critical and ethical development of responsible community-based educators. The chapter is important to the study because SEMIS identifies as an organization rooted in, influenced by, and committed to educating in accordance with an EcoJustice Education approach.

Chapters 5, 6, and 7 tell the story of the SEMIS organization in three parts in order to illustrate (a) the theory and structure of the SEMIS steering committee (Chapter 5), (b) the design and analysis of SEMIS sustained professional development (Chapter 6), and (c) the resulting themes articulated by members of the SEMIS steering committee (Chapter 7). Chapter 5 presents the ways in which members of the SEMIS steering committee have come to conceptualize and articulate the function and structure of the organization as a learning community. This chapter presents SEMIS as a learning organization and describes how the steering committee functions to provide sustained professional development.

Chapter 6 draws from the perspectives of the SEMIS’ steering committee to present a composite articulation of SEMIS’ design for sustained professional development. This

chapter presents the overall scope and sequence of professional development and support designed and offered by the organization to members of the coalition. Chapter 6 elaborates on the sustained SEMIS professional development and introduces a theoretical learning model for the development of an eco-ethical consciousness toward a pedagogy of responsibility.

Chapter 7 rounds out the *deep* description of SEMIS. This chapter examines the experiences of the steering committee as they reflect on SEMIS' organizational design and presents key themes that emerge from the study to illustrate the complexity of the learning relationships in the coalition. The chapter explores the articulated challenges faced by the organization's commitment to recognizing and valuing difference, identifying and addressing influences from Western industrial culture, and navigating the impact of school climate on teacher learning in SEMIS. In other words, Chapter 7 completes the sequence of Chapters 5, 6, and 7 to present the story of SEMIS as they work through challenges that emerge while trying to work toward and through ecological models of learning in structures, or institutions, rooted in Western industrial culture.

Chapter 8 deals with the implications of the study and offers recommendations for future research, specifically in the context of globalization, neoliberalism, and the ecological imperative for efforts that support learning how we might grow together toward socially just, sustainable communities.

Chapter 2: Research Design and Methodology

The combination of methods gleaned from critical ethnography, oral history, cultural anthropology, and grounded theory contribute to this qualitative case study of the design of Southeast Michigan Stewardship coalition (SEMIS). These methodological traditions set the foundation for the study and allow for a detailed examination of SEMIS and the analysis of the organization's design. The methods used in this research have been selected for the ways in which they support rigorous research while allowing for a deeply reflective and engaged design of methodology. A combination of methods are used to research the stories of SEMIS through interviews of current and past members of the organization's steering committee, observations of the structure and function of the organization, and the identification and analysis of artifacts.

This study draws from the articulated stories from key people involved in SEMIS to describe how participants came to join, or in some cases create, the organization and their perceptions of what SEMIS hopes to achieve. Analyzing interviews in triangulation with observations and artifacts, I situate these stories in relevant contextual literature, illuminating the structure of the organization and highlighting themes that emerge from their interviews. This research process consists of a complex combination of interviews and observations that impact the direction of the research. Thus, I acknowledge the great importance of remaining flexible and responsive throughout the entire research process. As I occupy a prominent role within and a close history with the organization I have researched, it was important to maintain structured attention to the role of the researcher at every step of the study.

Role of the Researcher: Methods in the Study of SEMIS

The role of the researcher in this study is developed through an ethical response to addressing questions and trends that have emerged in the field of EcoJustice Education in the context of school reform and is heavily influenced by two main bodies of scholarship. The first is the work of cultural anthropologist Clifford Geertz (1973)—primarily his text *The Interpretation of Cultures*. Geertz’s exploration of “thick description” informs this study at each stage of the research process, from developing a research design that goes deeper into uncovering what exists beneath the surface of what is simply observed, to informing an ethical approach to design maintained throughout the research. Second, this study is influenced by the captivating autoethnographic research of cultural anthropologist Ruth Behar (1996) in her book, *The Vulnerable Observer: Anthropology that Breaks Your Heart*. Behar writes in ways that draw vividly from her personal life experiences. These authors call to our attention the delicate complexity of “humans observing other humans in order to write about them” (Behar, 1996, p. 5). Drawing from Geertz and Behar, the role of a researcher can be understood as being less bound by rigid positivist rules and more ethically responsive as a reflexive storyteller of other peoples’ stories—a listener as much as a writer.

In qualitative research, the researcher has a responsibility to maintain a constant awareness of subjectivity and to regulate how his or her perceptions shape the outcomes of the study. Creswell (2007) expresses the importance of identifying the personal assumptions made by researchers when they engage in qualitative research. The researcher is in constant interaction with the research process. In other words, the role of the researcher begins with self-identifying the personal assumptions brought to the study or the framing of the study by the researcher. This often results in and requires a relinquishing of power on the part of the

researcher. Creswell (2007) addresses the understanding of self in regard to how research is designed, conducted, and communicated. He explains the complexities of selecting methods for research and gives an overview of the ways in which a researcher's theoretical perspective can influence a study. In the qualitative research methods selected for this study, the role of researcher's influence is tamed through methodological structures used to ensure that the study informs both the choice of methods and the theory or theories that are of importance to the analysis. The methods selected for this study consist of observation fieldnotes, interviewing, analysis, and several stages of writing. The following section briefly clarifies the theoretical and practical precedence for these primary methods as they pertain to the study of the design of SEMIS in the form a critical ethnographic case study.

Observation. The process of embedding oneself as an observer in ethnography is very important as it has a tremendous impact on the entire qualitative study. When a researcher embeds him or herself in the role of an observer in an ethnographic study, he or she commits to the practice of collecting descriptive fieldnotes with the occasional interjection of analytic notes in the form of questions or thoughts that occur in relationship to what is observed (Emerson, Fretz, & Shaw, 1995; Glesne, 1999). Observation is more than just observing, as it actually spills over from simply observing and taking fieldnotes to playing a vital role in understanding and communicating the participants' experience of the condition or situation being studied. An example of how observation overflows into other methods could be when a researcher's observational experiences inform how interviews are designed and how participants are selected and interviewed. Closely associated with observations, the practice of recording fieldnotes is a method that both informs and frames how the research is designed, conducted, and communicated. The process of taking

fieldnotes is well examined and presented by Emerson, Fretz, and Shaw (1995) in *Writing Ethnographic Fieldnotes*. Ethnographic fieldnotes offer great insight into the descriptive details of observations that play a critical role in the research. Fieldnotes also play an interactive role with the researcher's self-reflexivity. Given the existence of subjectivity in all research, it is very important to keep one's self-reflexivity—a researcher's openness to methods and their reflectiveness on the process—in perspective. In this study the practice of keeping a detailed research journal helped to organize the fieldnotes taken throughout the study. The recording of fieldnotes into the study's research journal helped to capture and recreate the essence of a setting or experience and played a major role in the write-up process. The process of being an observer in the study not only requires methods that record vital information, but also methods that function in a reflective manner to uncover what other methods may be appropriate within the study. In order to clearly communicate participant voice and establish authentic themes within the study, interviewing can be worked into the research design in ways that complement observation and fieldnotes.

Interviewing. Interviewing, which often positions the researcher as interviewer, can be a method that not only ensures participant voice in the study but also informs how the study takes shape. Interviewing is a method of research used across many methodological frameworks; however, the ways interviews are structured and then used in a study vary across methodologies. In this critical ethnography case study, interviews serve to tell the stories in relationship to conditions of a particular situation or place and give authenticity to themes in those stories. Drawing from Irving Seidman's (2006) *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*, this study emerges from the analysis of primarily open-ended questions that unveil the stories of participants.

Seidman refers to these questions as intended to engage participant responses to open-ended questions in ways that reconstruct experiences pertaining to the topic of study. Interviewing goes beyond structuring, conducting, and analyzing themes. The stories, or voices, that emerge serve a purpose in that the interviews themselves reveal themes that inform the direction and shape of the research process (Seidman, 2006). A strong critical ethnographic study focuses on the experiences of several individuals. This requires that the researcher engage in several rounds of interviews and analysis in order for him or her to relate a commonly shared experience to the stories of the participants in the research.

Analysis. Throughout the research process of engaging in the observations, taking fieldnotes, and conducting interviews, the researcher is faced with the task of analyzing the experiences shared by participants. The method of analyzing interviews in triangulation with observations, fieldnotes, and any other artifacts that may emerge as relevant from the process occurs in several rounds as the researcher distills themes for the study. Common to this process are practices of clustering or bracketing of themes in the data analysis phases of research. In other words, clustering groups of similar themes together organizes the dominant themes that emerge from the interviews and observations. Bracketing temporarily suspends those themes from the context in order to analyze the themes. Good qualitative research begins with data collected from open-ended interviews of participants who share their experiences and goes through rigorous cycles of data analysis and bracketing of themes that inform further interviewing and results in narratives that communicate an author's intent through the voice of the story being told.

Charmaz (2006) presents grounded theory as complementary to this process. The methods of analysis used in this study (which are explained in detail later in this chapter)

draw from grounded theory. Specifically, Charmaz's grounded theory is followed to ensure researcher practices produced, or led to, conclusions that were grounded in the actual documentation of participant accounts being researched. According to Creswell (2007) and Charmaz (2006), at the heart of grounded theory is a strong commitment to conclusions that grow organically from the data collected in ways that "generate or discover as theory" (Creswell, 2007, p. 63).

Stages of writing. The voice and the impact of any qualitative study come through the analysis and written word and the engagement of readers. This requires that the action of writing such research be considered as a method. The write-up stage of a qualitative study is not exactly the final stage. Although it is commonly positioned as such, it is an interactive process—a method within the study itself. When authors bring voices from others together to tell a story, they make choices and they have the responsibility to recognize that it is a process. The role of researcher as author is extremely important. Good qualitative research, no matter the methodological framework, depends on the effectiveness of the author to communicate the study through the voices of the participants while engaging readers in a way that highlights the focus of the study. This is best brought into the discussion by Behar's (1996) explanation of Geertz's suggestion in his book, *Work and Lives: The Anthropologist as Author*, that "ethnographies are a strange cross between author-saturated and author-evacuated texts" (p. 7). The researcher's perspectives influence his or her voice as an author and must be held into account throughout the entire research process for both the authenticity of the author's communication of the study and the emerged findings.

Over all, good qualitative research comes down to a strong dedication to balancing methods of research while integrating and attending to a shared authorship between the

researcher and the participants' voices throughout the entire process. The essence of qualitative research resides in the written presentation in ways that both present and shape the research process and the conclusion as intertwined and responsive to what emerges from the process and not what is imposed or forcibly linked to predetermined theoretical frameworks.

The methodology of the current study includes contextualizing important theoretical history that traces the epistemology of major influences as they come up in the stories told by the participants, which leads into an emerging narrator-articulated, non-author-saturated, theory of action which reveals a unique learning model and organizational structure for SEMIS as an intermediary organization. Thus, this study draws from critical ethnography and oral history with layers of story collecting, storytelling, and the analysis of both. Eventually the stories culminate in a narrative that does not present “data” or “results”; rather, the resulting study communicates a set of lived experiences through the combined authorship between the researcher—myself—and the participants—the key people in the work and history narrating the story of SEMIS.

Research Design

Context of the study. The general design in this qualitative case study research was crafted in efforts to communicate the structure of the organization and present analysis of themes that emerge from the stories that describe the Southeast Michigan Stewardship Coalition. This deep description of SEMIS is built up from verbatim collected through interviews of current and past members of the organization, observing the structure and function of the organization and the identification and analysis of documents archived by the organization. In order to tell the story of SEMIS, the research requires interviewing the people founding and leading the organization and analyzing how their articulated experiences

influence the organizational structure and design. In this research I collect stories from any person who at any moment in the organization's history participated as a member of the organization's steering committee. I interviewed these members or past members in SEMIS, asking them to describe how they came to join or, in some cases, create the organization, and their articulated vision of what the organization hopes—or hoped—to achieve. By analyzing the interviews in triangulation with observations and artifacts, I situate these stories in relevant contextual literature, illustrating a design model transferable to other intermediary organizational efforts. This case illuminates a composite organizational theory of action (Argyris & Schön, 1974) that emerges from the articulations of the SEMIS steering committee (Geertz, 1973, 1988). This analysis consists of a rich combination of interviews, observations, and analysis of interview transcriptions that impact the direction of the research (Seidman, 2006).

Using the previously described methods in connection with influence from grounded theory (Charmaz, 2006), I conduct qualitative case study research that tells the stories of SEMIS in a way that will not only set up an authentic articulation of this intermediary organization but will also communicate the growth and development of an EcoJustice Education framework and other contributing frameworks that emerge from the interview process. In other words, the story of SEMIS is an untold chronicle that requires ethically strong qualitative methods that guide the story in a way that allows for the presentation of an articulated espoused theory that emerges from the stories being analyzed and presented as a narrative (Behar, 1996; Errante, 2000; Geertz, 2000).

A case study, according to Robert Yin (2009), can be “used in many situations to contribute to our knowledge of individual, group, organizational, social, political, and related

phenomena” (p. 1). It is important that the case study be clearly defined and that it communicate its structure in a way that provides a fair context from which readers can understand the case study’s value and limitations. In this case, the story of SEMIS is a case study of the design of a unique organization, as described in chapter 1, that one could consider an information-oriented selection. Bent Flyvbjerg (2006) defines an information-oriented selection of a case as “selected on the basis of expectation about their information content” (p. 230). Further drawing from Flyvbjerg’s *Strategies for the Selection of Samples and Cases* (2006), one could classify this dissertation research as an “extreme case,” one designed “to obtain information on unusual cases which can be especially problematic or especially good in a more closely defined sense” (p. 230). In other words, the selection of SEMIS for this case study research is based on the fact that this organization is one of a kind. SEMIS is an intermediary organization setting out to work through an EcoJustice Education framework while situated in the context of a grant funded university partnership. These factors make SEMIS an ideal candidate for a strong and useful single examination case study for future research and for those looking to replicate, or work through, similar efforts.

The Southeast Michigan Stewardship Coalition (SEMIS), introduced in chapter 1, is an intermediary organization that uses what they call a steering committee as a decision-making body. While a fuller structural explanation of the organization’s steering committee will be provided in the *deep* description of the SEMIS structure (see chapter 5), I have bounded the case study collection of data to members of the organization who have served in the major decision-making body and participated in the day-to-day work carried out by the organization. In this case, it became clear that the design of the organization could best be told and bounded for close study by understanding the organization’s design and their

articulation of the work by interviewing all of the past and present members of the steering committee.

Subjects: The Narrators of the Story. The study population was recruited using a convenience sample of 12 adults from the organization that were interviewed in order to build a qualitative case study of SEMIS. No vulnerable populations and no individuals under 18 were involved at any stage of the research, and all the participants were recruited through educational, community, and grassroots networks. The subjects were all informed that their participation is completely voluntary and that they may withdraw at any time without penalty or consequence. All of the subjects had the option to remain anonymous in the study; however, the risk was clearly articulated that anonymity would be difficult given the dynamics of the study and general access to public information. In all cases, the subjects agreed to have their name used in the study. As a level of insurance and respectful commitment to the authenticity of their voices, the final stage of the analysis included sending each subject his or her written profile for the study and the verbatim selected from his or her interviews that was used in the study for approval. In all cases, the full transcripts were kept confidential and under lock and key, with a five digit random number assigned to individual participants. It was not until after the final approval from the subject that his or her name was revealed on any documents.

While this aspect of the organization will be further described in Chapter 5 as part of the articulated structure of SEMIS, for the purpose of laying out the procedures of the study I will describe the steering committee as the organization's visioning, decision-making, and project labor pool for SEMIS. The twelve narrators, whose individual profiles are shared in Chapter 3, were sorted into three categories and coded in order to provide a detailed

methodological process for the ways in which their “positionality” in the study was assigned and then written. In other words, the position of the narrators in the organization is important to understanding the context of their articulations, as they are used throughout the study to tell the story of SEMIS. The three categories, with the corresponding codes detailed in Table 1 “Codes for Categorizing the Subjects/Narrators,” consist of university professors, community partners, and graduate students.

Table 1

Codes for Categorizing the Subjects/Narrators

<u>Code</u>	<u>Domain</u>
UNF	University Faculty (5)
GRS	Graduate Student (2)
PRT	Community Partner (5)

Note. n = 12 participants

These codes were created at a stage in the research after which all of the interviews had been conducted, transcribed, and analyzed and triangulated with organizational documents to verify the presence of these three categories as used to describe the position of each narrator in the study. In two cases, subjects articulated positions in ways that entailed multiple codes be assigned to their positions. While in the process of determining themes and structural categories, which are described in detail later in this chapter, I also analyzed the entire set of interview transcriptions for how each narrator’s role might have been referred to by other members of the steering committee. In the case that a narrator’s own interviews articulated more than one identity position in the organization, I selected the more dominant code when taken in triangulation with organizational documents, his or her interview transcriptions, and the interview transcriptions of all the other narrators. In efforts to address the limitations of making such decisions, each narrator’s profile includes a complete articulation of the ways in

which the narrator describes his or her identity in the organization. These codes are used as one of many layers of insurance in place to help regulate my power and voice as the main author of the study and clearly communicate to readers the reflective and reflexive process of this research.

Story Collection and Analysis. This section details the research design of this case study by describing the performed rounds of thematic analysis on the transcriptions of interviews. Further, the section explains how that analysis includes triangulating the transcriptions with historical events, observation fieldnotes, and artifacts to construct the design of SEMIS as an organization that sets out to support a transition toward diverse, democratic, and sustainable communities (Creswell, 2007; Emerson et al., 1995; Seidman, 2006). The research design of the study relies heavily on interviews that set out to capture the articulated experiences of the narrators, whose stories were audio recorded, transcribed, and analyzed. The participants were asked to describe their perceptions and experiences related to the topics listed below in open-ended and semi-structured qualitative interviews. All of the narrators were asked questions similar to the following:

- What role did/do you have in SEMIS?
- What previous experiences or events brought you to SEMIS?
- How would you describe the work you do/did in SEMIS?
- How do you see those experiences or events influencing or informing SEMIS?
- What do you think SEMIS does successfully?
- What do you think limits or challenges SEMIS?

After each round of interviews, the audio files were uploaded to a password secured laptop and backed up on a removable hard drive that was kept in a locked filing cabinet. The files

were then transcribed, analyzed, and coded for themes that emerge to inform the writing of each narrator's story as it contributes to the overall case study of the design of SEMIS.

Research Procedures.

The process and procedures for this study adhered to the research design illustrated in Figure 1, titled "The Story of SEMIS: A Research Design," which served as a map or outline for the research process. The illustration is a quasi-linear, top-to-bottom flow chart.

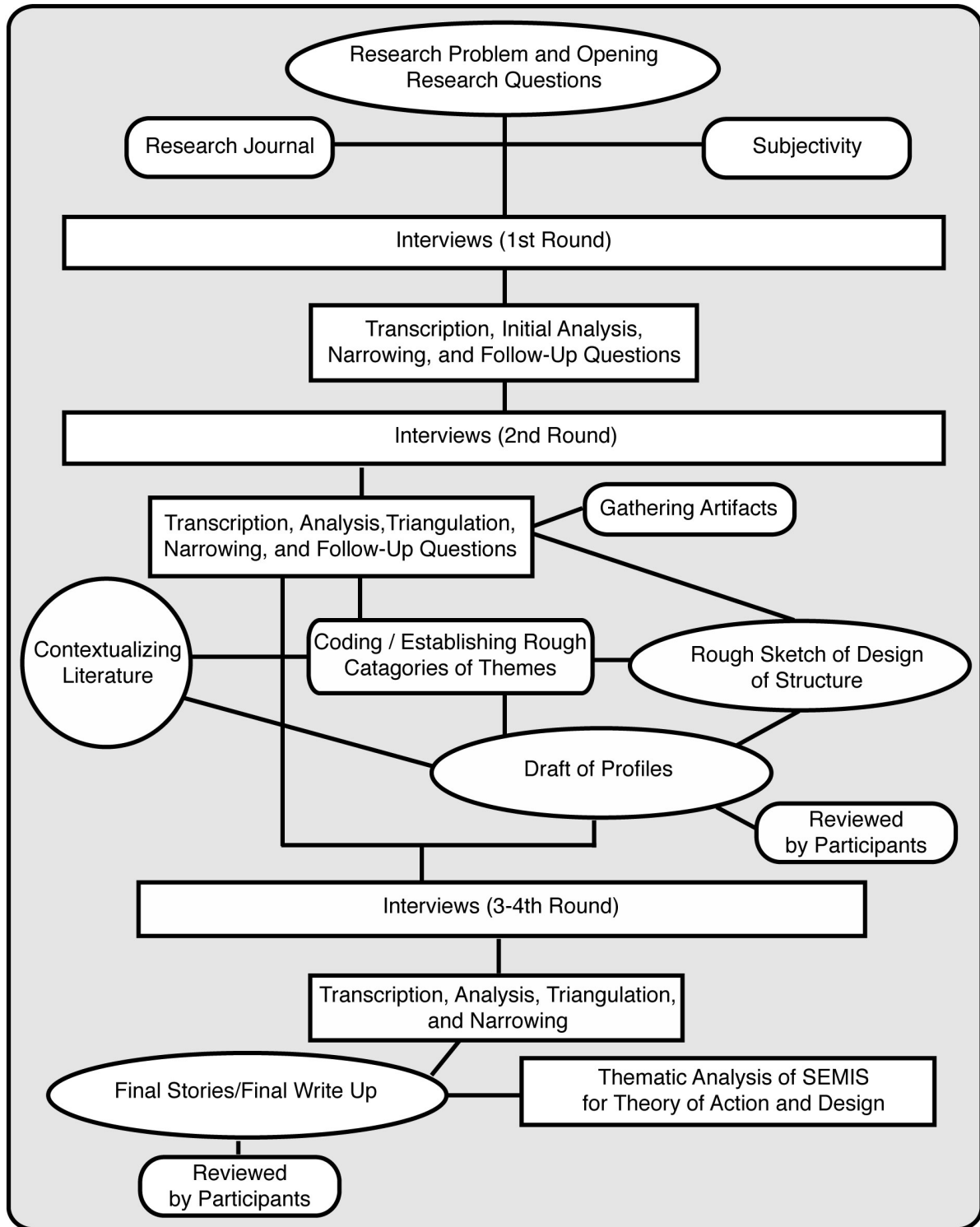


Figure 1. Research Design. This figure illustrates the research design of the dissertation research project.

Utilizing the theoretical and practical precedents for methods outlined earlier in this chapter, this section details each step taken in the research process. After the development of a research question, a research journal was started to document the entire process. The first step taken was to compose my personal articulation of SEMIS, so as to establish my position and understanding of the organization before beginning the interview process and the analysis of interview transcripts. This first step was essential in order to identify and communicate any potential personal influence I may impose based on my perceptual lens as a researcher embedded in the organization being studied. Glesne (1999) refers to this type of qualitative research as “backyard research” and cautions researchers to be mindful of the potential concerns inherent in conducting such studies. Creswell (2007) suggests that if one is determined to conduct “backyard research”—research in which the researcher has experiences or relationships that may compromise or alter the process—they need to include methods for checking the influence of researcher bias at every stage of the research. In this study it was particularly important to have a disciplined research design with built-in reflective practices, as three of the members of the dissertation committee are also members of the SEMIS steering committee and interviewed in the course of this research. This unique case for “backyard research” called for the strict monitoring of my position as a researcher. It also required that the design include external consultation on particularly sensitive themes or verbatim. One of the very first steps taken in order to set a precedence for a disciplined commitment to self-reflexivity was that I recorded and transcribed my own recollection of the origination, structure, and function of the organization. This auto-ethnographic account of the organization was drafted before the interviewing of any participants and later served as a reflective tool to which I would often refer in efforts to make sure I was aware of my

subjectivity as I made important research decisions. This in turn ensured that those decisions were not blindly made in favor of my perception, but rather rooted in the themes of the participant accounts. While there is no avoiding the presence of personal bias, the development of a statement of reflexivity and the commitment to an awareness of how my role in the organization might effect the study was imperative and attended to at each stage, from designing the methodology to collecting and analyzing data, and including the final write up of the study.

Data Collection. After establishing my positionality, I set up a design that began with constructing a detailed organizational system for each narrator in the study. I created a filing system in which each narrator had a designated file that included a biographical statement, a historical timeline, a consent form, an interview schedule, transcriptions, and documents from the organization to be used for triangulation. The filing system set up a protocol for managing the collection of stories in a way that allowed for analysis and reflection at each stage of the interviewing. Next, I reviewed the aforementioned six interview questions and referred to the work of Seidman (2006) to think through the interview structure. I based my interviewing protocol around Seidman's "The Three-Interview Structure" and heeding Seidman's advice, I kept all the interviews to between 60 – 90 minutes. Initially my design was set up for a series of one hour interviews, but Seidman advises against 60 minute interviews, stating that they are too standard and advises 90 minutes. I decided that since, in many cases, I had a relationship with the participants being interviewed, I would cap at the interviews at 90 minutes per interview, but try to keep each session around 60 minutes.

I broke the six interview questions up into three groups in an effort to help draw out an authentic voice from each interviewee as they became the narrator of their stories and the story of SEMIS. The first grouping of questions was designed to construct a historical timeline that put the narrator's experience into context with events documented in the organization's artifacts. The second group of questions was designed to uncover the details of the narrators' present experiences by asking them to share their perceptions of the work they do in the organization. The third group is intended to draw out a reflection on the strengths and challenges of the organization. Immediately following the first round of interviews by each of the 12 past and present steering committee members, the audio recording with interviewee/researcher notes was uploaded to a secure hard drive and transcribed in preparation for the first round of analysis. Once an interview was transcribed, I listened to the interview while reading along with the transcription, identifying initial themes, highlighting important information, and noting further questions to ask in the second round of interviews. Each narrated story included the sketching of a historical timeline that contributed to an overall historical timeline of the organization. Once the first round of interviews was complete, the second round of interviews was conducted. These interviews focused on the structure and function of the organization. This round of interviews was followed by the same procedures as the first—the audio files were uploaded, transcribed, and then analyzed. The second round of analysis was accompanied by the gathering of artifacts—documents such as steering committee meeting minutes and professional development session agendas—for triangulation and included revisiting previous interview transcriptions to identify themes consistently building in each story and in the overall story of the organization. Additionally, each participant's transcription was analyzed for how his or

her relationship in the organization may be influencing his or her participation, and specifically for how my role as a researcher was influencing the study. As previously articulated, no research is free from bias, but the awareness of this bias and its influence is essential in bracketing themes and establishing authenticity in the themes that elicit further attention. At this stage in the research it became a regular practice to reflect on the influence of my past and present position in the organization which was done in triangulation with my research journal and my personal articulated and documented story of the organization. This stage of the research was accompanied by efforts to locate pertinent contextualizing literature, establish categories for coding the transcripts, and create a rough sketch of the organization's design.

Coding and Analysis. Coding, according to Charmaz (2006), “generates the bones of your analysis” that together with your theoretical framework helps “assemble these bones into a working skeleton” (p. 45). Charmaz (2006) explains, “Coding is the pivotal link between collecting data and developing an emergent theory to explain these data. Through coding, you *define* what is happening in the data and begin to grapple with what it means” (p. 46). When I began to develop codes or categories to name emerging themes in the stories of SEMIS, I did so in response to two types of information in the data. In early rounds of analysis it became apparent that there were two main types of information consistent in the narrated stories. The first type was verbatim that articulated and communicated the structure of the organization. The second type identified tensions and strengths—or the themes that emerged out of narrators’ articulation of the experiences while working in the organization. In other words, the narrators’ stories were analyzed for support in communicating the case study design of the structure of SEMIS and a separate round of analysis and coding was

conducted for identifying verbatim that communicated dominant themes in the narrators' experiences of work in SEMIS. During the second round of interview analysis, each narrator was interviewed for a reflective session in which he or she was asked to share his or her thoughts on the strengths and challenges of the organization. Like the first round of interviews conducted, all of the second round interviews were uploaded, transcribed, and analyzed upon their completion. Once each narrator's file was complete with a full set of interview transcripts and a first round of analysis on each individual interview, a second and third round of analysis were conducted upon the narrator's complete set of transcripts for the overall themes. It was during the second and third rounds of analysis that a more formal development of a coding scheme emerged and codes were assigned according to the codes in Table 2 and Table 3.

Table 2

Codes for the Thematic Analysis of the Structures of SEMIS

<u>Code</u>	<u>Domain</u>
STC	Steering Committee
CMP	Community Partners
FND	Funding/Grants
PRD	Profession Development
SMI	Summer Institute
WSR	Whole School Reform
COA	Coaching
CRA	Curriculum/Assessment/Evaluation

Table 3

Subcodes of the Major Code “Partnership”

<u>Code</u>	<u>Domain</u>
RVD	Recognizing and Valuing Difference
INH	Institutional Hierarchies
ADL	Adult Learning
MOL	Models of Learning
SCC	School Climate

After a third round of analysis of each narrator’s complete set of transcripts, a final round of analysis was conducted for each set of codes. Using this coding system, each narrator’s complete transcription file was coded for verbatim that could contribute to analytic files set up to collect data from each story told.

In an effort to maintain an organizational system to manage such an enormous amount of data, I set up folders for each code, or category, and made the decision to cut and paste the actual verbatim identified as belonging to a particular code onto an index card. This quickly grew into what Glesne & Peshkin (1992) call “fat data” and amidst the piles of organized data it was important to remember that not all the data collected would make it into the study, but that sufficient data needed to be collected and sorted in order to craft an authentic case study of the organization. The next stage of the research design, which was occurring simultaneously with the accrument of “fat data,” was the drafting of profiles for each of the narrators and the final follow up interviews for further clarification. After each profile was drafted in accordance with the style of research detailed earlier in the chapter, the profiles were read over and edited by each narrator in an effort to ensure that his or her voice stands out as authentic to his or her position and experience in the organization.

With the verbatim on note cards organized into groups and kept in manila envelopes, the story of SEMIS came to life through the voices of the participants from the organization’s

steering committee. Each set of coded verbatim was subjected to further rounds of analysis as the story of SEMIS was being drafted in the writing of Chapters 3, 5, 6, and 7. While occurring at regular intervals throughout the research process, at this stage it was crucial to the participant voice that significant attention to my positionality and influence as the researcher was tamed and that themes were analyzed for what they brought to the overall emerging story of SEMIS and checked against any personal interest or potential risk to participants that could influence the study. In the case of verbatim flagged for potential risk to the participants or the organization, the identified verbatim was separated from the final write up, but only after other verbatim was located and selected to replace the flagged verbatim that contained the point being made. This process of reading and rereading through the narrators' verbatim in connection with the overall story being crafted required bracketing that grouped the coded verbatim in major and minor themes in the overall study. This process consisted of isolating exemplaric verbatim from each coding category. This stage included making decisions about the exclusion of verbatim to avoid what Michelle Fine and Lois Weis (1998) refer to as "surfing the data" for "spikes" or "hot spots" (p. 274). In other words, any verbatim that had the potential for misinterpretation or put the narrators into a difficult or dangerous political position was excluded from the study. In the case of this study, I identified potential "spikes" in the verbatim and in all cases, was able to find alternative selections that kept the integrity of the point being made without compromising the narrator. This required careful attention to themes, and the overall story being communicated through the writing. Since members of the dissertation committee were embedded in the study and it could pose potential harm to participants to share these "spikes," external consultation with a panel of qualitative researchers became necessary. In

acknowledgement of my own subjectivity and the ethical commitment to the participants, I removed any identifying labels from the selected verbatim and consulted colleagues who were not familiar with the participants, but were skilled qualitative researchers, for their opinion as to whether or not the discarded verbatim was still thematically represented and supported by other verbatim in the write up. The end goal was to have a series of vividly described narrators whose stories could be woven throughout the study so that the story of SEMIS both introduces and explains the theory and the practice of educating adult learners to teach in ways that support diverse, democratic, and sustainable communities. The writing of the profiles, and their voices throughout the chapters, required a process of refining the stories as individual accounts in connection with the other narrations of the story as a whole. This commitment to a non-author saturated case study of the design required that several rounds of writing and rewriting be noted as a formal step in the methodology of the study. It is through the writing and rewriting, or the crafting of the stories, that the researcher/author can be more self-aware and maintain the structural corroboration of the study while remaining narrator articulated and non-author saturated.

Conclusion

This chapter introduces the theoretical and practical precedents for methods used in the critical ethnographic case study examination of the *deep* design of SEMIS. This chapter has addressed the role of the researcher, the research design of the study, and the research procedures. The following chapter will introduce the narrators' profiles as their voices situate and contextualize the story of SEMIS.

Chapter 3: Introducing the SEMIS Steering Committee

The Southeast Michigan Stewardship Coalition (SEMIS) is a unique organization with a cornucopia of voices that comprise the steering committee, which is the decision-making body for all the work carried out by the group. SEMIS' commitment to democratic decision-making is a mainstay for this organization. The following pages will introduce the narrators—the past and present members of the SEMIS steering committee. As detailed in the previous chapter, the narrators of the story of SEMIS will be grouped into three categories: university faculty, community partners, and graduate students. These categories help to contextualize the roles of the narrators as their voices tell the story of SEMIS. This chapter introduces the narrators as co-authors of the study and their voices will be woven throughout the narrative describing the design structure of SEMIS and the themes of partnership. The following introductions illustrate the diversity of backgrounds of those who have offered their time and expertise to the steering committee. This chapter provides a foundation from which their voices tell the story of SEMIS.

University Faculty

The SEMIS Coalition is housed at Eastern Michigan University (EMU), a Midwest regional university of around 23,000 students in the city of Ypsilanti (www.emich.edu). SEMIS is a grant-funded program affiliated with the Institute for the Study of Children, Families and Communities (iSCFC) and the Department of Teacher Education at EMU. The SEMIS coalition has a director who is on course release in order to run the organization. With support from the College of Education granting course time release for grant funded faculty projects, SEMIS has been able to add tenured faculty members to the steering committee. In this section, I introduce the narrators who are EMU tenured faculty members.

While each of their stories offer something different to the overall story that will unfold in the following chapters, the voices of Dr. Rebecca A. Martusewicz, Dr. Ethan Lowenstein, Dr. Linda Williams, and Dr. Nancy Copeland are introduced here to contextualize the personal and professional experiences that inform their perspectives.

Rebecca. As a co-founder of SEMIS, Dr. Rebecca Martusewicz has worked with this organization in many capacities over the years, including serving as the director for the first 4 years, and currently serving as co-director. Dr. Martusewicz, or Rebecca, is a professor at Eastern Michigan University (EMU), in the Social Foundations of Education program. She has been at EMU for over 25 years, working to develop critical and ethical undergraduate courses and graduate programs designed to push educators to rethink the power and potential of education. As a graduate student at the University of Rochester, Rebecca studied the sociology of knowledge and continental philosophy with Philip Wexler. Her dissertation was focused on a critical discourse analysis of 19th century women's debates on higher education. Initially working through a social justice paradigm with a strong emphasis on the complex relationships between culture, ethics, and education, Rebecca's work grew to question the cultural foundations of suffering within and between all living beings within an ecological system. Rebecca recalls her realization, explaining:

I realized that I had never really forced myself to think about why I suffer so dearly in the face of destruction of the natural world...especially animal suffering. I realized...that I had been pushing that down for all my life.

Rebecca's background in critical theory and post-structuralism, which focused on the work of Gilles Deleuze, Michel Serres, and Michel Foucault, provided the foundation from which

she developed, in partnership with C.A. Bowers and Jeff Edmondson, what is now known as EcoJustice Education.

This collaborative work with colleagues led to her envisioning programing to explore how to build capacity for educators to engage in a cultural-ecological analysis framed by EcoJustice. Rebecca began to connect EcoJustice Education with her work with colleagues and grassroots organizers in Detroit to participate in collaborative efforts to strengthen the local commons and reclaiming neighborhood sovereignty (Bowers & Martusewicz, 2006). Involved in a number of community initiatives, Rebecca worked to find ways to connect grant funding with community organizations that were committed to the revitalization of the Detroit's cultural and environmental commons through art, poetry, and gardening (Martusewicz, 2009). Through her relationships with Detroit-based organizations, such as the Concerned Citizens of Northwest Goldberg, the Committee for the Political Resurrection of Detroit (CPR), and the Boggs Center, Rebecca experienced a strong sense of reciprocity in her engagement in revitalizing the commons in Detroit. Rebecca recalls:

I had been introduced to Charles Simmons' neighborhood and was working with them for a little while on CPR Detroit and then I got introduced to...Jim Embry from the Boggs Center who became a really important Detroit mentor for me. We would go down and sit at Avalon Bakery, drink coffee, and talk and listen to him teach us about the history of the African-American community and what was going on in Detroit around racism and EcoJustice.

Rebecca describes how Charles Simmons, a long time Detroit activist journalist and EMU faculty member, Jim Embry from the Boggs Center who was also a member of CPR, Aurora Harris, a local poet, educator-activist, and Chazz Miller, a local artist all became a part of a

collaborative movement to organize a conference to think through EcoJustice in Detroit. She explains:

I was beginning to develop relationships with people in Detroit, looking at using the concept of the commons to think about what was happening in Detroit... We organized one [a conference] that would take place in Detroit in conjunction with this Michigan welfare rights organization. They put on this big conference and we did an EcoJustice strand of it. Part of that was a tour of Detroit that Jim Embry did with us and so we rented a van... and we piled all these people into it and we drove down to Detroit.

During this time, Rebecca began to work with the iSCFC at EMU to foster the development of community-university partnerships through grant funding awarded by the United States Department of Justice in support of non-violence education. This collaboration between university faculty, a university fiduciary, and the organization Public Art Workz inspired Rebecca to continue to work through the potential of collaborative grants in support of EcoJustice Education. After a period of researching and writing about an ecological approach to grassroots activism and community-based education with colleagues and integrating this work into her course content, Rebecca went on sabbatical and partnered with teachers in a high school to develop practices in support of this work. Supported by an EPA grant involving four high schools in three states, Rebecca collaborated with a geography teacher, an English literature teacher, and a biology teacher at Souhegan High School in Amherst, NH to create and co-teach a student seminar that engaged students in an EcoJustice Education approach to food systems and sustainability (Martusewicz & Schnakenberg,

2010). This experience had a great impact on Rebecca's work. Rebecca, recalling the experience at Souhegan High School, explains:

We had created and were teaching this year-long senior seminar called: "Food Systems and Sustainability: Food for Thought." It was an interdisciplinary course with an English teacher, a science teacher, a social studies teacher, and then me. It was a fantastic experience for me. That was the first opportunity...to really bring EcoJustice into a school and to think about how to translate it for high school kids and how to do teacher professional development with this little group.

This work in New Hampshire was part of a collaboration with local environmental educator and school reform consultant Susan Santone. Working together on many fronts, among which included Susan teaching in the EcoJustice Education program at EMU, Rebecca and Susan wrote and received an U.S. Environmental Protection Agency (EPA) grant they called Building Leadership Capacity for Sustainability Education (BLCSE). A precursor to SEMIS, this initiative encouraged them to continue to explore funding opportunities for working with schools, teachers, and members of the community.

In 2007, Rebecca became the co-founder and director of SEMIS after she, Susan, and Shug Brandell were awarded a planning grant from the Great Lakes Stewardship Initiative (GLSI) as a part of a state-wide initiative funded by the Great Lakes Fisheries Trust (GLFT). Today, in her current role as an active member of the SEMIS steering committee, Rebecca's continued work as an EcoJustice scholar situates her as a leader in the larger eco-democratic reform movement. The editor of *Educational Studies: A Journal of the American Educational Studies Association* since 1998 and author of many articles, book chapters, and books contributing to and defining the field of EcoJustice Education, Rebecca works to

explore the connections between dominant discourses of Western industrial culture, unjust suffering, and sustainability.

Ethan. Dr. Ethan Lowenstein, the current director in SEMIS, came to the organization through his work at EMU as an associate professor in Curriculum and Instruction. Ethan became dedicated to confronting injustice through his experiences as an undergraduate student at Carleton College in Northfield, Minnesota. He recalls:

In college I became part of a community of people and, I think, my political training in college emphasized how to make consensus decisions—how to listen. My philosophical training was around summarizing, paraphrasing, listening very carefully to what people were saying and then trying to navigate perspectives and negotiate them to come to consensus in.

While at Carleton College, Ethan's primary influences were a combination of the anarchist feminism of his philosophy professor Maria Lugones and what he learned about grassroots organizing and social movements from his political science professor (and future Senator) Paul Wellstone. Both professors mentored Ethan as he began to engage in political organizing and action. After graduating from Carleton and being introduced to the challenges of activist organizing, Ethan decided to attend New York University to become a certified social studies teacher. Ethan's work as an urban high school social studies teacher and his activist identity informed his envisioning of how experiences in the classroom could support and strengthen communities. Ethan explains:

I wanted to enter teaching, primarily at that point to further social justice goals. I got my master's and started teaching in East Harlem. From the moment I started teaching, I fell in love with the art of teaching and pedagogy. I learned, I think fairly

quickly, to approach my love for my students as learners as a social justice act and that because of the context that I was teaching in, if you cared for students, you automatically engaged in politics in terms of advocating for them and all sorts of things happened during the four years that I taught.

After teaching at Park East High School in East Harlem, Ethan pursued a PhD in Humanities and Social Sciences at New York University. This experience entailed conducting research on the organization Facing History and Ourselves with which he had once been a participant. Facing History and Ourselves is an organization that provides professional development for social studies teachers and is committed to engaging educators in “combating racism, anti-Semitism, and prejudice and nurtures democracy through education programs worldwide” (www.facing.org). As a doctoral candidate at NYU, Ethan studied Facing History and Ourselves extensively. He also had the opportunity to serve as a Graduate Assistant of Joseph P. McDonald, a NYU faculty member whose research on teacher learning and school reform has been at the forefront of the field. Ethan credits McDonald for providing him with a model of how to create and enact a professional identity that connects theory around teaching, learning, and systems reform with practice. Ethan’s experience as a student of McDonald along with his involvement in Facing History and Ourselves provided him with a perspective on school reform and teacher learning that meshed well with the work of SEMIS. Ethan describes that he has drawn from McDonald’s approach to school reform:

He comes out of the Coalition of Essential Schools; he comes out of looking at teaching as a craft; he comes out of looking at systems reform and layering in teacher education into larger systems and arguing that...if you separate the two, you’re never really going to get anywhere.

In 2003, Ethan became a professor of Curriculum and Instruction at EMU. Working as a lead facilitator for a leadership development program for administration in Washtenaw County that focused on issues of equity, systems reform, and forging partnerships with educational leaders from the Boggs Center in Detroit, Ethan began to grapple with the complexities of university partnerships in educational reform as a university professor. He also continued his work with Facing History and Ourselves as a co-principle investigator on a large-scale evaluation of the organization. Ethan became aware of SEMIS when he was invited by Rebecca, who was then Director of SEMIS, to a coalition meeting in 2007 to learn about the organization. She encouraged him to participate in any capacity he saw fit, though at the time he was unsure of how he could coordinate his work to directly align with that of the organization. Over the next few years, Ethan's attention to environmental issues through his participation in the Transition Towns movement in Ann Arbor, his background in social justice, and his critical perspective on consumerism began to mesh with his interest in working with teachers to address the cultural roots of social suffering and environmental degradation. Ethan explains how a two prong approach modeled by his daughters' preschool teacher, Jeanine Palms at Blossom Home Preschool & Adventures, impacted what he now considers powerful place-based education. Ethan explains:

I think that these two criteria are very important: the recognition of young people's developmental needs—not burdening them with the weight of the world—at the same time that they're engaged in very authentic and honest ways around issues of ecological degradation and what we can do as human beings to care for the earth. He recalls leaving the film *An Inconvenient Truth* (2006) and experiencing the realization that he was really afraid to raise his children in the current culture and feared for their

uncertain future. From that point on, Ethan became more interested in understanding how he could act within his professional career to support community-based solutions to large cultural problems. He realized that SEMIS was a perfect place to align his professional life with his personal identity in the community. Ethan's background in teacher learning and whole school reform influences the SEMIS design and the implementation of the professional development offered through the organization. Ethan recalls how as a graduate researcher he developed the skill set for navigating organizational tensions. He explains:

I started to develop a skill set...for being sensitive of the contexts that teacher professional development, also systems reform, takes place in. How to navigate and negotiate between the variety of perspectives that educational actors take within that context—from principals to teachers to researchers to reform advocates and professional development organizations.

While Ethan identifies as newer to place-based ecological pedagogies, he has designed approaches in curriculum and instruction to include ecological perspectives in Social Studies education. His background with Facing History and Ourselves and his experience as a high school social studies teacher in East Harlem brings an invaluable perspective to SEMIS. He is a local environmentalist and community organizer in Ann Arbor and Detroit. Ethan came into SEMIS as a leader in whole-school reform, adult teacher learning, and with an authentic interest in learning how to foster the development and growth of an organization rooted in EcoJustice Education.

Linda. Dr. Linda Williams is a current member of the steering committee and has been in the organization for the past two years. Linda is an associate professor of Teacher Education at EMU, specializing in Reading and Literacy. Before pursuing her PhD in

Curriculum, Teaching, & Educational Policy at Michigan State University, Linda was a Waldorf teacher in both Milwaukee and Detroit. She explains her orientation in education as “place-based, arts-based, project-based, and inquiry-based.” Linda further articulates:

I came to EMU hopeful that this would be a place where I could integrate my love of arts-based, project-based, place-based authentic literacy learning—and also learn more about the more mainstream literacy establishment—and work with teachers, or teachers-to-be, in bringing infused literacy practices into their classroom. Infused by both sides—both the art stuff and the mainstream stuff.

Linda officially joined SEMIS through an invitation from Ethan to become a member of the steering committee in 2012. However, Linda had previous experience with SEMIS in 2010 through a circle of Waldorf educators working with Detroit Community Schools. Linda recalls attending a SEMIS professional development workshop that was held at Nsoroma Institute, a SEMIS school that focuses on providing children in Detroit with an Afro-centric education. At this particular workshop, the principal of the school, Malik Yakini and educational philosopher, Madhu Prakash, presented to the SEMIS Coalition about the pitfalls of Western education and the history of Eurocentrism in local and global context. She explains:

I remember that being so intriguing... To be on Nsoroma’s grounds and see what they were doing. Malik, of course, is just really engaging and then the openness of the SEMIS folks to work with these issues of racial and class problems in the community.

Seeing SEMIS as an organization that was engaging in the community to tackle injustice commonly overlooked in university and school partnerships, Linda decided to join when Ethan approached her to be on the steering committee. Linda brings a critical approach to

literacy and arts-infused, community-based education to her current position on the SEMIS steering committee.

Nancy. Dr. Nancy Copeland is the most recent addition to the steering committee and is in her first year with the organization. Nancy is an associate professor of Educational Media and Technology at EMU and has been a part of EMU for over a decade. Her work with educating adults on the potential role for technology in communicating ideas and organizing information led her to teach and work with future teachers. Nancy explains:

My background is in educational technology. My doctorate is in instructional technology specializing in emerging technologies in K-12 education and how to effectively integrate technology into a teacher's K-12 teaching. I've been here at Eastern for a very long time. I began teaching as a lecturer in 1990 and continued teaching off and on until my current tenure track position began ten years ago.

She explains that most of her life outside of the academy has been committed to raising her children to be kind and caring stewards of the community. Nancy's outlook on living systems and the interconnectedness of humans and nature has always been a strong part of her personal life. After several friendly office chats with Ethan, who kept mentioning SEMIS, she recalls that SEMIS began to spark her curiosity. Nancy shares:

He [Ethan] was talking about SEMIS an awful lot. It sort of intrigued me—not because I have a background in that area—and, in fact, a lot of this was so new to me when I began. EcoJustice...I know what it is, but I don't have any strong readings or a background in that particular area at all. What I connected with was the kinds of things that they [SEMIS] were doing in the schools with children were the same types

of things that I was doing—even before I got into education—with my children in my own personal life.

Interested in how her experience with technology could help SEMIS, Nancy began working with Ethan on how she could support the organization in integrating web based project portfolios and digital story telling. Initially working with SEMIS to help them with web and e-mail communications, it wasn't long before Nancy found herself on the steering committee and integrating ideas she is learning through SEMIS into the courses she is teaching.

Nancy's experience with educational technology brings a valuable perspective to her position as a current member of the SEMIS steering committee as she spearheads the development of online portfolios and a stronger website and social networks presence for the organization. Nancy fills gaps in the organization's communication system and provides valuable instruction to participants in using technology to document their work.

Community Partners

The SEMIS coalition works through partner relationships with a number of diverse organizations—often non-profits—embedded in local communities who can join with schools and teachers to launch and sustain place-based education. This aspect of SEMIS, in combination with the organizations commitment to being community-centered and democratic, has required strong representation of community partners on the steering committee. In this section, I introduce the narrators who come to SEMIS primarily as representatives of non-profit community organizations. The following profiles of Susan Santone, Shug Brandell, Gloria Rivera, Gary Schnakenberg, Rebecca Nielson, and Danielle Conroyd contextualize how their contributions to the SEMIS steering committee help to tell the story of SEMIS.

Susan. Susan Santone, the director and founder of Creative Change Educational Solutions (CCES), was one of the founding members of SEMIS and co-directed the organization as a community partner in the first year of SEMIS. Susan's choice to become an educator stems from an epiphany she had as a young woman. As a music major studying abroad in Germany, Susan began to perceive the ways in which environmental degradation and social justice were interconnected. Susan describes living outside of the United States of America and being asked questions about political policy and social justice while she was simultaneously reading *Diet for a Small Planet* (1982) by Frances Moore Lappe. These experiences culminated in the realization that she wanted to be a part of exposing hidden truths about human relationships and that she could do this as a teacher. Susan, referring to world hunger and other social and ecological injustices, shares having this realization:

This [hunger] would change if people knew about it. So I'm like, "I have this background in teaching—granted, it wasn't teaching this [sustainability], but I have a teaching certificate and I'm learning how to teach English. I have this passion for these ideas, I know how to teach, so somehow I'm going to make this happen." So I spent the next ten years taking classes. I got certified in Social Studies. I got English as a Second Language certification. I taught everything. I taught summer classes, I subbed, I did exchange programs for international students, and I taught adults. You name it, I taught it. And along the way, I found that my real passion was developing the materials. Because none of this stuff was in the schools.

After finding a convergence for her passions as an environmental educator and completing several degree programs, Susan worked as a Special Projects Coordinator in Washtenaw County with the master composter program in the county's sustainability education initiative.

Susan holds the position that through education communities can learn that sustainability is possible. This has led her to focusing her efforts on school reform. Susan decided that educational transformation was paramount in order for sustainability to be taken seriously in communities. Susan founded CCES in 2002 and has since worked ardently to engage teachers, schools, and districts all over the country in designing curriculum and participating in customized professional development. This professional development is centered on the concept of sustainability as an opening discussion through which teachers and administrators engage in whole school and community reform. She reflects on the experiences that have brought her to this point:

I went to college, got exposed, and then spent ten or fifteen years just becoming a sponge and banging my head against a wall, trying to figure out, “Where's my place in this world?” Because I found the classroom very constraining and there was not one certificate that would accommodate what I wanted to do. So I thought I could have a bigger impact by creating materials and pushing them out.

CCES is a non-profit based in southeast Michigan that works nationally to “serve leading educators who understand the ethical need to educate for a greener economy, revitalized communities, and a more equitable society”(www.creativechange.net/). The work Susan spearheaded through CCES and her work with Rebecca at EMU set the table for what would become SEMIS. She recalls co-writing the initial grant application in 2007 and connecting Rebecca with Shug so that all three of them could present a unique partnership she refers to as “the whole package.” Susan provided her experience with designing curriculum with a local focus and her connections to schools and teachers through work she was doing through CCES to SEMIS. While Susan left the steering committee in 2008 to focus on the growing

demand for curriculum and programming provided by CCES, her influence on SEMIS as a non-university community partner and a founding member provides an important perspective to the story.

Shug. Shug Brandell is a long time affiliate of the Coalition of Essential Schools movement and worked as a part of a school improvement initiative in Detroit when Susan Santone connected her with Rebecca at an exploratory meeting hosted by the GLFT to launch the GLSI. Shug was one of the three founding women who wrote SEMIS into existence. Her experience as a teacher and a principal carried over into her work as a consultant and coach for school reform and it was precisely this diverse professional experience and skillset that Susan and Rebecca sought out when they began writing the SEMIS grant proposal to the GLSI. In 2007, Shug was working as part of the U. S. Department of Education's Comprehensive School Reform (CSR) at the Hope of Detroit Academy in Detroit. Shug recalls:

We [Michigan Coalition of Essential Schools] tried to provide the professional development for the schools that we were working with that were funded by the Comprehensive School Reform grant money. Those were basically schools that were identified by need. They were high-poverty, low-performing schools. And they were all over Michigan...They were elementary, middle, high schools, rural, urban—and, in some cases, suburban schools.

Shug further articulates:

I'd gotten a call from Susan Santone early on about doing some kind of partnership. She knew of the Coalition of Essential School work and we were going to try to find some ways of working together, but of course funding was always an issue. So it was

Susan, and then Rebecca, who contacted me when they were looking for organizational partners that were like-minded. Of course they thought of the Coalition of Essential Schools and contacted me.

Shug, who identifies as an advocate for justice in schools, as evident in her leadership in school reform, recognized that SEMIS was setting out to do something unique and difficult.

Shug describes her contribution to SEMIS:

The Coalition of Essential Schools takes a little bit different perspective in that we see a lot of reciprocity in the relationship between communities and schools. It's that students and teachers have much to give to a community. So that is what I brought to it [SEMIS]. I also brought a lot of experience in adult learning theory and philosophy. Because so much of my work has been done...from a perspective that modeled all of the best practices—the strategies and skills that teachers who are really immersed in project-based learning would use with their students. There was a very intentional kind of alignment around the importance of the process of the professional learning situation with the schools...I did not have the content expertise around sustainability or even the social justice piece of it, but I had knowledge of project-based learning.

Shug's work as a steering committee member whose connection to a plethora of protocols for working with teachers and building relationships requiring support from school structures provided a valuable perspective on the steering committee. Shug retired from SEMIS in 2010. She currently continues to provide coaching support for schools through her long-standing relationships with the Coalition of Essential Schools.

Gary. Gary Schnakenberg is a retired social studies high school teacher and is currently a faculty member working on his PhD in geography at Michigan State University. Gary's teaching experience and his research in political ecology brings a valuable contribution to SEMIS as an EcoJustice scholar. His work as a high school teacher at Souhegan High School in Amherst, NH—a school founded on the Coalition of Essential Schools model—became an incubation site for the educational approach that SEMIS later came to use. Gary describes his work as a teacher:

I got a job as a social studies teacher, and it was everything I wanted to do. Everything I wanted to be. I just loved it. My initial background was in history—non-U.S. history. I taught required courses like U.S. government and U.S. economics, but primarily I taught European history—Western Civ. kind of classes. That was the stuff that I really loved.

Gary is married to Rebecca Martusewicz and has served SEMIS in several capacities over the course of the organization's existence, ranging from consultant and coach to steering committee member. In the fall of 2005, Gary and Rebecca partnered with teachers from Souhegan High School to facilitate an interdisciplinary course for high school seniors. As previously described in Rebecca's profile, this course was a seminar combining social studies, language arts, and biology content under the theme of food systems and sustainability. Most notably, the course engaged both the instructors and the students in EcoJustice Education as a framework for interdisciplinary inquiry based project learning. Gary and Rebecca worked in collaboration with the language arts teacher Ken Boisselle and the biology teacher Melissa Chapman, together with students at Souhegan to develop a model for an EcoJustice approach to place-based education (Martusewicz & Schnakenberg, 2010).

This experience and Gary's expertise in the craft of teaching played an integral role in the development and facilitation of professional development and coaching in SEMIS.

Currently, Gary has taken a less active role in the organization to complete his dissertation on small farm agriculture in Jamaica; however, he states that he looks forward to returning to SEMIS after his defense in May 2013.

Becca. Rebecca Nielson, who goes by Becca in SEMIS to avoid confusion with Rebecca, is a current member of the SEMIS Steering Committee. In recent years, Becca has taken up a leadership role in providing individual curriculum and instruction support for SEMIS teachers. Becca co-facilitates professional development with Ethan in efforts to grow a whole school reform initiative within SEMIS. Before joining SEMIS Becca had been in connection with the GLSI and was a participant of a meeting in 2007 hosted by the GLFT to introduce potential grant applicants to the GLSI's and GLFT's vision of place-based education. Previous to Becca's involvement with these initiatives, she was drawn to teaching as a science educator. Becca shares that she didn't always identify as a "science person":

I came out of high school terrified of science. It was only through college that I went through all of the biology classes and all of the natural science classes, because science and math were off limits for me. My ninth grade math teacher told me I was stupid and that was it. So I was going to do Spanish and some other stuff, but ended up with a really fantastic mentor that said, "No, writing about animals, learning about natural history, learning about different kinds of organisms, you know, cells through biomes and ecosystems and all that is science." So then I went back and got science degrees. It has always been interesting for me to be labeled this "science person" even though that's what I came out of college with—science degrees.

Following her studies at the University of Michigan, Becca worked at the Leslie Science and Nature Center (LSNC) in Ann Arbor, MI. LSNC is “a nonprofit organization that provides environmental education and experiences for children, families, and other individuals to honor and perpetuate the legacy of Dr. and Mrs. Eugene Leslie by fostering understanding, appreciation, stewardship and respect for the natural world” (www.lesliesnc.org). Soon after Becca completed a Bachelor’s of Science in Biology and Anthropology-Zoology from the University of Michigan her love for science education led her to further pursue her education. Becca moved to Virginia to pursue a graduate degree in Science education from the University of Virginia. She explains:

I got a master’s degree in Education and taught high school for a while, found that I really worked well with...students who were put at risk by their institutions. My kids were dropping out, pregnant, failing, in trouble with the law... You know, anything that would make them nontraditional students and alienated from traditional school culture. I worked really well with them and I really liked to teach science and learn science with them. So I did that for a while and then we moved back up to Michigan and I went back to that non-formal education.

When Becca returned to Michigan, she worked at the Detroit Science Center. She recalls how the Detroit Science Center wasn’t exactly the right fit for her:

I was sort of wavering between formal and non-formal education, and thinking about how kids learn. Working in Detroit at the Detroit Science Center kept me with that sort of disadvantaged, marginalized population in science. Maybe they were scared of it, maybe they didn’t like it, which was the population I liked to work with...but it was mostly engineering, which wasn’t my forte. So when the position with the

National Wildlife Federation opened up, I thought, “That’s my niche. Non-formal education and natural science. I’ve got a formal education background but I’m not going to be in the standardized testing arena anymore”...I want to be in this non-formal science—but natural science—educational arena...where I can bring programs to students and work with teachers directly, but not be in the classroom myself.

Becca’s work with the National Wildlife Foundation (NWF) put her in direct correspondence with the GLFT and GLSI in 2006. Becca explains:

When I got to NWF, one of the things that I was asked to do was to oversee our involvement with the Great Lakes Fishery Trust and the education realm. I was put on the committee that was reviewing the applications for the Great Lakes Stewardship Initiative initial hubs.

In this manner, Becca came into contact with SEMIS early on and, through the NWF, ended up a community partner with SEMIS in 2007. She recalls her eagerness to review the GLSI applications:

I really jumped at this chance to go and participate in this Great Lakes Stewardship Initiative which I thought would get me back with teachers and get me back with organizations that were trying to do stewardship education and non-formal science education with kids. I actually read all of the proposals for all of the hubs. I had been contacted about being a community partner in SEMIS by Susan Santone, who was one of the writers of the SEMIS proposal.

Becca was struck by the non-traditional approach of the SEMIS proposal to developing and implementing place-based education. She articulates the thoughts and experiences that led to her joining the SEMIS Coalition:

I kind of hesitated, because it was the only proposal that was anything but natural science, anything but traditional EE [Environment Education]. I was a little skeptical, but...It [the SEMIS proposal] just had a very unique quality to it. I wasn't there yet, in terms of thinking about social justice being connected to environmental stuff because I was squarely in the science education perspective. Coming out of the secondary biology certification I love nature and teaching kids. I was out in the woods...doing things that were water quality, ecosystems based...very science based stuff.

In 2007, Becca began to participate with SEMIS as a community partner on behalf of NWF. After a few years as a community partner with SEMIS representing NWF, Becca left the NWF and formed her own educational consulting company. As an independent educational consultant, Becca balances several jobs in addition to her role on the SEMIS steering committee. She is a lecturer at EMU and University of Michigan Dearborn in Curriculum and Instruction, a Michigan Environmental Education Curriculum Support (MEECS) trainer, and an evaluator for the GLSI. As a former classroom science educator and experienced informal outdoor environmental educator, Becca regularly finds herself navigating between the educational reform efforts of SEMIS, the GLSI, and environmental science education in the state of Michigan. Becca's educational consulting, and her role as the director of Site-Based Programming for SEMIS—through which she provides professional development and coaching as a part of a whole school reform effort rooted in place-based education—provides a valuable perspective and service to SEMIS as a current member of the steering committee.

Gloria. Gloria Rivera is a Sister of the Immaculate Heart of Mary (IHM) and the director of the Great Lakes Bioneers Detroit (GLBD). Gloria originally came to SEMIS as a partner through her work with the GLBD. She explains how she became drawn to GLBD:

What brought me to the Great Lakes Bioneers Detroit was a life-long commitment to justice and the environment and then the conclusion that environmental justice and social justice are one movement. Bioneers really allows for that to be lived out. By no means am I there, but it's a way to live out that marriage or that blending of the two movements.

The GLBD is a subgroup of the national organization, the Bioneers which is a “non-profit educational organization that highlights breakthrough solutions for restoring people and planet” (<http://www.bioneers.org>). The GLBD describe their work as “celebrating and understanding the connections we all have to each other, our environment, and social justice” (www.gldb.org). They go on to explain their mission is “to promote a sustainable community that fosters life-giving relationships, nurtures connections, and celebrates solutions for restoring and healing Earth’s communities.” Gloria explains how the fusion of the two movements has become a part of her identity:

The IHM—Immaculate Heart of Mary—Sisters from Monroe, Michigan, see a progression in our history from a huge commitment to education with a heavy commitment to justice, and then evolving into an ecology mindset. Prior to that was feminism, but always the kind of movements incorporating the different strands of what a whole life looks like. So we [IHM Sisters] had environmental justice. We called it an environmental enactment. In 1999 the IHM community made a

commitment to sustainability, and as the first step we did a “green” renovation of our Monroe retirement and administrative campus.

Gloria, originally from Mexico City and currently a resident of Southwest Detroit, brought to SEMIS a community partner representation with a spiritual background in an ecological approach to grassroots organizing and education in Detroit. Gloria recalls being called to join SEMIS:

I’m am still understanding what sustainability really means and so when I connected to SEMIS and understood its various components of place-based education, community partners, and the analysis of all the “isms” and the systemic analysis that took part in it. That, to me, made a great deal of sense. Since I’m a teacher in another life, I was excited that this would be part of the opportunity for education—especially in Detroit. Because of the lack of good education that we have in this city...it appealed to me.

Gloria is a long time activist and brings a spiritual dimension to the work she does in the community, and brought those influences with her participation in SEMIS. Originally a community partner through the GLBD and the IHM Sisters, Gloria later became co-director of SEMIS in 2010 to help Rebecca with the growing demands of leadership and reporting in the organization. Gloria provided an integral perspective to the leadership of SEMIS as a community partner. She parted from SEMIS in 2011 to focus on the GLBD and is no longer involved with the organization. While this departure is discussed in later chapters that analyze the tensions and themes that emerge from the stories of SEMIS, it can be noted that Gloria’s departure from SEMIS grew out of an omnipresent tension between funding, leadership, and the demanding workload carried by members of the steering committee.

Danielle. Danielle Conroyd, a former IHM sister, works with the River Raisin Institute (RRI) which is a non-profit affiliated with the IHM sisters in Monroe, MI. She originally came into SEMIS as a community partner with Saline High School and gradually developed a stronger presence in the organization that grew into her role as a member of the steering committee. Danielle explains how the RRI emerged from the IHM Sisters in Monroe:

They [IHM Sisters] wanted to establish a non-profit that was focused on trying to teach about living more sustainably. Because of the IHM's educational legacy...the non-profit [the RRI] would be another way to educate citizens for the planet.

The RRI works on two main fronts. The RRI “sponsors educational works with the goal to respect, nurture, and promote the well-being of all creation” and “collaborates with others to promote transformational learning and sustainable community for the 21st century and beyond” (www.rriearth.org). Danielle's background in community partnerships provided a valued perspective as community partner and a non-university representative on the steering committee. Her contributions helped to foster SEMIS' early commitment to equitable partnerships between community organizations and the university participants. In the spring of 2010, Danielle opened her lake house up for the steering committee to have a two-day spring retreat in Brooklyn, MI that proved to be a critical moment in the organization's history and development. Danielle has since parted ways with SEMIS as partnerships for the RRI and SEMIS went in different directions.

Graduate Students

The SEMIS coalition, co-founded by Rebecca at EMU and housed in the College of Education and iSCFC, has used the support and talents of graduate students in the Social

Foundations of Education master's program and the Educational Studies PhD program. Graduate students interested in the work of SEMIS are highly valued. Funded graduate assistantships awarded by the college and by SEMIS have allowed some graduate students to participate as members of the steering committee. At the time of the research in this study, three graduate students had worked in the organization as members of the steering committee and six doctoral students had shown interest and were beginning to participate in supporting the organization. In this section, I introduce two of the three narrators who are, or were, EMU graduate students involved with the SEMIS steering committee. The following paragraphs introduce the voices of Lindsey Scalera and Lisa Voelker. The third voice in the study that falls under the graduate student category of narrators is my own. I have been a graduate assistant in the organization since 2011 and a graduate student on the steering committee since 2007. My introduction and relationship to SEMIS can be found in the preface of this dissertation.

Lindsey. Lindsey Scalera worked as a graduate assistant (GA) for SEMIS while she pursued a graduate degree as a Social Foundations student in the EcoJustice Education concentration. As a GA working closely with Rebecca, she participated in the work of SEMIS from 2009-2012. Before Lindsey's time as a graduate student at EMU, her friends and teachers in high school urged her to participate in youth programming that sparked her interest in anti-oppression education. Lindsey recalls:

I had been working in high school, all the way through undergrad in multicultural education—or anti-oppression education. In high school we started—with some awesome Alt Ed teachers—a diversity council at the school...The stuff in high school had also been supported by this organization called National Conference on

Community and Justice—which is now the Michigan Roundtable for Diversity and Inclusion....All across southeast Michigan, they were bringing kids together and teaching them language and facilitation skills to talk about, basically, structural oppression, mostly around race and gender—even more so race.

She goes on to explain:

That was my background coming in. As a kid I had these tools and this language to think about things a certain way. Which is that, “race is a social construct,” and all that kind of good stuff...Language like “anti-oppression” and “structural oppression.” And so that was what I was interested in studying. I took as many classes as I could in undergrad that put me in that direction.

After Lindsey’s undergraduate studies, she looked into studying those topics further and came across the Social Foundations of Education program at EMU. She explains:

I was trying to figure out what I wanted to do and I had thought maybe I want to work in higher education. So, I was really disappointed when I was looking around at programs. I was surprised to find that many of the programs did not cover diversity in the way that I expected they should. Most of the programs I looked at only had one or two classes; some weren't even required....So I happened to find the Social Foundations program in our catalog. I wasn't even thinking of staying at Eastern, but I did.

Lindsey further articulates starting her graduate studies as EMU:

That was sort of the start of it. I went both into the master’s program at the same time as I did AmeriCorps. I was kind of continuing my anti-oppression education through community-based work, which I was finding very valuable. I was working with all

these non-profits and learning about what they were struggling with... They were mostly non-profits that dealt with social issues... foster homes, Catholic Social Services, Hispanic Outreach program in Pontiac and things like that. I was learning about all that stuff.

It wasn't until Lindsey's second year in her graduate studies that she discovered her niche in the field of eco-democratic reform. Her interest in sustainability and social justice made Lindsey a strong candidate for the EcoJustice concentration and SEMIS. She recalls the discovery:

I came back to Eastern for my second year and I saw in the course catalog a course called Ecofeminism and I was like, "I don't know what that is, but I'm going to take it because it sounds cool." I had come from this huge focus on social oppression and how humans treat each other, but at the same time, my whole life, I had always loved nature. My mom grew a garden and we used to go camping all the time. So, there was that vein in me, but I never linked them together until I took that course.

Lindsey further articulates:

So, I took that course, and for whatever reason Rebecca saw something in me. She had invited me to be her GA for Educational Studies—the journal that she runs. That was the pathway in, and then once that turning point happened, it opened up this whole other world, "Oh, so, these things are linked. That's cool. That makes a lot of sense." [laughs] I always say, when I explain EcoJustice to people, "Okay, the same underlying reasons that humans think that they can go and colonize a place, or have slavery, is the same reason we think we can blow off the top of a mountain to get at the coal inside." It's related... That's how I got involved in SEMIS.

Lindsey graduated from the EcoJustice Education masters program and moved into a position in SEMIS as the Communications Director. Lindsey also lectured in Social Foundations undergraduate courses and ran a learning garden at EMU while she co-directed the Michigan Young Farmers Coalition (MYFC). Lindsey developed and designed most of the SEMIS print materials and web presence. Lindsey departed from SEMIS in 2012. She currently works on agriculture, food policy, education, and community gardening as a grassroots organizer for National Sustainable Agriculture Coalition on a project called Michigan Voices for Good Food Policy.

Lisa. Lisa Voelker is an EcoJustice Education graduate and worked as a GA for Rebecca Martusewicz during her time as a graduate student. Before Lisa's experience in the EcoJustice master's program at EMU and her work with SEMIS, she was an undergraduate student in art education. Lisa recalls:

I started the art education program at Eastern, and then ended up in a SOFD class—Johnny's SOFD class. Leading up to that, I was feeling pretty isolated in the program in terms of addressing social and ecological justice and was wondering if that was going to be a possible part of my teaching future....Then I had Johnny's course in ethics and the social foundations of education.

She goes on to explain:

I had been waiting to ask the questions that I had and to address those questions through education. Then Johnny introduced me to Rebecca and Susan at the beginning of an EPA grant program that they were doing. A friend of mine, Claire, was the one who got me involved in Bioneers the same year that I had Johnny's class. He announced that the Great Lakes Bioneers Detroit Conference was going on. And

those two things came together at the same time, from Johnny and Claire. I volunteered at Bioneers and Claire introduced me to Gloria Rivera and that kind of sisterhood of these rebel nuns. That was the piece of it that filled in parts that weren't quite together in the education program.

Lisa recalls how these connections later led to a decision to study in the EcoJustice Education master's program. She explains:

My last term doing my art education certification, Rebecca let me sit in on a graduate course called Ecofeminism and Education. And that would later lead to me entering the Social Foundations master's degree program at EMU.

Lisa worked with Susan Santone at CCES in 2009. She recalls: "I worked with Susan in my undergrad and that summer...at the end of my undergrad and the beginning of my masters."

Lisa goes on to explain how this led to her involvement in SEMIS:

I was working for Susan. I came with her to one of the first SEMIS meetings, where she was a Creative Change partner. She was on the steering committee and also a community partner. That was at the beginning of my master's degree. Rebecca wanted us to do case studies that we could use...to get an understanding of what it might be like to attempt doing EcoJustice in schools using a program like SEMIS. So as graduate students also studying this, we were supposed to go into the field and do case studies of particular schools. What we produced during that time was to be part of our grade for the coursework and then also was to gather information for SEMIS to try to understand what was going on—to see how it looked out in the field. That was close to the beginning of how I got involved with SEMIS.

Shortly after her class with Rebecca, Lisa became a part-time SEMIS GA. As a GA, Lisa worked closely in SEMIS as a note-taker, logistics organizer, student-member of the steering committee, and fundraising steward. Lisa's experience as an art teacher, an EcoJustice student, and her community work with organizations like CCES and GLBD contributed to her role on the steering committee. Currently, Lisa is a visual arts teacher at a National Heritage Academy school in Ypsilanti, MI and pursuing her PhD in Educational Studies at EMU.

Conclusion

These profiles provide a context for the voices authoring the story of SEMIS in the following chapters. The brief profiles introduce present and former members of the SEMIS steering committee and contextualize the research by providing insight into the motivations and aspirations of the participants. Similar to how the researcher's subjectivity is a vital part of the research and ought to be included as a part of the study, the same concept is applied to all of these voices, as their perceptions shape and tell the story of the design of SEMIS. These statements reveal to readers of the study the potential biases and backgrounds that shape the viewpoints and positions of the participants. These introductions provide the personal contexts of participants that inform the diverse perceptions, experiences, and interpretations that create the story of SEMIS. The next chapter will build upon content introduced in Chapter 1 and highlight some of the key scholarship influencing an EcoJustice Education framework. Specifically, the following chapter will examine the work of educational theorist C. A. Bowers and its influence on what Martusewicz and Edmundson (2005) collaboratively articulate as an "eco-ethical consciousness" and a "pedagogy of responsibility."

Chapter 4: A Pedagogy of Responsibility and the Development of an Eco-Ethical Consciousness

In this chapter, I provide more background for the EcoJustice Education framework introduced in Chapter 1. In Chapter 1, I provide an overview of an EcoJustice Education framework and I introduce a particular stance on eco-democratic reform work that has arisen in response to a very specific history and trajectory. EcoJustice Education is a critical and ethical framework through which one accepts the responsibility to identify the role that education both plays, and ought to play in transitioning toward diverse, socially just, and sustainable communities. As part of a growing field of eco-democratic reform, this particular strand—EcoJustice Education—is comprised of educators, scholars, activists, and artists doing critical work to address social justice issues and environmental degradation as linked to the powerful cultural assumptions—the “discourses of modernity”—of Western industrial culture. Before presenting the design study of SEMIS in the follow chapters, it is necessary to articulate the theoretical frameworks upon which the organization is founded. SEMIS strives to follow an EcoJustice Education framework. In other words, SEMIS aspires to work with participants in the organization at all levels to critically and ethically (a) examine Western industrial culture and its impacts on social and environmental systems; and (b) identify, examine, and teach skills and habits of mind that support socially just and environmentally sustainable communities.

As articulated in Chapter 1, EcoJustice Educators use this critical and ethical framework to examine how Western industrial culture has emerged from a specific set of cultural practices and historical events while simultaneously utilizing the framework to inform actions that address damaging or unjust aspects of deeply-rooted cultural

assumptions. Take, for example, the assumptions that shape and guide us to accept social suffering and ecological destruction as “progress,” or how these dominant patterns of thinking define success as the accumulation of goods produced through the exploitation and enslavement of our sisters and brothers, the more-than-human community, and the land and oceans. For many educators—or people in general for that matter—who are disciplined by Western industrial assumptions of human-superiority and individualism, this type of analysis highlights the importance of the complicated relationship between our language, how we think, and our behaviors. Specifically, an EcoJustice Education framework challenges the habits of mind and body that undermine living systems and thus contribute to social suffering and environmental degradation.

In Chapter 1 I explain that EcoJustice educators recognize how language shapes culture, and that culture informs how we interpret the “differences that make a difference” (G. Bateson, 1972; Bowers, 2011). I explain how EcoJustice Education recognizes and responds to how Western industrial culture—like all human cultures—is defined by the dominant languaging process being passed on, including deeply-embedded assumptions like anthropocentrism (human-centered), ethnocentrism (one culture is central and assumed superior), androcentrism (male-centered or patriarchy). These assumptions are communicated through our language patterns to provide the very blueprints or maps that define our culture. These get passed on and internalized generation to generation, having tremendous influence on how we think and act—the traditions, values, ways of identifying, and resulting behaviors of our everyday lives. EcoJustice educators assert and act in accordance with the understanding that it is through our culture that we are shaped by the

stories of our beliefs—the stories that teach us how to make sense of the world. In other words, we are all bound by the metaphors of our language.

EcoJustice educators take the position that it is important to address these language patterns' role on influencing what is marginalized by our language and our thinking, and therefore our actions and decisions. In Chapter 1, I lay out how, through the examination of the ways in which language works, we can identify alternative patterns that challenge and replace the dominant assumptions of Western industrial culture with life sustaining patterns rooted in ecology. EcoJustice Education pays particular attention to language and how educators can interrupt metaphors of the current dominant oppressive culture. What emerges from this work is the clear recognition that we have learned to treat each other in destructive ways and we have learned to live within illusions of our existence as being separate and superior to nearly everything else. EcoJustice educators recognize that we need a very different paradigm for how we make sense of the world and that through education we can begin to learn how to co-exist on this planet.

In this chapter I trace some of the key influences on the epistemology of an EcoJustice Education framework through the work of educational theorist C. A. Bowers and its influence on what Martusewicz and Edmundson (2005) collaboratively articulate as an “eco-ethical consciousness” and a “pedagogy of responsibility.” Beginning with Bowers and key influences on his work, the chapter traces the development of this framework into EcoJustice Education. I describe Bowers' proposed *five aspects of ecojustice* and introduce the major voices contributing to the development of these aspects. The chapter then examines the extension and growth of Bowers' conception of ecojustice as it relates to wider efforts involving educators committed to eco-democratic reform that currently contribute to

what some activist-educators—and members of SEMIS—refer to as EcoJustice Education.

The chapter presents EcoJustice Education’s historical trajectory and situates key contributions and concepts coming from EcoJustice scholarship in the context of SEMIS and illustrates how these concepts are a part of the theoretical foundations of SEMIS.

Tracing the Roots of an EcoJustice Education Framework

SEMIS, as framed by EcoJustice Education, emphasizes the importance of focusing on the diverse contexts and relationships occurring in local, living systems through which meaning is developed. This approach is predicated upon the position that through the recognition and awareness of the complex set of influences acting on how we make meaning, change becomes possible. In this section I illustrate the development of Bowers’ articulation as it came to influence an EcoJustice Education framework. It is important to clarify that his work spans nearly four decades, but draws on centuries old knowledge and has a specific lineage with influences from key non-Western voices critical of Western industrial culture. Bowers and other associated scholars referred to this evolving framework as ecojustice, ecojustice, and then Ecojustice. This work, in turn, grew into the approach known as EcoJustice Education by a group of educator-scholars who recognize Bowers as a key contributor to the framework, but have a distinct derivation of his work. The following section shows how the framework referred to by Martusewicz, Edmundson, and Lupinacci (2011) as EcoJustice Education has an epistemology that can be traced through the scholarship of Bowers and share many of the same major influences. To provide the specific lineage of EcoJustice Education, the following section presents Bowers’ key contributions and major influences on his work.

Tracing Bowers' articulation of an ecojustice framework. Bowers first began to write about the strong, interconnected relationship between education, culture, and the ecological crisis in *Cultural Literacy for Freedom: An Existential Perspective on Teaching, Curriculum, and School Policy* (1974) and later in *The Promise of Theory: Education and Politics of Cultural Change* (1984). These texts lay out a strong foundation for calling attention to the educational implications of individualism, equality, and critical inquiry. This work also illustrates the importance of how a sociology of knowledge can be used to reform education and challenge how authority is established and maintained in modern society (Bowers, 1984). Drawing from the seminal sociological work of Peter Berger and Thomas Luckmann (1966) in *The Social Construction of Reality*, Bowers examines the socialization process and the ways in which language works to maintain cultural patterns that often go unnoticed or are accepted as objective. Bowers, drawing from the concept of social construction, explains how a certain taken-for-grantedness obscures the implications for a specific language that developed through and with the rise of the Scientific and Industrial Revolutions. Bowers (1984) situates the teacher, and more broadly educational reform, as a potential interruption to the social construction of knowledge as it works to reproduce social and environmental suffering associated with cultural patterns that emerge from modern Western thought. A key element of Bowers' work is a comprehensive examination of how language works to carry forward and reproduce ways of thinking from the past. In *Elements of a Post-Liberal Theory of Education* (1987), Bowers examines the complexity of the relationship between language and how we, as modern Western humans, understand and frame experience. Critical of liberalism, Bowers argues for the reclamation of certain words like "interdependence" and "ecological," while illuminating the limits and traps of words like

“autonomous individual” and “liberalism.” He asserts that education can and should push boundaries set by specific limiting language while still maintaining life-sustaining values. Bowers (1987) articulates how educational theories put forth by influential scientists, such as Carl Rogers and B.F. Skinner, or educational philosophers, like Paulo Freire and John Dewey, have a major impact on the field of education. He goes on to explain that these prominent theories carry forward patterns of educational liberalism that undermine any challenge to power relationships that function as impediments to sustainable living on the planet. Bowers works to examine the connections between prominent theories of transformative education and the globalizing trends of a Western industrial culture. Drawing on the work of Gregory Bateson (1972), Bowers works to promote and support sustainable cultures and the educational traditions that could serve as sites of resistance to economic globalization and the destruction of the world’s diverse ecosystems. I return to the influence of Bateson in Bowers’ work and the importance of this connection later in the chapter as it is central to Bowers’ interest in ecological intelligence, his work to introduce an ecojustice framework, and to the growing EcoJustice Education movement’s focus on the vital role of discourse and the language process.

Bowers, in response to a growing movement of scholars and activists responding to Western cultural colonization in connection with indisputable evidence of the resulting global climate change, focuses his efforts on (a) the impact of Western education on the so-called Third World; (b) the need for Western cultures to shift from a mechanized, anthropocentric intelligence to an ecological intelligence through the revitalization of the world’s diverse cultural commons; and (c) the critical imperative for deep cultural analysis that examines the relationships between language, culture, and thought. This work is most

notably articulated in *Education, Cultural Myths, and the Ecological Crisis: Toward Deep Changes* (1993), in which Bowers illustrates the importance of understanding the complex connections between education, culture, and environmental and social injustices that occur in modern Western society. Responding to the prevalence of scientific studies shaped by dominant cultural assumptions of progress and linear development in environmental literature, Bowers further explores the importance of language by laying out a framework for considering the ecological consequences to an education that does not challenge deep cultural assumptions undermining living systems. Bowers identifies ecojustice through five interrelated aspects—expanded to six by key EcoJustice educators introduced later in the chapter—that work to “reduce the impacts of industrial/consumer dependent culture on everyday life” (Bowers, 2005b).

Bowers’ five aspects of ecojustice. It is important to note the contributions of *The Development Dictionary* by Wolfgang Sachs (1992) as a key influence on the work of Bowers. Sachs edited and contributed to a seminal text of post-development theory that presented many perspectives from the so-called Third World on how language is context-dependent and embodies assumptions that vary by culture. Sachs and his co-writers illustrate how specific ideas associated with “progress” and “development” are representative of colonization and take on entirely different meanings when analyzed through their impact as interpreted and experienced within non-Western industrial cultures. This emphasis on the role of language as a key tool in the continued oppression of so-called Third World cultures, combined with the highly influential work of the International Forum on Globalization (IFG), informed the development of the EcoJustice Dictionary that would come to clarify how words commonly used by educational theorists reproduce the anthropocentric, patriarchal,

and ethnocentric traditions of Western culture. In an attempt to situate ecojustice as a framework that “provides the larger moral and conceptual framework for understanding how to achieve goals of social justice” (Bowers, 2005b), the EcoJustice Dictionary reads:

The five aspects of ecojustice that have significance for educational reformers include the following (1) eliminating the causes of eco-racism, (2) ending the North’s exploitation and cultural colonization of the South (Third World cultures), (3) revitalizing the commons in order to achieve a healthier balance between market and non-market aspects of community life, (4) ensure that the prospects of future generations are not diminished by the hubris and ideology that drives the globalization of the West’s industrial culture, (5) reducing the threat to what Vandana Shiva refers to as “earth democracy”—that is, the right of natural systems to reproduce themselves rather than to have their existence contingent upon the demands of humans. (www.cabowers.net)

These five aspects, to later include a sixth introduced by Martusewicz and Edmundson (2005), and what Bowers (2010, 2011) refers to as education for ecological intelligence, serve as a map for defining the primary focal points in the analysis of an EcoJustice Education framework through the work of C. A. Bowers.

Major influences on Bowers’ “five aspects of ecojustice.” The first two aspects of ecojustice are heavily influenced by the efforts of the IFG, members of the Schumacher Institute, *The Ecologist* journal, and other academics and activists who worked through a critical era of global trade policy reform to disseminate information against the existence and unfair centralizing practices of globalization. More specifically, these efforts were directed toward opposing and exposing the World Trade Organization (WTO), the International

Monetary Fund (IMF), and the World Bank as enforcers expanding capitalism into a global economic empire and rapidly accelerating the spread of consumer/industrialized Western culture. Major influences on these aspects include members of the IFG: Vandana Shiva, Helena Norberg-Hodge, Jerry Mander, Edward Goldsmith, Martin Khor, and Wendell Berry. The IFG published an edited collection of essays titled *The Case Against the Global Economy: And a Turn Toward the Local* (1996), which lays out a strong foundation for understanding the connections between economic globalization and the worldwide resistance from those struggling toward democracy. The book emphasizes the planet's dire need for unsustainable cultures to shift toward sustainability. This collection not only informs key influences on an ecojustice framework, and later EcoJustice Education, but also illustrates the imperative for people in consumer/industrialized cultures to stop destroying each other and the world's diverse ecosystems. While these essays primarily make the strong case for local economies of scale, they also grow out of important work opposing global systems destroying the planet.

The Ecologist (1993) published a report titled *Whose Common Future: Reclaiming the Commons* that outlines the importance of the commons as they relate to sustainability within an ecojustice framework. In Bowers' book *Revitalizing the Commons: Cultural and Educational Sites of Resistance and Affirmation* (2006), he refers to the commons and explores efforts to revitalize the commons. Bowers (2005a) links the concept to education, defining the commons as:

Both the natural systems (water, air, soil, forests, oceans, etc.) and the cultural patterns and traditions (intergenerational knowledge ranging from growing and

preparing food, medicinal practices, arts, crafts, ceremonies, etc.) that are shared without cost by all members of the community. (www.cabowers.net)

Bowers draws heavily from the work of Edward Shils (1981) in *Tradition* to explain how the commons vary from culture to culture, especially in relationship to traditions that have formed bioregionally. Bowers explains how the commons are aspects of both the natural world and the cultural traditions that have not been reduced to monetized transactions through commodification and market relationships (Bowers, 2006). Bowers (2006), drawing from Polanyi's *The Great Transformation: The Political and Economic Origins of Our Time* (2001), illustrates how markets work in such ways that they monetize and enclose the commons in a process of exclusion based on culturally constructed, unsustainable economic systems.

Important to understanding the influences on Bowers' work is the global context out of which critics of globalization began to organize around issues of social and environmental justice. *The Ecologist's* (1993) report emerged from a meeting that took place in Rio de Janeiro, Brazil in 1992 for the United Nations Conference on Environment and Development (UNCED). This event in history, commonly referred to as the "Earth Summit," marks a critical moment in global politics in which the importance of healthy ecosystems began to be accepted and recognized by national governments as a political issue. The explanation of the enclosure of the commons in connection to both social suffering and environmental degradation outlined in *Whose Common Future?* is a clear critique of development and Western ideologies of "progress." In addition to these publications, the work of Helena Norberg-Hodge, Vandana Shiva, and Wendell Berry extends far beyond the IFG and the *Ecologist* to play key roles in laying out the theoretical foundations for the five aspects of

ecojustice. In her book *Ancient Futures: Learning from Ladakh* (1991), and the film by the same title released in 1993, Norberg-Hodge illustrates how destructive notions of progress and development are to local economies and to living systems. Focusing on community relationships of health and happiness, Norberg-Hodge exposes how local women in Ladakh, India work to maintain important, ancient, and sustainable traditions that have been crucial to survival in the Himalayas for generations.

Vandana Shiva's work as a feminist scholar in *Monocultures of the Mind: Perspectives on Biodiversity and Biotechnology* (1993) exposes the ways in which dominant Western thought rooted in mechanization works to undermine living systems. In her later work, Shiva expands upon this predication and presents the perspective of sustainability as inextricable from decentralized decision-making through a particular type of democracy—"Earth Democracy" (Shiva, 2005). Decision-making in support of Earth Democracy is decentralized from institutions of centralized power and relocated within the inhabitants of an environment, including the "more-than-human world" (Abram, 1996). This non-anthropocentric version of democracy challenges the exclusionary versions of democratic decision-making and acts as a set of guidelines for the ecojustice framework's third, fourth, and fifth aspects—"the right of natural systems to reproduce themselves rather than to have their existence contingent upon the demands of humans" (Bowers, 2005b).

Wendell Berry, an American writer and farmer in Kentucky, writes extensively about Western society's transformation from sustainable farm cultures in close relationship to the land and its inhabitants, to a destructive, unconnected culture of large agribusinesses and war mongering politicians. Berry's poetry, fiction, and political essays offer many powerful examples that inform an ecojustice framework. Examples of this influential work can be

found in an essay titled “Conserving Communities” (1995) and in Berry’s critique of modern science found in a response to E.O. Wilson’s *Consilience: The Unity of Knowledge* (1998) published in *Life is a Miracle: An Essay Against Modern Superstition* (2000). Berry’s critique of science as a modern superstition calls attention to how a scientific mindset acts to reduce life to a machine. Specifically, he calls into question the sacredness of modern science as fact and in turn connects the modern scientific mindset directly to an industrialized/consumer mindset (2000).

These influences all contribute to a body of work that helps critics of globalization work to expose the role that education, more specifically Western schooling, plays in reinforcing false notions of progress. This topic is perhaps best handled by Esteva and Prakash (1998) in *Grassroots Post-Modernism* and Prakash and Esteva (1998) in *Escaping Education: Living as Learning Within Grassroots Culture*. Madhu Suri Prakash, an educational philosopher and experienced scholar on Illich, Ghandi, and Berry, partners with post-development intellectual and activist Gustavo Esteva to expose the monoculturalizing forces of Western schooling’s work to devalue and destroy traditional knowledge that is essential to living locally, sustainably, and in support of living systems.

In summary, Bowers works towards an alignment with so-called Third World perspectives on sustainable cultural practices. Bowers’ participation with and respect for these diverse perspectives combines influences from prominent environmental thinkers, such as Aldo Leopold and Wendell Berry, with his own commitment to the potential of educators to interrupt unsustainable patterns of dominant culture in their classrooms. This work brings to the forefront of educational reform the importance of language, specifically how taken for granted root metaphors, such as “autonomous individual,” shape how we interpret the world

and have strong consequences that contribute to a life-impeding ecological crisis (Bowers, 1993). Bowers' analysis of the importance of Bateson along with his commitment to learning from ecologically-centered cultures, such as his references to Traditional Elder Knowledge in ecological reform, provides a strong framework for what Bowers calls Eco-Justice (Bowers, 1995, 2006).

EcoJustice Education: A Growing Movement in Eco-Democratic Reform

Over the last two decades Bowers' work has grown from the emerging Eco-Justice framework in collaboration with educator-scholars Jeff Edmundson and Rebecca A. Martusewicz. Together, they worked to grow a movement that recognized a centuries-old way of "living in recognition of and responsibility to the limits and fragility, as well as the beauty, mystery, and power of life systems" (Martusewicz, 2004, p. 1). This succinctly captures a defining characteristic of ecojustice that distinguishes the framework from other educational reform efforts rooted in critical pedagogy and constructivism which often argue for the need of "each generation to rename the world and to avoid forms of knowledge that do not emerge from the process of critical reflection" (Bowers, 2005c, p. 121).

The ecojustice framework developed into a movement that grew from educators in conversation about how they were expanding their curriculum, or in some cases overhauling it, to include sustainability as a key issue. Two publications that stand out to signify this era of development in the field are *Ecological Education in Action: On Weaving Education, Culture, and the Environment* (1999) edited by Gregory Smith and Dilafruz Williams and a special issue of *Educational Studies: A Journal of the American Educational Studies Association* (2004) titled *Ecojustice and Education* published by Martusewicz and guest edited by Kathryn Ross Wayne and David A. Gruenewald. Smith and Williams, while not

explicitly referring to the work as ecojustice, include many of the major contributors to the development of EcoJustice Education—Madhu Suri Prakash, C. A. Bowers, Gregory Cajete—and other voices influential to EcoJustice Education, such as Gregory A. Smith and David W. Orr, whose work became prominent in the fields of environmental studies and place-based education. It is important to note the prominent role of the journal *Educational Studies* in its efforts to include ecological perspectives in the field of Social Foundations and to challenge the resistance by many scholars to take up environmental degradation as part of cultural studies. Bowers, and a group of scholars who had worked or studied with him—some of which include Kathryn Ross Wayne, David Gruenewald (now David Greenwood), Derek Rasmussen, Jeff Edmundson, Bill Bigelow, and Steven Newcomb—make up a significant group contributing to the broad movement of eco-democratic reform. It is within this larger movement that the collaboratively shaped Eco-Justice framework, primarily introduced by Bowers, began to grow into EcoJustice Education.

While some of the better known work of scholars drawing from Bowers—like the work of David Gruenewald (2003, 2005) to define a critical pedagogy of place and Bill Bigelow’s work to publish social justice-centered teacher resources through founding Rethinking Schools—do not fully align with an EcoJustice Education framework, it is important to note that they do at some level identify social and environmental justice as inseparable and inextricably linked to culture. Most notable of these scholars contributing to an EcoJustice Education framework is the work of Derek Rasmussen (2004) and Steven Newcomb (2008), both strong academic voices and even stronger community activists. Rasmussen’s (2004, 2005) work in northern Ontario with indigenous cultures calls attention to the role of modern schooling and the destruction of sustainable practices, while offering

great insight into how Western dominant cultures have much to learn from traditional, land-based cultures.

Newcomb's (2008) book *Pagans in the Promised Land: Decoding the Doctrine of Christian Discovery* provides a strong example using linguistics and cognitive theory to expose the ideological underpinning of the colonization and genocide unleashed on indigenous cultures in North America through what he describes as the "conqueror mindset" (Newcomb, 2008). Newcomb's work to name and trace the origins of the insidious nature of the laws created to uphold a genocide on all non-Christian, non-European people and to justify the complete "conquering" of land from all others adds a deep cultural analysis to the horrors of colonization. These two voices are important extensions of Bowers' work and without a doubt both represent and influence what has developed as EcoJustice Education to emphasize recognition and value of indigenous epistemologies. However, it was through collaborating with the scholarship of strong academics like Frédérique Apffel-Marglin and her connections with the Proyecto Andino de Tecnologías Campesinas (PRATEC) and Rebecca A. Martusewicz and her activism and scholarship that focused on revitalizing the commons and the presence of collaborative intelligence in Detroit, MI (Apffel-Marglin & PRATEC, 1998; Bowers & Martusewicz, 2006; Martusewicz, 2009) that Bowers published two seminal texts linked to the development of EcoJustice Education. The first of these books, *Rethinking Freire: Globalization and the Environmental Crisis* edited by Bowers and Apffel-Marglin, was a product of collaboration between his and Apffel-Marglin's existing work with PRATEC.

The work and influence of Apffel-Marglin and PRATEC (1998) in *The Spirit of Regeneration: Andean Culture Confronting Western Notions of Development* offers a

comprehensive analysis of how Western development is problematic to local indigenous cultures within the greater Andean region. This text provides a strong example of how individualistic, anthropocentric epistemologies and associated practices do not fit with the diverse local sets of principles rooted in a non-Western ecological cosmology. Case studies provided by these texts supported Bowers' work to expose why critical pedagogy and other forms of social justice-centered educational efforts inadvertently undermine local diversity and often devalue local knowledge about sustainable practices. The essays in the book *Rethinking Freire: Globalization and the Environmental Crisis* (2005) tell stories of resistance to the modern emancipatory education found in globalized Freirian models of education. The examples of this resistance to Freirian teaching from around the world offer some useful suggestions for local resistance through a process they call rethinking "Freirian-based pedagogies" (p. vii) and "revitalizing the commons" (p. ix).

The second seminal text of Bowers' work, *Revitalizing the Commons: Cultural and Educational Sites of Resistance and Affirmation* (2006), focuses on the commons and the process of community empowerment through the reclamation of the commons from being enclosed by markets. The process Bowers refers to as "revitalizing the commons" emerged from working closely with a group of educators that most notably included Martusewicz and Edmundson (2005) in their work together to grow the idea of a "pedagogy of responsibility" and later as a part of defining EcoJustice Education. Drawing from Bowers (2006), Martusewicz et al. (2011) define "revitalizing the commons" as a "key step in taking sustained action" that includes "acting in collaborative local democratic efforts to strengthen local decision-making in ways that ensures the continuation of healthy sustainable aspects of the local commons and revitalize aspects that have been enclosed" (p. 313).

They break the process into three key steps:

1. Identify aspects of the commons in our daily lives.
2. Evaluate those aspects of the commons as to whether they support living systems or support killing systems.
3. Take action to strengthen those aspects that support living systems. (p. 314)

Practicing this work, Bowers, Martusewicz, and Edmundson organized a series of annual ecojustice retreats and meetings that coincided with conference presentations, out of which the ecojustice framework began to grow into a movement that extended beyond what Bowers had developed as ecojustice, and began to be recognized in its distinctive form as Eco-Justice.

Eco-Ethical Consciousness and a Pedagogy of Responsibility

Eco-ethical consciousness as an operative concept in EcoJustice Education can be traced to earlier work published by Rebecca Martusewicz. In *Seeking Passage: Post-Structuralism, Pedagogy, and Ethics* (2001), she presents a strong analysis of educational relationships and, using post-structuralist theory, demonstrates the complex nature of how cultural meanings are created from the generative power of difference. While the educational theory of Bowers offers the concept of ecological intelligence as a similar construct, “eco-ethical consciousness” differs from intelligence because it explicitly addresses ethics. Although, ecological intelligence and similar constructs used to describe ecologically responsible cultures and the resulting actions that stem from such an intelligence or awareness imply ethics, they do not explicitly deal with the complexity of ethical decision-making. Martusewicz (2001) defines ethics in the context of education:

Ethics must be all teachers' willingness to constantly ask what our work means in relation to a whole range of social, political, and cultural forces, and our willingness to shift our behaviors, our beliefs, and our identities as we come to understand the implications of what we do as political, transformative work. (p. 20)

Drawing from Deleuze, Serres, and Derrida, Martusewicz directs her attention to difference and, more importantly, how we as humans interpret differences and our responsibility to ethics and social and ecological justice. Martusewicz (2001) makes an important distinction between pedagogy and education by first clarifying the difference between pedagogy and curriculum. She explains that traditional approaches dominant in teacher education assert: “*curriculum* is defined as the formal content to be taught, and *pedagogy* is conceived of primarily as the transmission of that content from teacher to learner” (p. 4). Martusewicz, taking a critical poststructural feminist approach in response to the dominant assertion that through curriculum outcomes can be predicted and controlled, articulates “pedagogy as a generative force” that recognizes “the infinite operation of difference resulting from our own attempts to think about the world” (p. 6). This position differentiates between pedagogy and education, as Martusewicz explains how a philosophical examination of the purpose of education includes ethics. She writes:

A definition of education as a workable concept includes ethics....I include in my sense of what it means to become educated a willingness to confront suffering and to engage difficult questions around “the collective good” in one’s personal life, in classrooms, in communities, in the world, while recognizing that there are no certain or final answers. (p. 21)

In the final chapter of this collection of essays titled “Earth, Ethics, and Education,” Martusewicz (2001) brings a post-structural analysis of suffering together with understanding our relationship with the Earth. Martusewicz describes this connection as “a discussion of our relationship with the Earth and the associated responsibility we have as educators to open our hearts to the questions related to our own interdependence with the complex life forms we live among” (p. 115). Focusing on ethics that emerge from acknowledging interdependence and asking what is and what ought to be the purpose of education, Martusewicz poses the question, “What is the relation between Earth, ethics, and education?” (p. 115).

Drawing from curriculum theorist Susan Edgerton’s (1996) concept of “eco-erotic love” and the work of Michel Serres (1989), Martusewicz calls attention to love in response to the ethics of addressing both social and environmental suffering. Martusewicz brings this concept of eco-erotic love in connection with the work of ecofeminist philosopher Val Plumwood to present an analysis of how suffering and separation work together through Western dominant philosophy. Martusewicz (2001), drawing on Plumwood and writing from a position of responding ethically to her eco-erotic love, writes:

As contemporary inhabitants of Western culture, we have been born into and socialized by a complex system of belief, practice, and habit that denies the autonomous integrity of the nonhuman world, as well as our interdependence with nonhuman others, keeping our human identities hyperseparated from this backgrounded “other world.” (p. 123)

Writing about an ethical framework for recognizing and valuing human relationships with both the human and more-than-human living systems, Martusewicz (2001) introduces the

ethical questions in education that would be a precursor for her later work with Bowers, Edmundson, and her EcoJustice students. Martusewicz (2001) writes:

All life depends upon the intervention in and ethical attention to the lives of others, whether they be human or not. Attention to the other, to alterity, to the beautiful generative force of difference, while understanding our interbeing, is the creator of eco-erotic love. We are given joy and awe and life when we attend. (p. 130)

Martusewicz calls for an awakening for educators, especially for those who have taken up social justice but fail to acknowledge or engage in “education’s significance to our earthly survival” (p. 130). Understanding or recognizing our earthly survival—our existence in relationship to the living systems to which we belong—and then engaging in decision-making influenced by an eco-ethic is what later developed into an “eco-ethical consciousness.” The process of engaging in developing and practicing such ethics would be later referred to in her work as a “pedagogy of responsibility.” Before these ideas took on these specific titles with an EcoJustice Education framework, Martusewicz writes:

In our relations with our students, in what we ask that they consider and in their interpretations of these issues and questions lie unforeseeable possibilities for this world, many more than we can know or predict. We must be prepared to attend to these different responses and to encourage an ethical shaping of their potential for loving the Earth, our local landscapes and neighbors, and those for whom we may believe we have no affinity. (p. 131)

Collaborations between Martusewicz and Edmundson resulted in the development of the concept of an “eco-ethical consciousness” that takes into consideration the social and environmental impact of decision making and recognizes them as inextricably linked.

Martusewicz and Edmundson make explicit connections between this consciousness and teaching with what they refer to as a “pedagogy of responsibility” in a co-authored chapter in *Teaching for Social Foundations of Education: Context, Theories, and Issues* titled “Social Foundations as Pedagogies of Responsibility and Eco-Ethical Commitment” (Martusewicz & Edmundson in Butin, 2005). While much of the development of the Eco-Justice framework grew through conference paper presentations, panel discussions, and retreat workshops, this book chapter marked a critical moment in the development and growth of this particular strand of eco-democratic reform that was collectively being called Eco-Justice. This collaboration between Martusewicz and Edmundson brought together the individual interests that drew them towards Bowers’ work and introduced to the movement the concepts of an “eco-ethical consciousness” and “a pedagogy of responsibility.”

As introduced in Chapter 1, Martusewicz and Edmundson (2005) explain that “a pedagogy of responsibility asks first to what and whom are we justly responsible?” (p. 84). Martusewicz and Edmundson explain how teachers engaging in a “pedagogy of responsibility” illuminate a web of ecological relationships in the community through which a cultural shift toward living in healthy sustainable communities becomes a reality rather than a theoretical possibility. Martusewicz and Edmundson (2005) state, “A pedagogy of responsibility looks for sources of moral authority in community traditions rather than individual judgment, while understanding that some traditions should not be maintained if they are oppressive, such as sexism, racism, and nationalism” (p. 84). The collaborative contribution to identify the development of an eco-ethical consciousness in connection with enacting a pedagogy of responsibility set the context for these EcoJustice scholars to describe what they call EcoJustice Education.

The five aforementioned aspects of ecojustice were extended and refined by Martusewicz and Edmundson (2005) as the six interrelated interests of Ecojustice. These were later published and currently exist as the six interrelated aspects of EcoJustice Education (Martusewicz et al., 2011). This notion was later returned to in a text titled *EcoJustice Education: Toward Diverse, Democratic, and Sustainable Communities* (Martusewicz et al., 2011). In summary, the evolution of EcoJustice Education can be traced from Bowers' introduction of the aspects of ecojustice that grew into the movement that was transitionally referred to as Eco-Justice, before developing into the field of study that is today called EcoJustice Education. Drawing from the aforementioned aspects and primary points made by Bowers in his work, Martusewicz et al. outline what they refer to as the “six interrelated elements” that define EcoJustice Education (Martusewicz & Edmundson, 2005; Martusewicz et al., 2011):

1. The recognition and analysis of the deep cultural assumptions underlying modern thinking that undermine local and global ecosystems essential to life.
2. The recognition and analysis of deeply entrenched patterns of domination that unjustly define people of color, women, the poor, and other groups of humans as well as the natural world as inferior and thus less worthy of life.
3. An analysis of the globalization of modernist thinking and the associated patterns of hyper-consumption and commodification that have led to the exploitation of the Southern Hemisphere by the North for natural and human resources.
4. The recognition and protection of diverse cultural and environmental commons—the necessary interdependent relationships of humans with the land, air, water, and other species with whom we share this planet, and the intergenerational practices and

- relationships among diverse groups of people that do not require the exchange of money as the primary motivation and generally result in mutual aid and support.
5. An emphasis on strong Earth democracies: the idea that decisions should be made by the people who are most effected by them, that these decisions must include consideration of the right of the natural world to regenerate, and the well-being of future generations.
 6. An approach to pedagogy and curriculum development that emphasizes both deep cultural analysis and community-based learning encouraging students to identify the causes and remediate the effects of social and ecological violence in the place they live. (Martusewicz et al., 2011, p. 9-10)

It is important to note that these elements, both as they appear directly above and in the previous examination of Bowers' work, are a product of many key influences derived from major contributions of scholars and activists. Based on these interrelated aspects of EcoJustice Education, Martusewicz and Edmundson (2005) introduce that if "a cultural-ecological perspective is the way of analyzing, then the corresponding mode of being and living is eco-ethical consciousness" (p. 73). They define eco-ethical consciousness as "the awareness of and ability to respond carefully to the fundamental interdependence among all forms of life on the planet" (p. 73). Connecting the idea of such a consciousness with Susan Griffin's concept of "collaborative intelligence" in her work *The Eros of Everyday Life: Essays on Ecology, Gender and Society* (1996) and key ideas from Gregory Bateson (1972), Martusewicz and Edmundson (2005) rethink education and intelligence through introducing and examining an EcoJustice Education approach to teacher education.

Martusewicz (2009), in “Educating for ‘Collaborative Intelligence’: Revitalizing the Cultural and Ecological Commons in Detroit,” brings Bateson’s “ecology of mind” together with Susan Griffin’s “collaborative intelligence.” Martusewicz (2009) writes:

Intelligence, even knowledge, is not born of the human capacity to think or make sense of the world alone. Rather, it is the result of a collaborative endeavor among humans and the more-than-human world. In this sense, as human communities are nested within a larger ecological system, we participate in and are affected by a complex exchange of information and sense-making that contributes to the well-being of that system. (p. 253-254)

Reclaiming “intelligence” from the human-centered cultural intelligence focused on individual cognition, Martusewicz draws from Bateson to situate differences at the heart of the communicative meaning-making process of collaborative intelligence. Martusewicz explains:

Intelligence, then, involves a process of collaboration among all these elements as they combine and communicate with one another, as well as with me, via their differences. In fact, *what I know* (or think I know) is only possible because of the whole system as it engages this communication process among differences, and is, thus, much more than just the operation of my own cognitive abilities. (p. 254)

Martusewicz presents that central to the continued work of EcoJustice Education—or to developing an eco-ethical consciousness—is the importance of recognizing Gregory Bateson’s contribution to an understanding of the differences between an ecological understanding and how dominant individually-centered cultures construct meaning (Martusewicz, 2006, 2009). Bowers and Martusewicz offer examples of approaches

currently being integrated into educational reform that call attention to non-Western ways of knowing as an approach to recovering our senses and recognizing our membership within the local ecological communities to which we belong (Bowers, 1993, 2006, 2011; Martusewicz, 2006, 2009, 2013).

Bowers' and other EcoJustice scholars' efforts to call attention to language, culture, and education consistently highlight Gregory Bateson's idea that as a modern culture "our survival depends upon a radical transformation of the dominant patterns of thinking in the West" (Bowers, 2011, p. 13). Understanding Bateson's major contributions to the awareness of how we conceptualize and implement educational reform—or engaging in what Martusewicz and Edmundson (2005) call a "pedagogy of responsibility"—helps us, as educators, examine how Western culture has emerged from a specific set of cultural practices and historical events, as well as how we must take direct action to address these deeply rooted cultural assumptions. Bowers and other EcoJustice educators consistently build upon key contributions from Bateson that frame what has developed into an EcoJustice framework. For those of us disciplined by modernist assumptions of human superiority and individualism, this analysis teaches the importance of the relationships between our language, how we think, and the behaviors that undermine living systems and thus contribute to the ever growing ecological crisis, Bateson and Bowers help us to identify and understand this ecological crisis as a cultural crisis and Martusewicz and Edmundson suggest that we overcome this crisis through engaging in the development of our eco-ethical consciousness through a pedagogy of responsibility.

As previously noted, EcoJustice educators emphasize the relationship between language and culture and maintain that culture is constructed by how we interpret the

differences from which all meaning is made. This focus on language, history, culture distinguishes EcoJustice Education from other critical approaches in educational reform. This explicit attention to the role of language made by Martusewicz and Edmundson (2005) differentiates EcoJustice Education from other theoretical frameworks. Martusewicz and Edmundson (2005) explain the concept of a pedagogy of responsibility in relationship to a Freirian “pedagogy of liberation”:

We offer a different underlying conception: A pedagogy of responsibility first asks “what are my just obligations to this community?” before asking “what are my oppressions (or my students’ oppressions) from which to be liberated?”... Thus, a pedagogy of responsibility exists in the tensions between two necessary ethical questions: What do we need to conserve, and what needs to be transformed? (p. 79)

Martusewicz’s work to examine difference, collaborative intelligence, and the eros associated with the concept of an eco-ethical consciousness in combination with the work she and Jeff Edmundson introduce as a “pedagogy of responsibility” are at the core of an EcoJustice Education framework (Edmundson & Martusewicz, 2013; Martusewicz & Edmundson, 2005; Martusewicz et al., 2011). I now return to the importance of an eco-ethical consciousness and a pedagogy of responsibility to SEMIS. In Chapter 1, I mention how SEMIS works with the a priori assumption that through engaging in the development of an eco-ethical consciousness, educators can learn in ways that recognize and value difference and our dependency on each other and the more-than-human communities to which we belong.

Bateson, Eco-Ethical Consciousness, and a Pedagogy of Responsibility

In order to better understand an EcoJustice Education approach to teaching and learning, it is important to examine our existence as a part of a complex living system—an ecological community. As a part of an ecological community we are in communication with everything that collectively, in a Batesonian sense, contributes to our ecological existence. Engaging in a pedagogy of responsibility, Martusewicz, Edmundson, and other EcoJustice educators encourage us to think ethically and critically through the traps of centric-thinking and recognize how we recreate value-hierarchies (Martusewicz, 2013). Moreover, it is through a pedagogy of responsibility—through asking “To whom are we ethically responsible?” as well as “What is to be conserved and what transformed?” (Edmundson & Martusewicz, 2013)—that we realize how often in our day-to-day actions and habits we reinforce the value-hierarchized centric thinking at the roots of racism, sexism, etc. and how it can all be linked back to our dominant socio-cultural tendencies. EcoJustice Education—drawing from concepts laid out by Bateson, Bowers, Plumwood, Martusewicz, and Edmundson—provides a framework, and a set of conceptual tools, for seeing these often hidden relationships.

Central to understanding this concept of “eco-ethical consciousness” is becoming aware of our existence as a part of a living community—our dependencies. Bateson, in “From Versailles to Cybernetics” (1972), describes how we can recognize the ways in which our existence is defined by our dependency on one another and the larger ecosystems to which we belong. He asserts that this occurs when we closely examine the languaging processes within an ecological context—or with a developed eco-ethical consciousness.

Bateson writes, “Mammals in general, and we among them, care extremely, not about episodes, but about the patterns of their relationships” (p. 478). In the book chapter “Eco-ethical Environmental Education: Critically and Ethically Examining Our Existence as Humans” (Lupinacci, 2013), I explain: “As humans, we are all animals and akin to other species. We all communicate through that kinship—our shared dependency—that we interpret experiences by recognizing or being attuned to patterns of our ecological existence” (p. 194). Bateson (1972) explains:

When you open the refrigerator door and the cat comes up and makes certain sounds, she is not talking about liver or milk, though you may know very well that that is what she wants. You may be able to guess correctly and give her that—if there is any in the refrigerator. What she actually says is something about the relationship between herself and you. If you translated her message into words, it would be something like, “dependency, dependency, dependency.” She is talking, in fact, about a rather abstract pattern within a relationship. From that assertion of a pattern, you are expected to go from the general to the specific—to deduce “milk” or “liver. This is crucial. This is what mammals, animals, are all about. They are concerned with patterns of relationship, with where they stand in love, hate, respect, dependency, trust, and similar abstractions, vis-à-vis somebody else. (p. 478)

Bateson’s example shared here highlights the impact that historical events and episodes have on how we interpret patterns. In other words, how the patterns of our languaging processes shape how we, as humans, culturally construct and then act in the world. This analysis offers the potential for a cultural construction shaped by an eco-ethical consciousness that illuminates our existence in relationship to living systems. Humans engage in a semiotic

process through which we use cultural signs and symbols to communicate our interpretations of the events and episodes that are patterns of our relationships, but beneath that process is “dependency, dependency, dependency” (G. Bateson, 1972; Lupinacci, 2013). Recognizing and valuing what Martusewicz (2009, 2013) draws from Griffin (1996) to call collaborative intelligence, or the development of what Martusewicz and Edmundson (2005) call a strong eco-ethical consciousness, helps us to recognize that we are all part of an ecological community—an interrelated interdependent system. Through the development of an eco-ethical consciousness, we are able to recognize the ecological reality within which we are all interconnected. A pedagogy of responsibility is the effort to work within our communities to strengthen our eco-ethical consciousness—our collective ability to recognize, respect, and represent dependency.

Examining a “pedagogy of responsibility” and situating Wendell Berry as an educational philosopher influencing EcoJustice Education, Edmundson and Martusewicz (2013) in the book chapter “Putting Our Lives in Order: Wendell Berry, EcoJustice, and a Pedagogy of Responsibility” explain, “A pedagogy of responsibility requires that we face the ways our institutions, including and especially educational institutions, perpetuate violence in the name of progress and superiority” (p. 8). They assert that teachers enacting a pedagogy of responsibility work with students to introduce “concepts that will help them to identify and critique the ways of thinking and being causing such damage” (p.8). Describing a pedagogy of responsibility for teachers, Edmundson and Martusewicz (2013) write:

Thus their responsibility is to disrupt and disavow those modernist discourses that lead to unhealthy and unjust relationships, institutions, and policies. Focusing on questions such as “what is to be conserved,” “what ought to be our fundamental

responsibilities,” and “to whom are we responsible” forces students to confront who we are as members of an industrial culture, to look critically at what we have been taught to become, in particular at the deeply violent relationships and practices that result from a mindset based on selfish individualism, mechanism, consumerism and centric thinking. (pp.178-179)

A pedagogy of responsibility focuses on educating students about the importance of making ethical decisions and the required development of an awareness of the cultural assumptions influencing those decisions—or an eco-ethical consciousness. Edmundson and Martusewicz (2013) explain that this means students work to identify and examine “the ethical implications of the discourses of individualism (what’s best for me?) vs. the discourse of community and ecological intelligence (what’s best for the community of life?)” (p. 180). In order to do this, a pedagogy of responsibility engages students to turn their attention to the local community and that curriculum be focused on what is needed locally in order for living systems to flourish. Edmundson and Martusewicz (2013) explain, “A central answer is that we need to renew those aspects of the cultural commons that support life. Schools should be teaching the skills that enable people to live sustainably, that encourage local economies” (p. 181). A pedagogy of responsibility looks very different from the typical authoritarian-based pedagogies found in most schools. It requires that students are engaged in the community learning through place-based activities that not only teach towards solutions to many of the immediate problems they face, but also the deep cultural roots of those problems.

Framed by EcoJustice Education, SEMIS takes the position that educational reform can be envisioned through the deep analysis of historical and socio-political influences that are shaping what it is we teach and learn in our local schools. SEMIS, with strong roots in

EcoJustice Education, sets out to explore “what ought to be” and interrupt current approaches to educational reform dominated by Western industrial perceptions of “what is.” The work of SEMIS, as an organization setting out to enact an EcoJustice Education framework, brings to the forefront the difficulty and potential success of arguing that a deep cultural ecological analysis is an important form of research shaping how we envision education that is situational, local, and in support of living systems.

EcoJustice Education, a Pedagogy of Responsibility, and SEMIS

Engaging in a pedagogy of responsibility and developing an eco-ethical consciousness is about recognizing and valuing the gift of belonging— the gift of the being members of the planet, the land, the water, the animals, the plants, the gift of membership with each other, and the gift of our abilities to plan and prepare with the capacity of collaborating in what some call utopian, but what EcoJustice educators claim as community. Diverse, local, and free from authoritarian rule in ecological concepts of communities, we all share the gift and responsibility of membership. We all share our dependency and the ethical responsibility to those shared living systems. No matter how buried beneath concrete and concepts, human cultures remain of and with the relationships of membership that support their existence. We are alive and in relationship to the land and all that dwell among us, and in death we shall remain as a part of that community in memory and in physical exchange as we decompose, continuing the cooperation. Despite how our eyes and institutionally socialized minds tell us to individualize our human nature over remembering, our being a part of a complex set of relationships is always there. Through EcoJustice Education, educators can focus on the understanding that the human potential to ignore this gift in pursuit of false illusions of individual existence can be overcome by the fact that we have an

even greater potential to recognize and celebrate the power of mutual aid and cooperation—to celebrate our existence as a part of a diverse system that does not need authority to ensure survival. An EcoJustice Education framework—which recall includes the development of an eco-ethical consciousness through engaging in a pedagogy of responsibility—offers opportunities for us to act with great courage as we boldly re-conceptualize educational spaces that engage us in the recovery of our ability to see both what is currently problematic about education, as well as guide us through a recognition of the shared abundance of the boundless, priceless gift of belonging to a set of ecological relationships based on mutualism.

Engaging in a pedagogy of responsibility includes an understanding of how we can contribute to ever evolving and adapting perspectives to learn to support and value concepts like community, mutual aid, diversity, and solidarity. In today's neoliberal institutions an agenda to enclose the last vestiges of public space works through educational institutions that reproduce a limited set of practices disciplined by modern discourses, to manufacture a sense of insecurity, instability, and erode solidarity. The impacts of authoritarian, top-down policy often result in resistance, especially in the form of educational experiments, which creates the opportunity to commit to understanding education as situational, local, and in support of living systems.

The story of the design of SEMIS reminds us that EcoJustice empowers us to educate in ways that engage participants in addressing the assumptions that have led to an erosion of solidarity. At the heart of an EcoJustice Education framework is recognizing and valuing our ecological existence. EcoJustice educators assert that recognizing and valuing our responsibility of belonging reaffirms that when faced with social injustice and environmental degradation, we all have the capacity to interrupt the dominant perceptions at the root of such

atrocities. As educators, the steering committee members of SEMIS work from the position that teachers have both the capacity and the responsibility to make an ethical choice to examine and challenge how dominant Western cultural ways of thinking have isolated us from the realities of our ecological existence. The ethical choice to recognize and value the existence of sustainable alternatives to Western industrial culture offers hope—a hope that by choosing to confront the dominant mindsets disciplining us, we can begin to perceive ourselves as belonging to and existing within an interdependent world. In other words, we humans have the ethical capacity to choose to reconnect with an ecological perspective over remaining stuck in perceptions of modern isolation from the natural world. We can engage in valuing an eco-ethical consciousness and work to develop and strengthen our ability to think and act in support of healthy ecological communities. Simultaneously, it is essential to recognize the choice that we acknowledge, value, and learn from those who for thousands of years, lived sustainably on this planet. Derrick Jensen (2004) suggests: “If we wish to stop the atrocities, we will need to understand and change the social and economic conditions that cause them” (p. xxi). Jensen (2000), writing about hope beyond the violence of modern human culture, suggests we confront our assumptions about existing as individuals separate from and superior to the greater ecological systems to which we belong. Jensen (2000) writes:

It is not possible to recover from atrocity in isolation. It is, in fact, precisely this isolation that induces the atrocities. If we wish to stop the atrocities, we need merely step away from isolation. There is whole world waiting for us, ready to welcome us home. It has missed us as sorely as we have missed it. And it is time to return.

(p. 375)

The point articulated by Jensen is that isolation, or what Val Plumwood (2002) would describe as an “illusion of disembeddedness,” must be understood as illusionary or as anything but natural. In efforts to better understand this illusion of isolation, it becomes essential to recognize that how we think and act can be historically traced, as well as critically and ethically examined for how we either support or undermine living systems. EcoJustice Education helps to explain how Western modern science works to shape and justify socially constructed value hierarchies that work to reproduce the perception of existing in isolation. It offers us insight into understanding and recognizing the barriers preventing us from living ethically and from accepting that we belong to each other, our more-than-human kin, and our homes—our diverse communities on the earth.

Conclusion

This chapter shares how the development of an EcoJustice Education framework—specifically the development of an eco-ethical consciousness and a pedagogy of responsibility—sets the theoretical context for the SEMIS educators working through this framework to explore how teachers and community leaders, together with students’ thoughts and actions, can be a part of the process of recovering from relationships of isolation and working collaboratively to engage in ecologically responsible pedagogies of solidarity toward diverse, sustainable communities. The following chapter is the first of three chapters that make up the *deep* design of SEMIS and will articulate the steering committee’s identity as a learning organization—or a network of learning relationships.

Chapter 5: A *Deep* Design of SEMIS—A “Learning Organization”

This chapter presents the story of SEMIS as narrated by the members of the steering committee introduced in Chapter 3 and is the first of three parts that present a *deep* design of SEMIS. The story of SEMIS has been broken up into the following parts: (a) the theory and structure of the SEMIS steering committee, (b) the design and analysis of SEMIS sustained professional development, and (c) the resulting themes articulated by members of the SEMIS steering committee. This chapter provides an overview of the theory and structure of the SEMIS steering committee as a part of the case study of the design of SEMIS. In Chapter 1, I introduced how this study sets out to provide a better understanding of how educators and advocates engage in partnership work between university faculty, community organizations, and schools and teachers to work toward education that fosters socially just and sustainable communities. Recall that SEMIS functions as an intermediary organization—an organization situated between policy, ideas, funding and those implementing the work. This chapter presents the ways in which members of the steering committee have come to conceptualize and articulate the function and structure of the organization as a learning community.

SEMIS is structured with a focus on *place*—or the situational context in which an individual or organization recognizes and values the interdependent relationships that make up a living community. This approach requires that one recognizes and attends to the complex set of influences acting on how we construct meaning and relate to each other in order to conceive of ways of living that contribute to the wellbeing of our living communities. The chapter provides a brief historical overview of the origination of SEMIS to set the context for the coalition’s present structure. Framed by member perspectives articulating the structure and function of the organization, this chapter and the next focus on

how the steering committee informs SEMIS' approach to sustained professional development and an articulated learning model shaped by an EcoJustice Education approach to place-based education in Southeast Michigan. This concept will be referred to as Powerful Place-Based Education (PPBE), a term coined by Ethan Lowenstein, the current director of SEMIS. The following presentation of the steering committee provides a structural and theoretical context for the general organizational design of SEMIS.

An Overview of the Southeast Michigan Stewardship Coalition (SEMIS)

History and funding. The Southeast Michigan Stewardship Coalition (SEMIS) is a regional hub of a larger statewide effort supported by the Great Lakes Stewardship Initiative (GLSI). The GLSI is funded by grants from the Great Lakes Fisheries Trust (GLFT) and in turn funds regional hubs throughout Michigan to “provide leadership, expertise, support for K-12 teachers, and material and financial resources for the collaborative, local work of students and community organizations” (www.glstewardship.org/About/RegionalHubs.aspx, para. 3). The GLSI, with SEMIS as a hub, works within the state of Michigan to “strengthen leadership for environmental stewardship and education in the Great Lakes basin” (para. 4).

In 1996, after ten years of negotiations between conservation groups and the Federal Energy Commission (FERC), a legal action was filed against Consumer Power Company for their failure to adhere to state environmental regulations. A landmark settlement was reached following operations that led to losses in the fish population at the Ludington Pumped Storage Plant (LPSP)—a facility owned by the Consumers Energy and Detroit Edison Company. The GLFT was founded upon the signing of an agreement between the plant's co-owners, state officials, and environmental groups. This state agreement produced the transfer of company land to the state for public use and the creation of the GLFT. This trust was

given an initial 10,000 acres of land and five million dollars, in addition to ongoing annual funding. Since 1998, the GLFT has granted organizations over \$50 million in its ongoing work to fund a range of projects. The GLFT projects that by 2020, they will have invested \$100 million in programs working to protect and restore the Great Lakes fisheries (www.glft.org/about/history/accomplishments, para. 2). To date, the GLFT has invested over \$2.6 million in GLSI initiatives (www.glstewardship.org/About.aspx, para. 10).

The GLSI supports eight regional hubs to work with students, teachers, and community organizations using three strategies: place-based education or community-based learning, sustained professional development, and school-community partnerships. Becca, who was a grant reviewer through the National Wildlife Federation (NWF) at the time, recalls how the GLSI sought to fund innovative approaches to place-based education:

Part of the rationale was to set up hubs that would come at this place-based education and sustained professional development to get at stewardship from different perspectives. So it's like, "Let's set up some hubs that will show us how place-based education is possible from different lenses."

The commitment of the GLSI to fund innovative proposals that were taking different approaches to place-based education presented an opportunity to grow the work that Susan and Rebecca had been doing in Southeast Michigan. In 2007, Rebecca attended an exploratory meeting hosted by the GLSI. Susan, unable to attend the meeting herself, had arranged for Rebecca to attend and connect with Shug to see if this might be a good opportunity to collaborate on a grant project. That initial meeting with the GLSI laid the groundwork for the three founding women of SEMIS—Rebecca, Susan, and Shug—to write

a planning grant for what would become SEMIS. As recalled by Susan, the three women, all leaders in their respective fields, brought unique backgrounds to the project:

I think one of the things we were most excited about is that Rebecca brought the bullet-proof expertise on the philosophy....That academic grounding was untouchable. We [CCES] brought, “This is what it looks like when you put that into an economics lesson for a third grader.”...Shug brought a pipeline into the kind of language and structures that schools are listening to—school reform, achievement, road maps to achievement, that kind of thing. I think what we tried to convey in the application [was] that this approach—the marrying of our [CCES] on the ground work with the philosophical grounding—put into the framework of school reform, is something new and different.

Susan, Rebecca, and Shug were awarded a planning grant from the GLSI that provided them \$17,702 from July 13, 2007 to October 25, 2007 in support of planning for place-based education in the South Eastern Michigan Regional Hub. This initial funding brought about the formation of SEMIS—with Rebecca, Susan, and Shug each representing three major components of this early collaboration. Susan succinctly clarifies this unique trifecta:

I think our [CCES] strength was the on-the-ground work with the teachers and we had live, place-based education going. Shug brought in a very strong sort of school reform model and then the university brought in both the expertise and the fiduciary and the capacity in all those things...So that was the initial partnership.

With a strong focus on the local context, the GLSI support enabled Rebecca, Susan, and Shug to bring community partners into the process as potential partners in the hub. In order for the planning grant to be successful in launching an organization that would foster PPBE,

community partner involvement at all levels of the organization was paramount. Rebecca, referring to early partners, such as the National Wildlife Federation (NWF), the Huron River Watershed Council (HRWC), and the Great Lakes Bioneers Detroit (GLBD) to name a few, explains, “They’ve all been consultants on this project since the beginning....We conceptualized this from the start as an EcoJustice-framed, place-based education coalition.”

The initial planning grant funded a collaboration between Rebecca through Eastern Michigan University’s Institute for the Study of Children, Families and Communities (iSCFC); Susan through Creative Change Educational Solutions (CCES); and Shug through her involvement in the Michigan Coalition of Essential Schools (MCES). Late in the summer of 2007, these women hosted a series of stakeholder meetings that involved teachers from three schools and a number of local community organizations. These initial “stakeholder” meetings documented the potential roles partners might play in a long-term commitment to sustained work between schools and community. These meetings established an EcoJustice Education approach to place-based education and influenced the organization’s guiding principles. These efforts resulted in Rebecca, Shug, and Susan submitting an implementation plan, which Rebecca refers to as the SEMIS “launch grant,” for which the GLSI awarded them \$175,089.18 to be used from November 30, 2007 to July 30, 2009 for establishing SEMIS as hub in the GLSI. Becca explains how the process was consistently centered on four pieces that brought all these interests together: “From the very beginning, place-based education, stewardship, and the Great Lakes were the pieces. Together with sustained professional development for teachers.”

Rebecca, describing the growth of SEMIS from the planning stages to that initial implementation award in the late fall of 2007, explains how this process identified the organization as a coalition:

The planning grant is pretty good, but the launch grant really says, “This is what we think we want to create.” We started talking about, “What does a coalition look like? Why use that language?” We originally used the word “center,” but it became pretty clear...that if we’re really going to do this work...we had to think in coalition terms....We drafted the principles that would guide the organization and they have to do with realizing that social and ecological problems are not separate; they have to do with democratic decision-making.

The transition from the planning grant to the implementation grant was an important era that involved community partners, schools, and local leaders in brainstorming what SEMIS could do in the region and it was from the meetings held in the late summer and early fall of 2007 that SEMIS emerged as a coalition.

The GLSI continues to fund SEMIS, awarding them \$201,664.82 for 2009-2011 and approximately \$145,000.00 for 2011-2013 through continuation grants (www.glstewardship.org/OurGrants/FundedGrants.aspx). Since 2007, SEMIS has grown as a coalition and sought funding from both the GLSI and through collaborations with community partners to successfully secure additional support through the Community Foundation of Southeast Michigan, the Sisters of the Immaculate Heart of Mary, the National Endowment for the Arts, the National Audubon Society, and the Spencer Foundation.

Powerful Place-Based Education (PPBE): An EcoJustice Education approach to place-based education. SEMIS is a unique organization with the primary mission to

facilitate school-community partnerships “to develop students as citizen stewards able to understand and promote healthy ecological and social systems affecting the Great Lakes basin and their communities” (Lowenstein et al., 2010, p. 106). Informed by the EcoJustice Education framework, SEMIS is organized according to the following guiding principles:

- A strong and viable Great Lakes ecosystem includes human communities nested within and interdependent with other diverse living systems including water, soil, air, plant, and animal species.
- Stewardship of the Great Lakes in S.E. MI is defined by the ability to connect with and protect one’s “place.” This requires collaboration with others, recognizing connections to larger economic and political systems, and understanding the impact of human cultures on the ecosystems in which they are nested.
- Human cultures create beliefs and behaviors that affect social and ecological systems. Thus, social and ecological justice is interrelated and must be addressed together.
- A sustainable S.E. MI depends upon diversity—both human and ecological—and is thus best served by strong democratic and collaborative systems. (SEMIS, 2011a, p. 1)

SEMIS engages in work that is not only relational, but also complex in its articulation of “place.” SEMIS recognizes that in order for education to fulfill the primary mission of developing strong citizen-stewards of the Great Lakes, change is necessary. More specifically, SEMIS holds the position that schools are potential sites of educational reform grounded in cultural change and that this potential is fostered through supportive strategies for rethinking of the role of education. SEMIS designs and provides professional development to a diverse group of local participants with a focus on two major tasks. The

first of these tasks is the engagement of participants in a deep cultural analysis of the impact of Western industrial culture on local relationships that support socially just and environmentally sustainable communities. The second task, occurring simultaneously within the organization, is identifying teaching strategies and rich curricula that support the aforementioned task. Dedicated to aligning the organization with practices designed to confront the dominant, socially constructed value hierarchies in the Western industrialized communities, SEMIS engages in difficult transformational work.

Committed to the EcoJustice Education position maintaining that any local place is comprised of situated relationships and the interpretations of those relationships, SEMIS formed what they call a “steering committee” in 2007. This committee was assembled to be a diverse, core group of leaders that would engage in learning together what it means to enact an EcoJustice Education approach to place-based education—which at that time the group called community-based education—and to engage schools and teachers in this approach. SEMIS established a steering committee that works within the organization to foster the recognition that no one “place” is independent from a diverse network of relationships with other “places.” In turn, all interactions between “places” occur within broader social, political, historical, and biological systems. Within these networks of relationships, SEMIS seeks to foster collaborations that help members of the community recognize, respect, and value the wellbeing of all.

SEMIS takes an EcoJustice Education approach that fosters the development of our collective and individual responsibilities to learning and living in ways that support socially just and sustainable communities for of all living beings. Place-based education provides a framework for educators seeking to engage students in learning that is situated in the

community. Place-based education as a field may be understood as “the pedagogy of community, the reintegration of the individual into her homeground and the restoration of the essential links between a person and her place” (Sobel, 2004, p. ii). In other words, place-based education can be recognized as the educational efforts that involve specific local knowledge of the community that students discover from learning outside of their classrooms and in the community. This approach to learning is most notably promoted by David Sobel, Gregory Smith, Doris Williams, David Orr, and David Gruenewald, as well as the GLSI and their regional hubs. This educational approach aims to provide youth with experiences that center learning content on local projects that address local issues to which students and teachers explore solutions in collaboration with members of the community. In many cases, this looks very different than the traditional model of schooling. Gruenewald (2003) explains, “Place-based pedagogies are needed so that the education of citizens might have some direct bearing on the well-being of the social and ecological places that people actually inhabit” (p. 1). All too often, when people discuss place-based education, what comes to mind is environmental education. Place-based education is environmental education, but it pushes further than typical environmental education to include critical social studies objectives.

A strong Place-Based educator recognizes and values that human relationships—what we often refer to as social relationships—are embedded in a larger ecological context. In other words, humans are a part of nature. Powerful Place-Based Education (PPBE)—which SEMIS defines as place-based education shaped by EcoJustice Education—engages community members in education that is situational, local, and in support of living systems. This particular take on place-based education recognizes that knowledge is rooted in the

relationships, both the human and more-than-human, that make up what is recognized as the local community. PPBE is community-based education with a strong commitment to recognizing and valuing who and what is included in how community is defined through an EcoJustice Education framework—recognizing and valuing the complex network of all living things and their interdependent relationships.

Returning to the two main foci of work in EcoJustice Education as defined in Chapters 1 and 4, the work of SEMIS is communicated as (a) engaging the members of the organization, and their students, in a cultural analysis of the foundations and shared roots of social suffering and environmental degradation and (b) education that engages participants and students in identifying community strengths and challenges, exploring beliefs, behaviors, traditions, ways-of-knowing, and skills that lead toward diverse, democratic, and sustainable communities (www.semiscoalition.org/about/programs). SEMIS sets out to enact a specific type of place-based education influenced by an EcoJustice Education framework as they work together in a complex environment to engage educators in the development of an eco-ethical consciousness through a pedagogy of responsibility. This process can be understood through examining SEMIS as a learning organization—a group that is engaged at every level in the two aforementioned foci. It is important to emphasize that this study does not evaluate the successes or potential failures of this strategy, but rather provides a thick description of the organization’s design—a learning organization in a network of relationships.

The Steering Committee

A learning organization in a network of relationships. SEMIS is a multilayered organization with a unique structure that can perhaps be best examined by understanding the organization’s decision-making unit—the steering committee. The steering committee

engages in place-based education influenced by an EcoJustice Education framework and is dedicated to learning together how this approach can be translated into practice for local educators. The steering committee is engaged in the development of members' individual and collective eco-ethical consciousness and the ways in which this kind of awareness and ethical duty translates to pedagogy. This is an important element of SEMIS in that the leaders in the organization—the members of the steering committee—simultaneously identify as learners engaged in a reflective process and deep cultural analysis. It is more often the case that organizational leaders are somewhat self-aware, in that they correct errors in response to everyday failures and establish rituals based on perceptions of success, but SEMIS maintains an added layer of self-reflection that requires deep critical and ethical analysis that encourages rethinking everyday perceptions of education. Recall that Argyris and Schön (1978) refer to this thinking and learning as “double-loop learning” and argue that this practice is necessary for innovation and paradigm shifting. Argyris and Schön (1974, 1978) explain that single loop learning is a cycle of reflective thinking in which a person or organization recognizes common errors and works to correct them. While it is important to engage in this level of reflection, Argyris (2002, 2008) describe double-loop learning as the type of reflective learning that questions the underlying assumptions, values, and beliefs of actions. The SEMIS steering committee is an organization of learners practicing leadership roles in PPBE with a commitment to both single and double-loop learning. Ethan Lowenstein, recognizing these multiple layers of reflection and engagement, explains SEMIS as “being squarely located within an EcoJustice movement writ large. So it’s not simply that we’re an organization. We’re an organization that’s situated within a movement that itself has goals.” Ethan further explains:

It's coming out of a theory of action approach...Joe McDonald and Donald Schön and Chris Argyris—that tradition of always holding up your theory—you're espousing a theory—being consciousness of what you're espousing, being conscious of your design theory, and then bringing forward information that will help you reflect on that in very full ways.

Recognizing that SEMIS is situated in a larger EcoJustice Education movement helps SEMIS to draw from the experiences of other organizations or movements. However, within the larger movement of EcoJustice Education and PPBE, this organization is pioneering an approach to professional development that is designed to support cultural change through school reform. This context demands that the steering committee be well-versed in EcoJustice Education, Adult Learning, Whole-School Reform, Organizational Leadership, and what it means to be a good classroom teacher in our current school climates. In other words, the members of the steering committee have responsibilities that attend to a diverse range of content. While no one member can be an expert in all of these fields, it is essential that members maintain a level of fluency in each field in order to recognize the value each brings to the organization. These demands require the SEMIS steering committee to learn together as a way of engaging in a process that recognizes, respects, and responds to the ever-changing needs of the local community. Becca describes the organizational goals of the steering committee and their intent “to be coalition-focused. We wanted to be a group of learners all together.” Nancy, recalling joining the steering committee, explains:

I wasn't expecting really to join SEMIS as a full-fledged steering committee member. My expectation was that I was going to join SEMIS and I was going to help with this part of it. Which I am, but that part of it has kind of expanded a little bit. It's just the

nature of how SEMIS works... the way that the steering committee works. I think it's very valuable—it's a very different type of committee than I've been on in the past. I think this whole issue of it being a learning community is different from those committees. You just kind of come in, do the work, and you're out. So I'm excited that I've learned a lot about each person, and learning about each person and what they do also helps me in terms of understanding, connecting, and feeling a different relationship in terms of the individuals and the kind of work. You're not just Johnny, or this is not just Ethan—it's Ethan that I know and he's really strong and he's really committed to this kind of work, which is something that I'm interested in, so I want to help and I want to participate.

Ethan explains the concept of the reflective tradition in the identity of the steering committee as a learning organization:

There's a very strong consensus in the organization that organizational development and self-development are completely intertwined and you can't separate them out. But I think it gets really complicated very quickly, because each of us is drawing on a set of traditions that has inherent within it its own set of tensions and issues and ways of framing what self-transformation is, the process that it takes, the language that you use to describe it, and so on. So one of the orientations that is brought to the organization is philosophical in nature and mostly grounded in communitarian philosophies.

I think every member... of the committee comes from a reflective tradition. I think that Gloria came from a religious, reflective, meditative tradition. Rebecca comes

from, at the risk of essentializing it, a philosophical reflective tradition. Shug was coming from the Coalition of Essential Schools, where reflection is primary—and I think her model for bringing protocols is all process. I guess there's a tacit understanding and shared agreement in SEMIS that the process is more important than the product. I think that that's an essential part of a learning organization.... We're all evolving—and I don't mean that in a teleological sense, but we're all growing in our life paths and those are embedded within relational networks and relationships. What I've seen in SEMIS is real attention to collective reflection and those relationships... the focus on that reflection was around SEMIS as a learning organization. And also an organization that's oriented towards continuous learning, self-transformation, and a co-development.

These descriptions from Ethan, Nancy, and Becca highlight that the steering committee is engaged as a group of learners and identifies as a reflective learning organization.

The SEMIS steering committee is a structure within the larger structure of SEMIS and functions as the labor force and decision-making body for all of the work in the organization. While some support is provided to the director of the organization from iSCFC for assistance with accounting and evaluation, most of the day-to-day work of the organization is divided up among the members of the steering committee. Integral to operating as an intermediary organization that provides support and professional development to schools engaged in PPBE projects, the SEMIS steering committee is committed to examining the organization's strengths and challenges. Ethan reflects:

I think we're a learning organization as the steering committee, but we're also a learning organization as a coalition.... We've always said we were an asset-based

organization, and over time I've wondered what that means. As I've grown, I've also come to dislike the word 'asset' because I think it sits within a consumerist metaphor. So thinking more about strength-based coalition building and part of that is sharing knowledge with each other and creating systems for that knowledge, sharing, recognizing, legitimating each others' knowledge, developing a set of self-concept and self-efficacy within the coalition context—so those are all of our goals. That requires learning together and also learning your way forward through some fairly significant challenges. I think you have to start with the assumption that we don't know how to do the work. What we can do is...bring the knowledge resources; we can create the relational networks to learn our way forward through challenges....We don't know what's going to happen a year from now. We do know that we have a structure to learn our way forward through it and we have enough trust within the coalition to do that.

As articulated by Ethan, the members of the steering committee bring their individual expertise to the collective efforts of the coalition. In response to the steering committee's diverse backgrounds and perspectives and the uncertain context of the work in which SEMIS engages, they organize democratically.

Democratic decision-making in a network of learning relationships. The steering committee, seated within the larger SEMIS Coalition, sets out to function as a democratic decision-making unit. All members' voices have value, and all members of the group have the obligation to participate. This entails that each member, and the group as a whole, has an ethical responsibility to making decisions that support the overall health of the entire living community to which they all belong. In other words, the steering committee is a council of

decision-makers who deliberate on how to fulfill the mission of developing strong citizen-stewards in Southeast Michigan. Rebecca explains:

We're creating an organization that is enacting a particular kind of justice and a particular kind of education towards justice and towards an ethical way of being together in the world. That's probably as important as anything else. We don't have a particular step—there's no sort of step-by-step methodology for creating what we're creating. What is crucial is attention to ethical ways of being together.

This is by no means an easy task given that anytime one commits to recognizing and valuing difference in a given group, one is bound to encounter conflict. This is the very nature of democracy (Barber, 1984). SEMIS organizes with a commitment to democratic decision-making. Rebecca shares:

We started thinking about how we create an organization whose mission it is to work with schools and community organizations to really develop projects that could get kids involved in real, hands-on projects and start thinking about this larger context that causes the problems that they're working on... You just hope that you've got enough experience and talent to bring the people together...to create the relationships that will create the best kinds of things. That's what democracy is about.

Rebecca reminds us that a large part of enacting an EcoJustice Education framework is about recognizing and working to eliminate socially constructed value hierarchies that exclude members of the community from their fundamental right to exist and be valued. With a commitment to what EcoJustice educators call Earth Democracy, the democratically organized steering committee faces the challenge of recognizing and valuing all the voices and potentially conflicting perspectives on the committee (Martusewicz et al., 2011; Shiva,

2005). However, conflict doesn't necessarily connote negative meaning. In the case of the steering committee, it means that the organization is always learning from each other and from their shared responsibility to the larger task. This is not to be over-romantically depicted and is often much easier said than done. Yet, for the most part, the SEMIS steering committee successfully mediates conflict as a part of the process of developing an eco-ethical consciousness and learning to provide meaningful and sustained support for local educators committed to that very same process. Ethan articulates, "It's involved figuring out how to respect each person and their strengths without essentializing them." Despite challenges posed by time and funding constraints, the SEMIS steering committee has continued to learn more about the work they are engaged in through a continued commitment to reflective practices in the organization. Through this process it became evident to the steering committee that the work in SEMIS called for a level of understanding that required them to engage in learning how to organize democratically. Ethan explains:

The steering committee is modeling what it expects the members of the coalition to do. So if we expect our coalition to be a democratic coalition, then we have got to model how to do that in the way that we operate...So you actually need to know the people you're serving, working with, in coalition with, and when their needs change. If you're out of touch with that, you're done....You need to know about other ideas in the educational world that are experimenting with distributed leadership, where no one person in the organization holds all the power and everybody's responsible for being a leader in the organization.

Ethan describes the steering committee's progress toward organizing democratically:

I think we've set very ambitious goals for ourselves because we know what works. Part of our learning has been around understanding that we not only have very lofty goals, but we also have a lot of restrictions...that's not an easy place to be, because we're responsible to the members of the coalition. So if we know what they need and we're not able to provide it—in terms of our ethical responsibility—it causes us a lot of pain. So it's existing within those dilemmas that there's a high level of motivation for us to be evolving as an organization and as individuals.

This is a strong description of the steering committee as a democratic learning organization—a network of relationships—one in which everyone and everything in the coalition is connected.

Given this commitment to organizing democratically, the steering committee has a common agreement that it is absolutely necessary for SEMIS to be flexible as an organization if they are to continue to not only exist, but also fulfill their mission. In the following selections from Rebecca, Linda, Ethan, and Becca, we see the way their different perspectives describe the work in SEMIS. Rebecca, with an emphasis on EcoJustice Education, explains:

In SEMIS, what needs to happen is exactly what we say the charge of EcoJustice Education is...teachers need to learn how to do deep cultural analysis. They need to learn how to use concepts carefully to think about place. To think about everything that's creating what they're living in and what their students are living in....Connect with your community, connect with the land, identify problems, analyze why those problems are there, you know, understand that there's something you can do about it, be creative.

Linda, focusing on the issues of equity for schools, teachers, and students adds:

You have got to get in there, learn, and open up the doors for everybody to get a piece of that pie and do what needs to be done in their communities. When I think of SEMIS in that way, I think of it as one of those doors that opens up resources. We are able to share intellectual, social, and actual physical resources with community members interested in helping kids—at some point—gain control of their own communities.

Ethan explains the organizational approach in the steering committee developed to support this lofty challenge:

There's an organizational responsibility to develop systems to help people build their capacity to handle complexity. And there, the metaphor for organizations is a network. That orientation also emphasizes mutuality in relationships. The radical feminist tradition and democracy, and coming out of an EcoJustice approach—Earth Democracy—and using ecological metaphor for organization. The organization is a web of relationships and we're evolving and we're shifting as those relationships evolve.

Becca explains how the complexity of the organization requires structure that supports the need for flexibility in how members engage. She articulates:

The steering committee has really been the gatherer of all of the pieces, logistically taking care of everything that needed to get scheduled, but then also reaching out and keeping the lines going. Keeping the communication going. And we've evolved the roles in the steering committee. I think we're still evolving those right now. We've tried to walk-the-walk of democratic decision-making as part of the EcoJustice

framework, but in reality it has been very difficult to do that. I don't think that's bad. I think that's just what happens in life because of the way our society is. But, at different times during the year, different leaders out of that group sort of emerged and took the lead on that.

Given the different perspectives these steering committee members have on the work of SEMIS, they all overlap in that they articulate how the organization functions to ethically serve the community through engaging in difficult work to reform current dominant Western industrial approaches in education. With a commitment to democratic decision-making within a growing organization, the steering committee recognized the need to regroup and reflect on what was working and what wasn't. It was at this moment in the organization's growth that the steering committee set aside time to articulate some process and protocol for both the learning they were committed to as a steering committee and to the design of the sustained professional development they provided.

Clarifying roles in a network of learning relationships. In the 2009-2010 school year, the SEMIS steering committee was working with more schools and recognizing that their mission required more time and labor than was possible given the current levels of funding and staffing. Recognizing the need to regroup, they dedicated meeting times for strategic planning. These meetings, in addition to the regular work in SEMIS, consisted of two facilitated full day meetings at EMU and two retreats where the steering committee met as a group for strategic planning. This strategic planning produced some major contributions for the organization. The steering committee identified that they were in need of some protocols and tools to help them to communicate the criteria for doing PPBE—which at the time they called community-based education. The committee got together and produced a

visual representation of the work of the organization. This tool helped the organization to establish some protocols for planning professional development and articulating the layers of the learning organization. At these meetings, the steering committee also identified the need for time to engage in deeper, more reflective learning together to address the underlying cultural assumptions posing problems to the implementation of PPBE. At one of the two-day retreats in 2010, having already drafted an organizational theory of action (see Chapter 6, Figure 6.3), the steering committee drafted the first version of the SEMIS rubric. After a difficult—and at times tense—series of meetings, the steering committee was exhausted, but had produced an amazing amount of tools—the group’s first systems map and a teacher team rubric—that were later further developed into resources for the organization. The steering committee also recognized, as a part of their strategic planning, that there was a need for more detailed roles for the work if they were to attend to the difficulties and tensions of enormous organizational goals. The steering committee, which had previously been meeting together bi-weekly to plan professional development, check in on school projects, and discuss additional funding streams, decided at a strategic planning meeting to form work groups. In the following selections of steering committee voices, Rebecca and Becca recall the members clarifying the work tasks for the steering committee. Rebecca relates:

The idea was each one of us would take on the responsibility of leading whatever activities needed to happen in those areas and then engaging different people on the steering committee for help....We were looking at what our roles had been and what the organization needed to accomplish and what it would look like to do that more efficiently. That’s when we started looking at the kind of departments that we might

have...For example, we had named a Community Partner Steward, Programming Steward, and so on.

Becca, a community partner and steering committee member, reflects on this organizational transition:

We've been really good at evolving a system where everybody feels comfortable with each other....It wasn't always that way. That has helped us to be able to duck into roles without actually defining them—which is both a strength and a weakness, because you can get taken advantage of that way. It also...sort of perpetuates the “operation on a shoestring” mentality, because if you have somebody who's really skilled at something that's not exactly their role, they can kind of fill in without having to find another person to do that.

Now it's all together and that's been a pretty interesting shift from the understanding of the steering committee about who they are and what we're trying to do. Just from trying stuff that either worked really well or didn't work at all. Having the ability to do that is pretty amazing...we are flexible that way, because we are in very close relationship with each other. If we tried to write out everything for another organization to mimic, it would never happen.

The work referred to by the steering committee as areas of stewardship consisted of administrative work, programming, communications, community partnerships, and resource development. Working in subcommittees and periodically checking in, the steering committee planned what evolved into a scope and sequence for professional development, initiating and developing relationships with community partners, developing protocols and

tools for assessing teacher learning, fostering a whole school reform initiative in the state, and launching potential evaluation projects. Despite the challenges of the work—which are analyzed in Chapter 7—the organization identifies as a democratic learning organization that recognizes and values membership in a network of relationships in the region. They recognize that change is inevitable, which makes it essential that the SEMIS Coalition is flexible and able to adapt. Ethan observes:

The structure of the organization has really shifted over time. There's a tension between this developing capacity for flexibility and adaptation, and a clarity of role structures. We're constantly navigating that tension of how we remain flexible and adjust to the context, while we are always working toward a clarity of the role structures and expectations so that people aren't driven crazy by the lack of certainty and so that their work is bounded.

A large part of the steering committee's connection to the larger social and ecological communities' voice in the decision-making and planning process is dependent on partnerships with community organizations. Ethan, reflecting on the democratic nature of the steering committee and the coalition, adds:

I guess the question is, "How do you create school-community partnerships that benefit and foster both teacher development and are good for youth and teachers in schools?" I see that as a primary function of what SEMIS should be about.

Becca, explains:

Originally, I think there was a strategy for having community partners as a part of the leadership team from SEMIS. We even toyed with the idea of teachers on the steering committee. The steering committee was going to be a formal body with

notes, facilitation, and roles for everyone on that steering committee. It was quite useful sometimes, and quite forced. Things kind of backfired a little bit and we had sort of transient attendance in some of the roles, which was difficult.... We had changing ideas about what was important and about where we were going until finally in the last couple years—although I think it is a weakness that we only have university staff on steering committee right now—we have been able to find the skill sets that we need. I think we’re still missing the community partner voice. I try to fill that sometimes. The farther I get out of it, the less I’m seeing that way, so it becomes more difficult.

Community partnerships in the coalition. Community partnerships are a key component to SEMIS at every layer of the organization. Whether it’s through their involvement with the steering committee, collaborating to write grants, or partnering with SEMIS to provide programming for teachers and students, the community partners bring a wide variety of knowledge and skills to the coalition. SEMIS community partners include non-profit organizations, university faculty, and local educators and activists (a list of SEMIS’ community partners can be found in Appendix A). SEMIS, as a coalition that emphasizes a strengths-based approach to the work, is always asking: “How can we address this local issue?” and “Who or what organization might be able to help us do that?” This approach to building a large network of relationships and a diverse pool of resources sets the context for teachers and schools to partner with local organizations that specialize in the content necessary for a particular place-based project. When asked about the value of community partners in SEMIS, Danielle responds:

Collaboration is just ideal and that's why you want to have community partners. There are often already a lot of organizations doing this work out in the community. And when kids are out of school you want them to know, "Here are the resources and here's a model for working together to make our community better, make it resilient, and to make change for ourselves and retain what's good that's already there."... That's why it's important to have the community partners...to have this collaboration that brings together like-minded people coming from perhaps different dimensions and offering different services and resources that then completes this mosaic of the community's life.

SEMIS community partners are organizations, or individuals, that join the coalition and work in three main capacities—as learners, as local experts, and as collaborators (www.semiscoalition.org/partners). Community partners come to SEMIS as participants that attend the professional development workshops and partner with teachers and schools to design and work on specific collaborative projects. The generative nature of these collaborations tends to lead to further collaboration and so community partners often bring their connections to other projects, people, and movements that may complement the mission of the organization or enhance a school's transition toward enacting PPBE. A unique aspect to the design of SEMIS is that the community partners are afforded the same space as any other participants to engage as learners. Gloria, recalling the strength of being a community partner in SEMIS, explains:

The...strength with the community partners—which are organizations doing social justice or environmental justice work—brings in the on-the-ground work, connection with issues, connection with the people, programming, and again more resources to

add to the mix...with the added value of the academic pocket of the university being shared with the teachers and the community partners. Often a community partner—while they may do direct service—they may not necessarily do systemic analysis for systemic change. So that kind of awareness for partners is very important because it strengthens their advocacy.

SEMIS, recognizing that community partners' organizations are often overburdened by problems in the community to which they are responding, is committed to providing community partners space to engage in the process of deep cultural analysis of the root causes of the issues. In other words, SEMIS provides an environment for community partners to rethink and address the roots of the problems to which they are responding. Overall, the community partners play an important role in SEMIS as both collaborators in PPBE projects in the schools and as teachers, learners, and leaders—members—in the network of relationships that make up the coalition. Ethan articulates their value to the work of SEMIS:

I think the way I would define a community partner now is that they are an organization or a person who has the knowledge and skills to be a coach...So the community partners that we have now are coaching the teachers actively. And they also have sets of organizational knowledge and they bring their own rituals and routines. So that when they're working with the teachers, they're bringing a whole set of skills...We're in co-development with the set of organizations as well. They influence us, we influence them.

This type of reciprocal relationship exemplifies SEMIS's goals as a learning organization.

Shug explains how involving the community partners at every level of the work helps to build solidarity and strong relationships within the coalition. She explains:

It just really pointed out what each organization had to bring to the table. The resources that they had, how they could connect with this bigger picture, how we could connect with one another...I think the big thing is to look at the mission vision goals that each organization had, and then...really be able to articulate them, either visually or in some kind of a presentation, and then doing the crosswalk, where people can see, "Oh my gosh, we all really do have a shared vision." And it might be reframing it or restating it, but it's definitely a bigger kind of common vision.

Danielle sums up the importance and value of the community partners of SEMIS. She reflects:

I think the strengths of it is that you bring the diversity. You bring different resources that already reside in the community. What happens is that those resources that are there become known to the school community and to other organizations so that they can also work together...you're broadening the circle of the learning community.

Each of these voices articulates community partners as a valuable asset to the organization.

A large part of strength in the coalition resides in the steering committee's value for members of the community. Without a diverse cadre of community experts on diverse issues in the community with access to valuable resources for PPBE projects in the schools, SEMIS would not be able to accomplish their approach to sustained professional development.

Conclusion

A large portion of the work SEMIS engages in is with the planning and implementation of professional development with teachers, administrators, and community partners. This chapter illustrates the design and articulated identity of the steering committee as a democratic learning organization. The steering committee engages in making decisions within a network of learning relationships to which they all belong—working together in a coalition model. This examination of the structure and function of the steering committee provides a context for presenting the primary output of their work together: sustained professional development that supports PPBE in schools. Over the years, the steering committee has evolved their approach to professional development into a scope and sequence. As SEMIS has grown and worked as a steering committee to refine the process of planning professional development curricula, they have contributed to the development of a learning model for understanding the development of an eco-ethical consciousness in connection with learning to enact a pedagogy of responsibility. The next chapter presents the organization's approach to professional development as articulated through interviews that are triangulated with observations and analysis of the organization's documents. These sources offer insight into the ways in which SEMIS has come to develop a structured sequence for adult learning influenced by research in teacher learning, adult development, and whole school reform supportive of the organization's goals: the development of an eco-ethical consciousness and pedagogy of responsibility.

Chapter 6: A *Deep* Design of SEMIS—Sustained Professional Development

In this chapter, I draw from the perspectives of the SEMIS' steering committee to present a composite articulation of SEMIS' design for sustained professional development. Situated in a model of teacher learning that is informed by the “How People Learn (HPL) Framework” (National Research Council, 2000), SEMIS has developed a theory of action for how they approach professional development in a coalition—or a network of relationships. While the SEMIS steering committee does not explicitly use the HPL framework as a heuristic in their work, the framework is used in this chapter as an interpretive lens for understanding SEMIS' professional development. It is important to note that an organization of such dynamic flexibility, funded in unstable economic circumstances, is vulnerable to change and likely to drift from the present model articulated in this chapter. Illustrating SEMIS' professional development, this chapter draws attention to the primary foci of SEMIS' professional development scope and sequence. Further, this chapter illustrates how SEMIS' unique approach as a learning organization designing and administering sustained professional development contributes to the conceptualization of a theoretical “Coalition” learning model and articulates an emerging trajectory for the development of an eco-ethical consciousness and a pedagogy of responsibility.

In the previous chapter, SEMIS was communicated as a multi-layered, democratic learning organization that recognizes and values the diverse network of relationships that define who they are and what they do. A primary function of SEMIS is to provide sustained professional development to members of the coalition through an approach that strives to recognize an ecology—or network—of language patterns. Within these patterns, participants engage in personal learning while facilitating student learning in a social and ecological

community. This chapter presents the design of SEMIS' professional development model that illuminates the importance and difficulty of recognizing teaching and learning as taking place within an ecological set of relationships. The professional development model articulated in this chapter situates the design of SEMIS' professional development as a necessary step in proposing and inviting inquiry into the development of an emerging learning model. This model is designed to work with an EcoJustice Education framework, through the development of what is discussed in Chapter 4 as an eco-ethical consciousness in conjunction with engaging in a pedagogy of responsibility.

Drawing from Ellie Drago-Severson's (2004, 2008, 2009) work on adult learning, SEMIS' professional development is designed to build a coalition supported by an intermediary organization within a larger social and ecological domain. This support is intended to provide the necessary structures within which adults can safely and with ample support begin to address the dominant conflicting commitments they bring to the classroom. Rebecca explains:

I think overall, if you came into SEMIS you would learn pretty immediately that we are dedicated to coalition-building....We care immensely about the kinds of relationships that get built among people who come together....I don't think it's necessarily always explicit, even among us. It's just that all of us care about it. So everything we plan ends up having that kind of effect.

SEMIS works from the espoused theory that a coalition approach to structuring learning, specifically teacher learning, will help to clarify how an interpretive ecological approach to developing an eco-ethical consciousness offers educators insight into how we might shift learning in ways that are not simply transformative, but transformative toward a fundamental

rethinking and reconnecting to an ecological understanding. Gary, describing the SEMIS professional development in relationship to the development of an eco-ethical consciousness, explains:

This [SEMIS] is a different type of professional development. It's not like a workshop...it requires EcoJustice concepts and understanding an EcoJustice framework really takes some level of reading, thinking, and discussing...in a typical professional development, you just don't have the time.

This organization's unique approach to sustained professional development can perhaps be better understood by first revisiting the primary goals of EcoJustice Education as examined in Chapters 1 and 4. SEMIS is working to rethink cultural assumptions that shape how we, as humans embedded in Western industrial culture, construct knowledge and how this cultural construction in turn influences everything we "know." More specifically, the development of an eco-ethical consciousness, in the context of SEMIS, requires participants at all levels to engage in recognizing the differences between an ecological understanding and a Western industrial understanding of self as separate and superior to everything.

Ecological Understanding

In order to understand the design approach to SEMIS' professional development, which is essentially an attempt to support the development of an eco-ethical consciousness, it is necessary to introduce the concept of an ecological learning model. In order to provide the context for SEMIS' professional development, I will explain two fundamentally different perspectives through which we, as human beings, culturally construct meaning. As articulated in previous chapters, knowledge—or understanding—is constructed by a person or a group of people interpreting and assigning meaning to difference. In other words, when

a relationship—any relationship—is recognized and explained, meaning is constructed through the interpreter’s culture (G. Bateson, 1972). For some people of the world’s diverse cultures, an ecological understanding is applied to the interpretation of all relationships. However, for a growing number of the world’s humans, there is a rising dominant culture that interprets relationships—constructs meaning—through what ecofeminist philosopher, Val Plumwood (2002) calls an “illusion of disembodiedness.” EcoJustice educators recognize that this destructive way of interpreting the world is conducted through a discursive process—a process of being a part of a network of complex relationships through which we all exchange, internalize, and create sets of valued and shared cultural meanings—and rests on a fundamental premise that to be human is to be separate and superior to all other life (Martusewicz et al., 2011). Therefore, the idea or definition of what it means to be “human” is predicated on notions of superiority and separation. This understanding fundamentally ignores humans as a species interconnected with and dependent upon the wellbeing of a complex set of ecological relationships—a communicative system of living and non-living things which Bateson (1972) names an “ecology of mind.”

Learning, which occurs through an interpretation of experienced difference or differences, happens within a network of relationships (G. Bateson, 1972; Bowers, 1993, 2011). Everything we know—everything we learn—comes into existence as a result of how we observe and interpret relationships with other things. If we are limited to what we recognize—the relationships we see—then we are limited in how we construct meaning. Based on Bateson’s (1972) “ecology of mind” and Bowers’ (2011) work to identify the importance of an ecological intelligence, Figure 2, titled “Ecological Understanding,” illustrates the ways in which sets of relationships exist within and are dependent upon their

ecological context. Humans, as a part of the ecological world, are in constant communication with each other and the more-than-human world. In an ecological understanding, humans recognize and value these interdependent relationships. The phrase “more-than-human,” introduced by David Abram (1996), is used to represent nature in a way that illuminates how these relationships are the basis for human life and for the vast diversity of life on the planet. From an ecological understanding of the world’s relationships, humans are seen as interrelated and interdependent with their ecological existence. An ecological understanding recognizes that relationships occur within the physical ecology of a living ecosystem. In Figure 2, the “Set of All Possible Ecological Relationships” can be understood as the set of all earthly relationships.

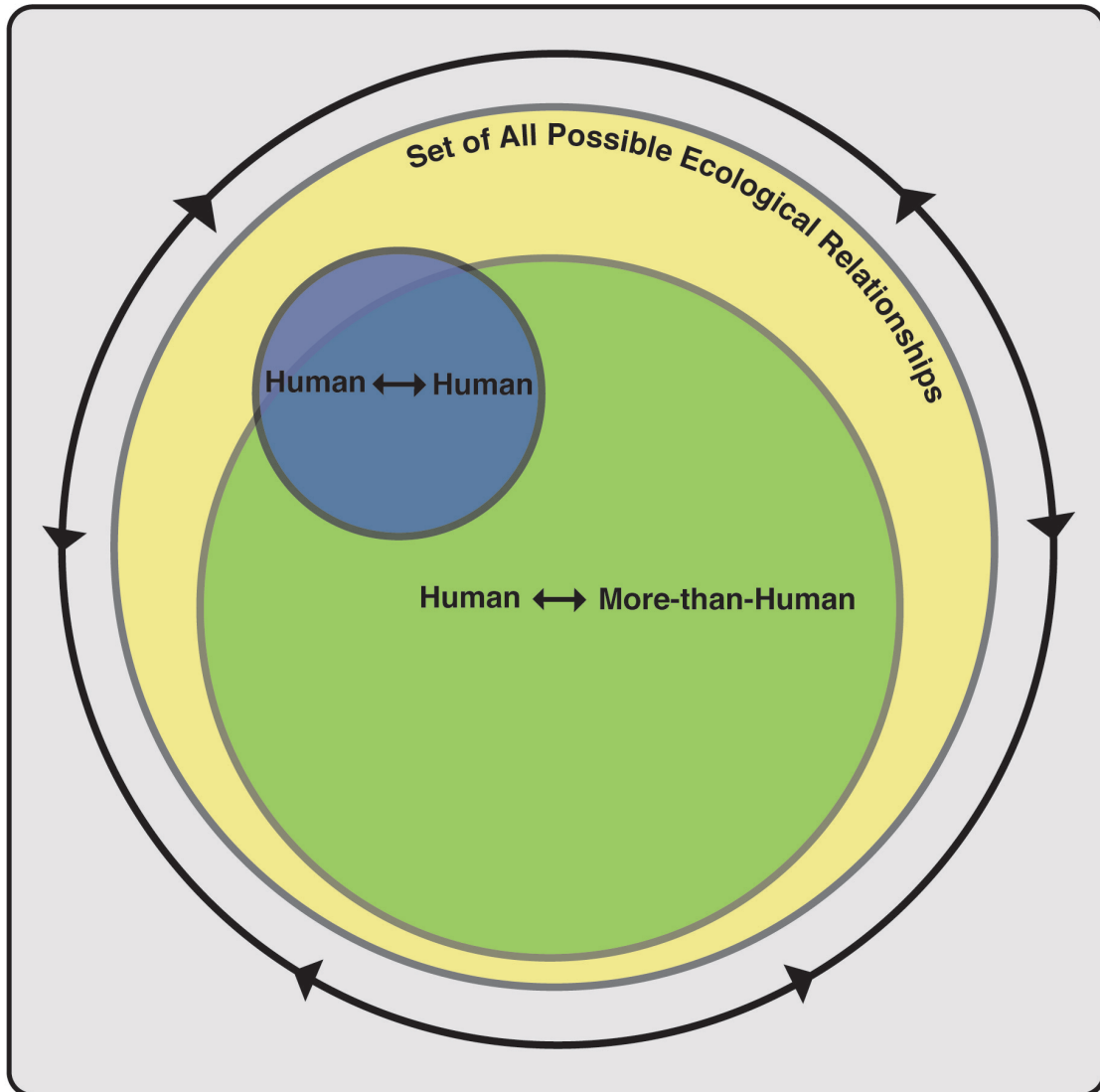


Figure 2. Ecological Understanding. This figure illustrates how an ecological understanding emerges from a recognition that our relationships as humans are embedded in a much larger ecological set of relationships.

Situated within this set are two important sets of relationships: the set containing all of the “Human to Human” relationships and the set containing “Human to More-Than-Human” relationships. It is important to note that Figure 2 illustrates the way in which these relationships exist within the “Set of All Possible Ecological Relationships.” The following

are some examples of these relationships and how they exist as embedded or contained within a finite set of infinite relationships. The set of “Human to Human” relationships refers to the set most readily recognized as people interacting with one another. In other words, this is the set of all social relationships. According to Bateson, these relationships exist within and are dependent upon the larger set of relationships to which humans belong. So while two people are in conversation, they are also breathing air and physically responding to their environment. Also, their bodies are comprised of water and organic matter—such as diverse colonies of bacteria—that are rooted and remain within the larger set of relationships with which they are in conversation. In addition to these physical dependencies, these two humans—all humans for that matter—also relate through culture.

The other set of relationships denoted in Figure 2 is the set of “Human to More-Than-Human” relationships. This set is much larger than the “Human to Human” set because humans are in constant interaction with the more-than-human living beings that belong to the “Set of All Possible Ecological Relationships.” In efforts to understand this, recall the two people in conversation. While in relationship with each other, they are simultaneously in relationship with millions of other living species. Their existence requires that they eat, drink, breathe, and respond to weather and the biological needs of the countless living relationships within the human body. Figure 2 visually represents the physical location of human beings as a part of—and not larger than or separate from—the living systems to which they belong. There is a set not labeled, but implied in this model: the set of all “More-Than-Human to More-Than-Human” relationships. This is a massive set of relationships that we can barely even begin to imagine having a complete inventory. In this set of relationships there are all sorts of communicative systems and networks between more-than-human species. For

example, a relationship fundamental to life is photosynthesis, in which the sun is in relationship with plants in a way that produces glucose, which in turn is a part of a complex ecological system that enables plants to produce oxygen from carbon dioxide. These relationships are all found in the non-pictured set of “More-than-Human to More-than-Human” relationships and are fundamental to the existence of the represented sets.

Finally, the circle of arrows in Figure 2 visually denotes that relationships in an ecological understanding are not organized in a Western industrial value hierarchy. In other words, there are complex networks of interconnected and interdependent relationships that do not follow any particular pattern. Due to the limits of two-dimensional design, this concept is difficult to graphically represent, but imagine arrows and lines all over the diagram with directions going every which way, yet all connected. Bateson (1972) provides the context for this model as a response to the consequences of a socially constructed model that locates “human” or “humanness” in the idea of mind as something separate and superior, located outside of an ecological set of relationships. Bateson explains, “When you separate mind from the structure in which it is immanent, such as human relationship, the human society, or the eco-system, you thereby embark, I believe, on fundamental error, which in the end will surely hurt you” (p. 493). This explanation has implications for SEMIS’ organizational goal of identifying as a network of relationships. Specifically, SEMIS identifies as a coalition of learning relationships and engages in work to develop an ecological understanding—or an eco-ethical consciousness.

The SEMIS steering committee engages in work to identify and examine how to develop and support an ecological understanding within the SEMIS coalition. This requires a strong commitment toward recognizing the relational, meaning-making assumptions that

influence our day-to-day actions in Western industrial culture. Drawing from Plumwood (2002), and the content explained in previous chapters, it is important to revisit what she calls the “illusion of disembeddedness”—a lack of recognition or a denial of our existence as linked to all other species embedded in a larger community of life.

Plumwood (2002) explains that at the root of a culture that interprets difference in ways that reproduce forms of centric thinking exists a fundamental error in which a person relates to the world as though he or she is not connected to the network of relationships that make up their existence. This concept is illustrated in Figure 3, “An Illusion of Disembeddedness,” as a visual explanation for how the Western notion of the “Autonomous Individual” or the “Cartesian I” sets up a limited and dangerous perspective from which meanings get constructed (Bateson 1972; Plumwood, 2002).

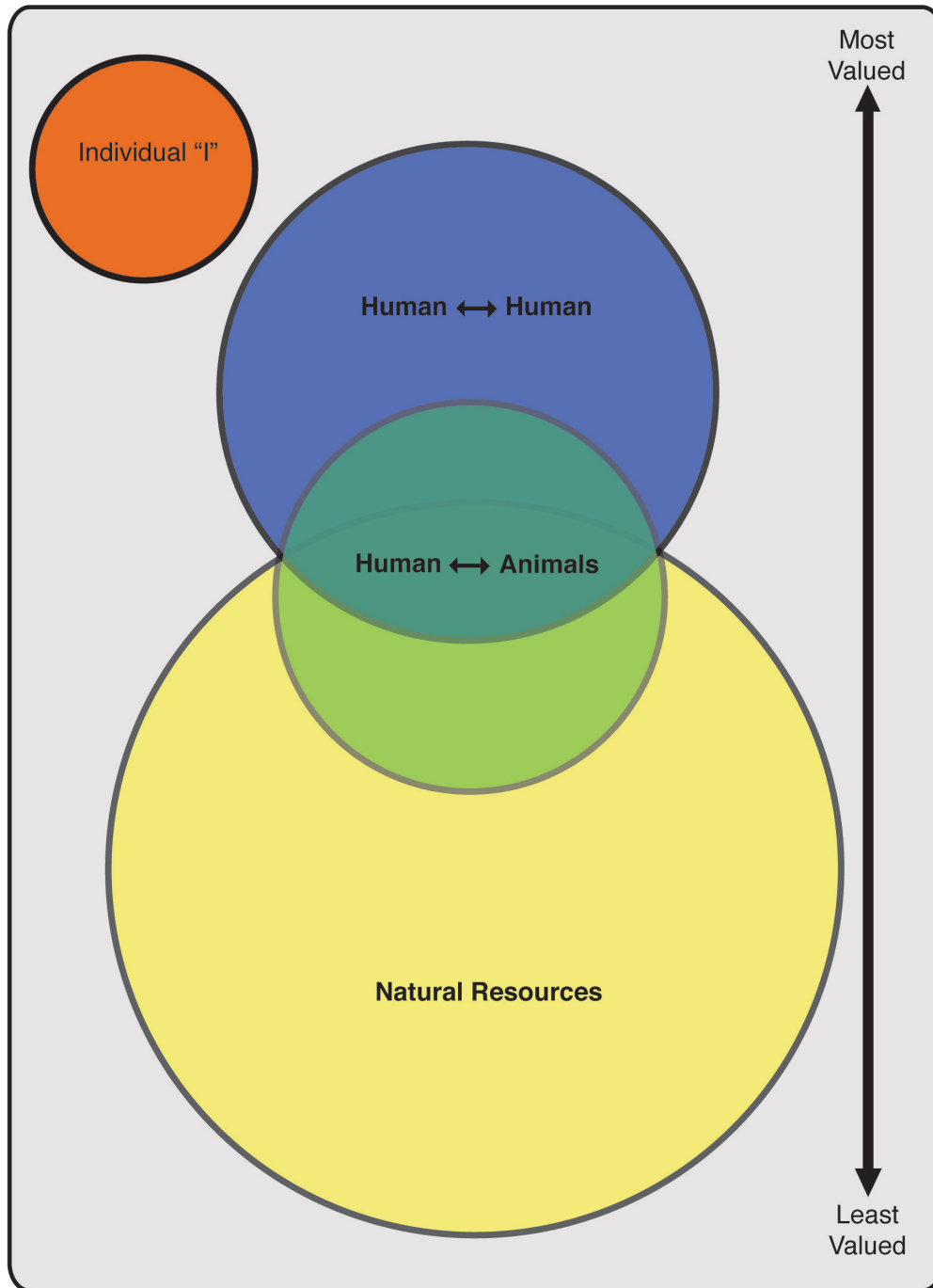


Figure 3. Illusion of Disembeddedness. This figure illustrates the concept of knowledge construction according to a false interpretation of relationships existing in a Western industrial, socially constructed value-hierarchy of relationships. This figure is based on Plumwood's (2002) articulation of an "illusion of disembeddedness."

Comparing Figure 2, an “Ecological Understanding,” to Figure 3, “Illusion of Disembeddedness,” there is a notable difference in that the latter is not biologically possible. In Figure 3, we see the “Set of All Possible Ecological Relationships” is gone and instead replaced with the set containing “Natural Resources” which includes animals and some humans. The set of “Human to Human” relationships is positioned above the smaller set of “Human to Animals” in this perception of how human relationships work. This positions some humans to be considered animals and natural resources. The arrow in Figure 3 indicates how this understanding is rooted in a value-hierarchy that ignores an ecological existence of humans as part of a complex web of living relationships. Most essential to this model’s fundamental break from living systems is the existence and location of the set labeled “Individual ‘I.’” This false set exists in complete isolation from the other sets and in this understanding of relationships—despite the physical impossibility—it exists as a socially constructed goal that signifies “progress.” For example, in a culture that interprets meaning through this model, development would be measured through showing or proving independence from other people and from all other species. Chapters one and four explain how at the core of human existence we are dependent on each other and all other living species. Figure 3 illustrates how the socially constructed model Plumwood (2002) calls an “illusion of disembeddedness” is a fatal and dangerous model for human development. With these two fundamentally different understandings explained, this chapter presents how SEMIS articulates their approach to sustained professional development and an articulated scope and sequence.

SEMIS Articulated Professional Development Model: A Theory of Action

SEMIS has an articulated theory of action delineating their approach to the development and administration of sustained professional development. As introduced in Chapter 5, the steering committee participated in strategic planning meetings that produced a range of artifacts relevant to the development of an organizational theory of action. Analysis of these artifacts reveals three important dimensions for their work: the development of cultural practices of an EcoJustice Educator; identifying and responding to characteristics of school change; and recognizing and supporting school change. The first of these dimensions, the development of cultural practices of an EcoJustice Educator, was described and clarified by the steering committee through the following list of guiding questions:

- How is what is being worked on contributing to more sustainable alternatives?
- How do we know if our thinking and actions—or their implications, support or undermine living systems?
- How do we reflectively listen and understand the messages, the communication, living systems are sending?
- How do we become ethical participants in an “ecology of mind”—a collaborative intelligence? (SEMIS, 2010a, p. 3)

The following two dimensions emerged from the steering committee’s strategic planning through artifacts from their discussions to develop a theory of change that would articulate how they approach professional development. Through this process, they identified key characteristics of school reform—which they were calling “school change”—as “slow, in need of nurturing, situated in ‘a climate of outcomes’ in a standards-based system, and vulnerable to the politics of organizing” (SEMIS, 2010a, p. 4). These characteristics

articulated from the steering committee's diverse experiences in school reform led to their articulation of how SEMIS, as an organization, could support such school change. They decided that they could support school change through:

- Establishing cohort groups of participants based on when they enter as a school into the coalition.
- Developing, or identifying, school team leader teachers who could serve as an ally in the school and help to develop a SEMIS professional learning community in their school.
- Supporting common planning time for teacher teams.
- Engaging school administrators in continued meetings and conversations with other SEMIS school administrators. (SEMIS, 2010a, p. 4)

The lists that emerged from the steering committee's work to develop a theory of change as an organization were drafted into a diagram of professional development by Lindsey.

Lindsey combined notes taken on large post-it sheets from the group's conversation with a diagram they were working on together to present what she titled, "SEMIS Professional Development Model" (see Figure 4).

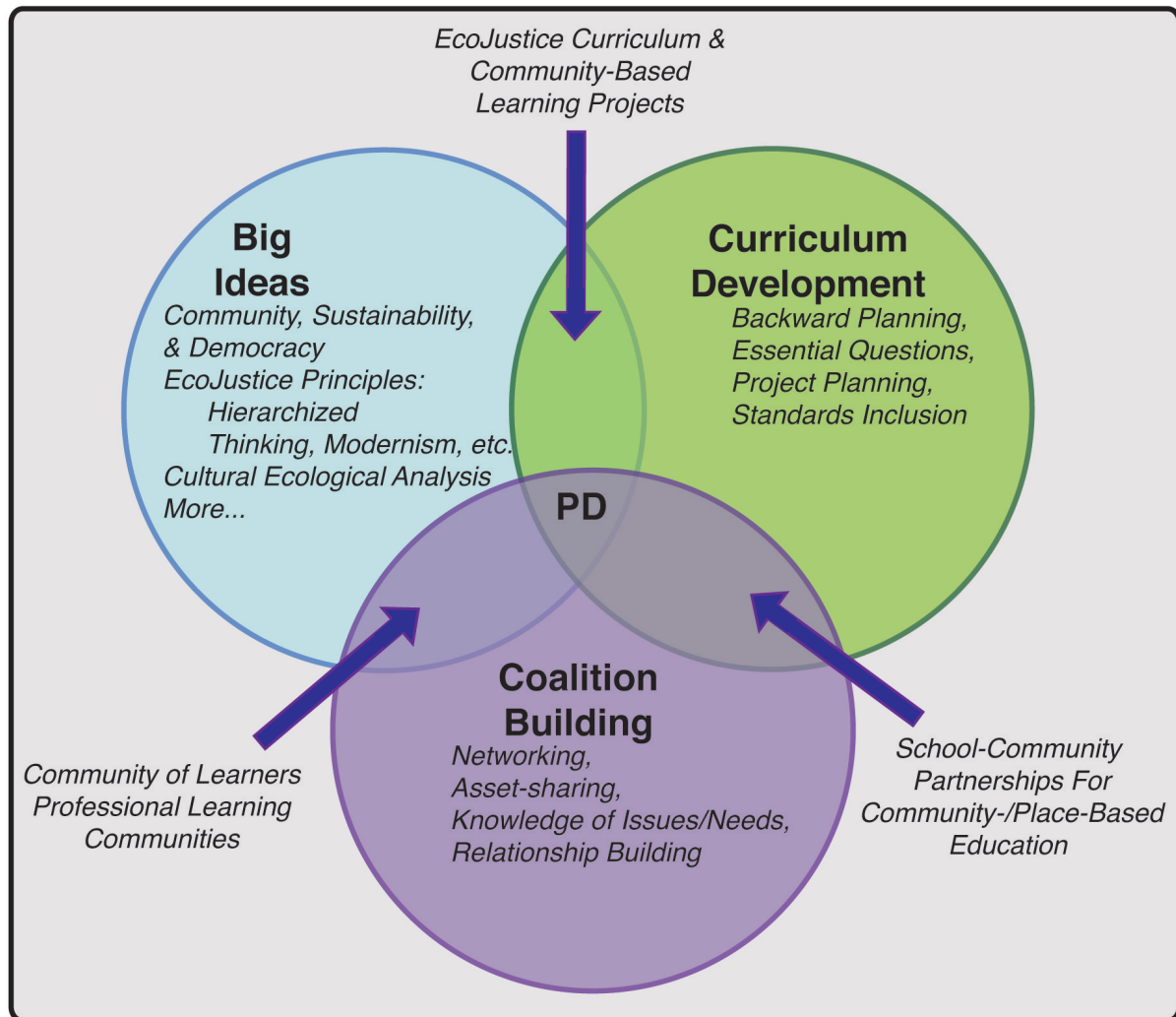


Figure 4. SEMIS Professional Development Model. This figure illustrates the theory of action for professional development as articulated by the SEMIS steering committee. This figure is recreated from a figure in a report generated by steering committee member Lindsey Scalera in 2009.

Figure 4 illustrates how the committee’s approach to the work they do can be understood through the ways in which three main areas of expertise and practice—big ideas, coalition building, and curriculum development—all come together to form the professional development SEMIS creates and administers. The region on the left, titled “Big Ideas,” was

developed based on the following list shaped by the espoused theoretical framework of EcoJustice Education and contributions by steering committee members. Those points articulate that this region—or dimension—would remind the committee, or those in the organization working on planning the professional development, of the goals for developing an eco-ethical consciousness:

- Identify how discourses of modernity operate in self and in community.
- Unpack the power of metaphors and how they work.
- Pulling together examination of social injustice and environmental degradation to see how they are connected.
- Developing a handbook that has readings, examples of student work, and examples of voice at various levels of development from an EcoJustice perspective.
- Constructing sustainable community projects in schools that trace the roots of issues that undermine socially just, sustainable communities.
- Identify the habits or actions that are associated with supporting socially just, sustainable communities. (SEMIS, 2010a. p 7)

This articulation of some of the main points emphasized in an EcoJustice Education framework, while not exhaustive, situates EcoJustice Education as an influence on SEMIS' professional development. Rebecca, a leader in the development of this aspect of SEMIS, explains:

The pieces that have to be in our PD [professional development] and that I keep pushing for are: How do we design activities and bring materials that help teachers learn how to do this kind of cultural ecological analysis? And then, how do we

design activities that get them to translate what they're learning into interesting projects with students?

The region pictured in Figure 4 on the right, titled “Curriculum Development,” illustrates the role of developing curriculum, instructional practices, and assessment that support the “Big Ideas.” The steering committee describes this region as helping guide the development of curricula for participants’ learning both EcoJustice content and how to model pedagogical practices to take into their classrooms. These are listed as:

- Clear narrative descriptions and artifacts collected from schools.
- Teams of teachers looking at student work using appropriate protocols.
- Identifying what makes for an appropriate protocol.
- Designing projects that are representative of authentic issues and community-based needs, interdisciplinary, and include the arts.
- Development of evaluative tools—like surveys and reflective practices—to measure project outcomes, changes in classroom practices, student outcomes, and community outcomes.
- Using metrics to up the academic rigor.
- Student-led exhibitions. (SEMIS, 2010a, p. 8)

This list was intended to remind the organization that curriculum development—with specific attention to teaching and learning—is important to understanding how the organization can enact the desired cultural change outlined in an EcoJustice Education framework. The third region, located on the bottom of the three and titled “Coalition Building,” calls attention to the importance of learning how to recognize, value, and build strong relationships in the network of learners. The main idea in this domain is that it is not

necessarily intuitive or familiar for learners to be engaged in collaborative learning.

However, collaborative learning is essential in a coalition of learners and important to address in this organization's approach to professional development. The SEMIS steering committee lists key characteristics and goals they have for of this type of learning:

- Social events that create a way for people to join with others in casual experiences that deepen and create relationships.
- Having retreats.
- Exhibitions, or celebrations, that occur annually or seasonally that involve the students in the coalition as a way to involve and empower the youth in the organization.
- Reciprocity between teaching, actions, and advocacy. Learning how to support each other's projects through critical and ethical solidarity.
- Cycle of continuous improvement, feedback loops, and reflective practices.
- Spend time teaching, learning, and developing how to build a coalition within your school and community.
- Exploring the diverse ways we deepen, or could work to deepen, our relationships and trust.
- Learning how to build more capacity and grow the coalition. (SEMIS, 2010a, p. 9)

The steering committee's continued reflection and learning together enabled them to articulate an organizational theory of action for how they approach the design and implementation of professional development. This process outlined for the organization how SEMIS engages in sustained professional development with lofty goals of cultural

transformation that include—and possibly even require—school reform. This early articulation of the organization’s theory of change is a draft that became a map for the work in which the organization engages. Lowenstein, Martusewicz, and Voelker (2010) describe this as the organization’s “three prong focus” (p. 108). Lowenstein et al. (2010), in the article titled “Developing Teachers’ Capacity for EcoJustice Education and Community-Based Learning,” explain:

(1) An understanding of ecojustice “big ideas” and deep cultural analysis (e.g. the problem of “hierarchized thinking,” learning principles related to Earth democracy, ideas of sustainability and stewardship), (2) opportunities to work in coalition and form the partnerships needed to develop and enact ecojustice curriculum, and (3) an engagement in a set of inquiry—and problem—based curriculum development processes...that help teachers “translate” ecojustice content within student and community contexts. (p. 108)

The SEMIS steering committee, following this theory of action for how they approach the design and implementation of professional development (see Figure 4), works to provide professional development that is both supported and supplemented with practices for the participants that enhance the content in all three regions. These practices are denoted in Figure 4 by the arrows pointing to where the three main focuses overlap. Think of these overlapping regions, in which only two of the three main focuses overlap, as each having a measurable or observable process or product. Between “Big Ideas” and “Curriculum Development” is the project, or projects, developed by participants in the organization. The goal between these two domains is that participants create curricula referred to as “EcoJustice Curriculum and Community-Based Learning Projects.” These are the projects

that teachers, community partners, and students collaboratively design and launch as Powerful Place-Based Education (PPBE) projects. These projects are designed to be rooted in an EcoJustice Education approach to deep cultural analysis and grounded in content standards and teacher practices. The process between “Curriculum Development” and “Coalition Building” is referred to as “School-Community Partnerships for Place-Based Learning.” These specific relationships illustrate the partnering of community members and organizations with teachers and students to identify local needs and then engage in learning and curriculum design together. The third process, located between “Big Ideas” and “Coalition Building,” is referred to in Figure 4 as “Community of Learners.” This process represents the formal arrangements for school teams and community partners to engage in a rigorous continued learning relationship. Danielle, a community partner on the steering committee and contributor to this articulated approach to professional development, explains:

This is a very comprehensive systems view—or approach—that requires deep change and study. It takes it to a deeper level...It’s not just doing projects. It’s about changing the way we think...helping the individuals think about, “What do I believe about this? What else can I learn about? And do I need to change anything about what I think?”

Drawing from the steering committee’s experience with the Coalition of Essential Schools, these structured learning relationships that SEMIS calls the “Community of Learners” are commonly referred to in schools as professional learning communities (PLC) or critical friends groups (CFG). In SEMIS, this is the learning structure outside of the coalition-wide meetings in which groups engage in learning about the “Big Ideas” and build solidarity through engaging in rigorous and culturally transformational learning together.

Lowenstein et al. (2010) state:

It has been our experience (and challenge!) that each prong of SEMIS program design—content, partnership, and curriculum development process—must be attended to and balanced in order to create professional learning environments that support teacher development, school change, and sustained instructional enactments. (p. 108)

Explaining the importance of this design and approach to the SEMIS professional development in the context of a professional learning environment, Ethan adds:

We [SEMIS steering committee] establish a safe place that's rigorous in holistic dimensions: emotionally, intellectually, ethically, and spiritually. We focus on adults as learners and our design really takes into account adult learning.... We provide a climate for a common moral purpose so that when people are engaged with us, they're with other people who have similar moral values and aims. We have shared routines and a shared discourse. And what I mean by discourse is that we use a common language and we also have—in terms of disciplinary discourse—a set of questions for inquiry that are grounded in an EcoJustice framework. We have relationship building within and across contexts.

In summary, the diagram shown in Figure 4 illustrates an articulated theory of action for SEMIS that ultimately manifests in the ideal balance of three main foci that set the context for three processes that all come together in the center as SEMIS professional development. Using this articulated theory of action for designing, planning, and implementing sustained professional development, SEMIS provides a structured sequence with an articulated trajectory for the participants—the learners—in the organization.

SEMIS Sustained Professional Development

Introducing the scope and sequence. Over the years, SEMIS has not only produced a model of their design approach to professional development but they have also articulated a general scope and sequence for the organization's coalition-wide meetings and additional supports for the sustained learning in which members in the coalition engage. In an effort to describe the scope and sequence, this section introduces the general layout of the SEMIS professional development meetings. Within an overview of the general scope and sequence, it is helpful to examine the SEMIS summer institute and conclude with a proposed model for understanding the SEMIS theory of action in connection with their articulated scope and sequence. SEMIS has no fixed graduation, or end point, for its participants. This aligns with their organizational goal that participants, at any level, are continuously engaged in learning. So an important point to make is that part of the professional development design acknowledges that learning is ongoing.

Since 2008, SEMIS has set the context for the year's professional development each school year, or grant cycle, through to what they refer to as the Summer Institute. The SEMIS Summer Institute can be thought of as bookending one full year, or cycle, of professional development for the organization. In other words, the Summer Institute sets the theme for the learning, project development, and implementation of curriculum for the upcoming school year, or cycle of professional development workshops. SEMIS has a variety of events and meetings that constitute professional development and support the learning objectives that Lowenstein et al. (2010) describe as the "three pronged focus" represented in Figure 4. The steering committee—or those on the committee working directly on the planning and implementation of the professional development—works to

ensure that members of the coalition all participate in a variety of events which include social activities, individual and group coaching, whole school professional development, and coalition-wide professional development workshops.

In response to the complex design structure that communicates all of these aforementioned points of contact, SEMIS has developed a bone structure for the organization's professional development—the coalition-wide professional development workshops. This base structure, referred to as coalition-wide professional development, consists of an annual summer institute, four one-day workshops throughout the school year, and an annual community forum celebration (<http://semiscoalition.org/professional-development/calendar/>). The year doesn't end at the community forum, rather participants continue on through an indefinite number of cycles that can be counted for the purpose of establishing a structure through Summer Institutes.

Figure 5, titled “Linear Scope and Sequence,” shows a linear sketch of the organization's coalition-wide calendar. The background of the figure illustrates three school years of coalition-wide professional development bookended by Summer Institutes. In the foreground, the figure illustrates more closely one cycle, or school year in the sequence.

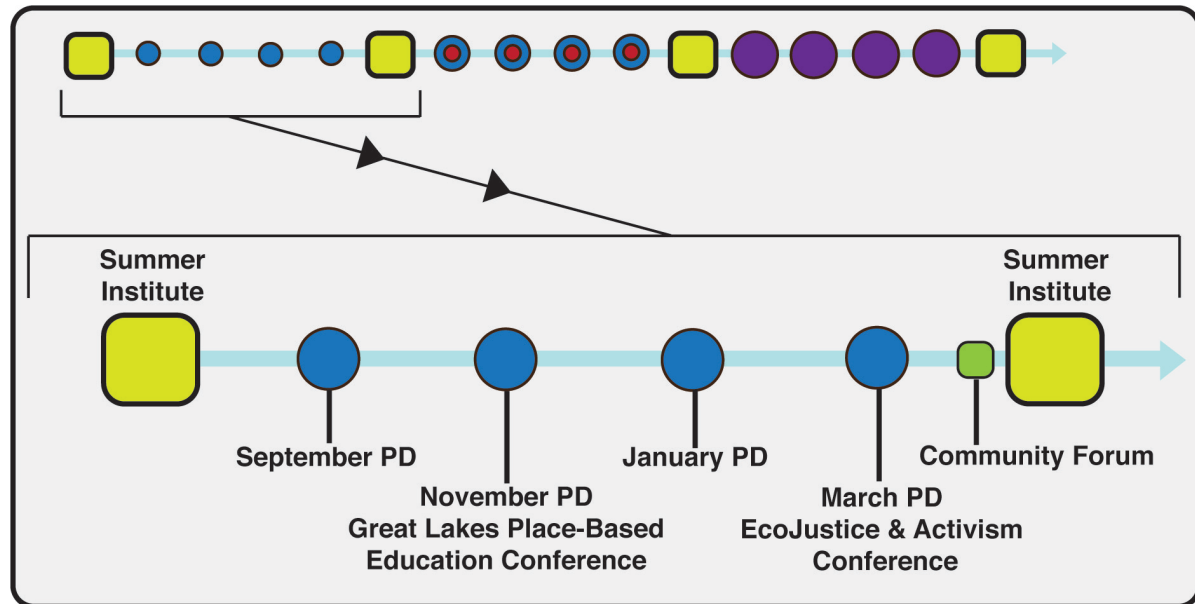


Figure 5. Linear Scope and Sequence. This figure illustrates a linear layout of three years of SEMIS professional development with a close-up examination of one year’s coalition-wide workshop calendar.

Starting with the Summer Institute, the rest of the year has four coalition-wide workshops with a fifth coalition-wide event—the Community Forum—and then the next cycle begins with another Summer Institute.

SEMIS Summer Institute. Offered annually each summer, the SEMIS Summer Institute (SI) consists of four consecutive days. This institute provides the members of the coalition with the opportunity to engage in intensive, ecologically-themed programming on an interrelated aspect of the local community. The SI is designed in accordance with the articulated three-prong approach communicated by the steering committee as “creating a common language for engaging in deep cultural-ecological analysis, project planning, and community inquiry and action” (www.semiscoalition.org/professional-

development/institute/, para. 1). Rebecca, who leads the steering committee's planning of the SI each year, explains:

We plan the Summer Institute by thinking about what we want to see in May and then we back up and say, "Okay, if we want this to happen, the Summer Institute has to establish these ideas." Right? So we actually do that and it's not very linear at all. It's not even necessarily back and forth. It's kind of like around and around. It happens in conversation. It happens in a back and forth kind of dialogue and a lot of brainstorming.

Rebecca's articulation of this approach expresses the committee's commitment to the role the SI plays in setting a foundation for the upcoming cycle of professional development and reinforcing the past year's curriculum.

A unique feature of the SI is that each year the institute introduces a theme that carries over into the four coalition-wide workshops offered throughout the year. Since 2008, the themes have included: EcoJustice and Place-Based Education in 2008; Interconnectedness: Racism and Ecology in 2009; Water: A Hidden History in 2010; Detroit as Our Place: Ecological, Economic, and Historical Stories in 2011; and Urban Agriculture: The Story of Food, Community, and Justice in 2012 (SEMIS, 2008, 2009, 2010b, 2011b, 2012b). Rebecca recalls how the themes and content of the SI focus participants on enacting an EcoJustice Education approach to learning. She reflects:

At our Summer Institute, we've focused on a sequence of themes that we've followed up on in the professional development workshops throughout the year. The Summer Institute is the place where we try to focus teachers' attention with readings and with particular kinds of discussions and workshops on how an EcoJustice framework helps

us to deepen our understanding of the cultural roots of water problems, for example. Or how they get articulated in an industrial model, and so on. Then we try to follow up on those ideas in the four following PDs.

In summary, the SI is a chance for the organization to set a foundation for the work that takes place during the year and to reinforce that work by modeling collaborative learning out in the community where the entire coalition learns together. This entails learning about the diverse sets of relationships to which we all belong and how, within those relationships, we might do more to identify how to support social justice and environmental sustainability.

During the school year, participants—many of whom are classroom teachers—may be too busy to engage in formal learning structures that embody a pedagogy of responsibility. The SI provides a much-needed break from the typical learning found in traditional professional development models. Lindsey recalls her observation of the Summer Institutes:

For me, after that summer institute—or even while it was happening—it was like a huge sigh of relief, because I was like: “Finally this makes sense.” And then shortly after that, I started to see some of the folks that had been with SEMIS for a while start to identify themselves as part of SEMIS. A membership identity began to emerge out of the Summer Institute. The Summer Institute offers a transformative learning experience where we all have the chance to transform and grow.

The SI is intentionally designed to be a transformational experience for participants no matter their level of experience. The SEMIS steering committee works hard to assure every SI is unique and strives to foster learning that emerges from the experiences participants have in relationship with each other, key EcoJustice readings, and the local context.

The SEMIS Summer Institute is itself a PPBE project modeled annually by the steering committee. The SEMIS steering committee intentionally plans the SI to include both time outside in the community and time together in a more traditional classroom setting. For example, at the SI in 2012 participants spent two full days, the first and last day of the institute, learning outside (SEMIS, 2012b). The first day of the 2012 SI was spent at Tillers International, a non-profit organization with a working homestead and learning center dedicated to the preservation, study, and sharing of “low-capital technologies that increase the sustainability and productivity of people in rural communities” (<http://www.tillersinternational.org/tillers/about.html>). While on this field experience, participants engaged in concrete observational experiences that introduced the teaching and learning occurring through Tillers International. They also engaged in a critical dialogue workshop facilitated by Rebecca between Patrick Crouch, a leader in the Detroit agricultural movement and Dick Roosenburg, the executive director and co-founder of Tillers International. This facilitated dialogue explored the contexts and connections for both urban and rural agriculture in connection with the 2012 SI theme of “Urban Agriculture: The Story of Food, Community, and Justice” (SEMIS, 2012b). The following two days were spent at EMU as participants engaged in deep analytic discussions and activities that focused on a close examination of the history of place and agriculture in Michigan. Bookending the four days with field experiences, the 2012 SI ended with a visit to The Growing Hope Center, which is the home-base and learning site for Growing Hope—a local organization dedicated to modeling and supporting urban agriculture and sustainable living (SEMIS, 2012b). The SEMIS steering committee relies on the relationships built through a shared, common

learning experience in the community at the SI to design curricula for participant learning throughout the school year's coalition-wide workshops.

Coalition-wide professional development workshops and the Community

Forum. Between Summer Institutes, the scope and sequence engages participants in four meetings—two in the fall and two in the winter—for the entire coalition to gather and engage in professional development. These meetings are each planned to support learning introduced at the Summer Institute and offer an opportunity in the coalition to provide a structured environment within which the steering committee can focus on building a supportive learning environment for all members of the coalition. Rebecca describes this support as she explains:

These PD workshops give attention to teachers' voice and experience. So as a coalition we listen. We ask people to talk about what they've been doing. We ask people to share out loud....We ask people to talk with each other about what they're doing and we value...what people are doing. There's constant expression of care and love, even as we're talking about the most horrendous, destructive crap that we're trying to deal with.

Rebecca's description highlights the importance of having a public venue to articulate the successes and challenges in enacting PPBE in the schools. The steering committee identifies that the importance of these meetings, above all the content objectives, is to reinforce that each member of the coalition is valued and welcomed into a community of educators working toward similar goals. These coalition-wide workshops are all planned by the steering committee with attention to each of the aforementioned "three prong approach" illustrated in the SEMIS Professional Design Model (see Figure 4). Simultaneously, each

workshop—or meeting—has a purpose in the larger overall scope and sequence. The first coalition-wide workshop follows the Summer Institute and is held in late September. This day-long workshop sets the context for the reflective practices and protocols (introduced in detail later in this chapter). This workshop sets out to engage teachers in thinking about their experience at the SI and any specific needs regarding the development of PPBE projects they are planning. Ethan, whose background is in professional development with whole-school reform initiatives, offers a clear articulation of each of the coalition-wide meetings and helps to illustrate the purpose of each workshop. Describing the September workshop, he explains:

In that first meeting, what’s developed is that we engage folks in reflective practice and planning, and also follow the thematic content of the Summer Institute. We continue our inquiry from the summer at this first meeting, usually at the end of September....They have some time to think about planning during that gathering and to collectively share what they’re doing.

This meeting also sets up and introduces the organization’s “powerful tools”—examined in relationship to the design of professional development later in this chapter—with which the participants will be engaged over the course of the year.

The second coalition-wide meeting has evolved over the past years to be held at the GLSI sponsored annual Great Lakes Place-Based Education Conference in November. This meeting, continuing with the reflective practices established at the SI and the first workshop in September, engages participants with the opportunity to attend this regional conference. The November meeting plays an important role in the scope and sequence because it allows for veteran participants to be presenters to a larger audience, while simultaneously learning

from other educators in the larger, broader movement of place-based education in the region.

Ethan, reflecting on the different levels of engagement that this meeting presents, shares:

What's emerged in our current scope and sequence is that our second meeting in early November is the Place-Based Ed. Conference, where again we continue our reflective practice and continue the thematic content. Additionally, the purpose that the second meeting during the year provides is allowing folks to see themselves as part of a larger movement and contributors to that larger movement. Which is important...So at the conference, they can go to any sessions they want. It's really based on their interests and their own goals. It also serves as an authentic performance of understanding, so we've had folks presenting the last couple of years and that's been powerful....It's a summative part of our scope and sequence as well, because folks are reflecting on their work. Some folks who have been with us presented and they're reflecting on not only this past year, but also their entire journey with SEMIS and their journey as place-based educators.

Ethan introduces to the scope and sequence an articulation of how the SEMIS steering committee gathers feedback from the participants work in efforts to gauge, or informally assess, the learning and growth of the participants in the coalition. While there is no formal protocol in the organization for the steering committee's observations of learning and growth, they share their observations in steering committee meetings that debrief each professional development workshop. These opportunities to reflect and provide feedback play a role in the organization's approach to designing content according to their theory of action while remaining flexible to the needs to the learners.

Following a break from November to late January, the third meeting in the school year's scope and sequence is traditionally held the last week in January and brings participants together in a format similar to the first meeting in September. At this day-long workshop the coalition takes time to reinforce the reflective practices and SEMIS protocol tools and checks in with the participants on the development of their projects and professional growth. The fourth meeting, held in the last week of March, has evolved to be somewhat similar to the second PD meeting. This coalition-wide gathering uses a local conference hosted annually by the EcoJustice Education Masters Program at EMU. The steering committee provides the opportunity for members of the coalition to attend the local conference of workshops and presentations that are collectively referred to as "EcoJustice and Activism." Similar to the Great Lakes Place-Based Education Conference, this event allows for members of the coalition to attend or present at workshops offered around sharing skills and scholarship that support a strong effort to critically and ethically analyze Western industrial culture and propose ways in which local scholars, artists, and activists can engage in efforts to revitalize the local commons. Ethan explains:

At the fourth meeting, what's emerged in the current design is that it's [SEMIS fourth meeting] concurrent with the EcoJustice conference at EMU. And it again serves the same kind of purpose as the Place-Based Ed. Conference. It's not only a time to form relationships—to broaden relational networks—but also to expand one's thinking about being a part of a larger movement and their membership in that larger movement.

Ethan's articulation highlights the importance of supporting the network of relationships in the model of SEMIS professional development. These workshops offer the opportunity to

both showcase the work being accomplished in SEMIS and connect participants to a growing community of activists and educators who share a similar interest. In other words, these larger events build solidarity, which is a necessary component to engaging in the work SEMIS encourages from their participants.

Although the development never quite comes to a close in this model of professional development, it can be articulated that before one cycle, or school year, comes to an end and rolls into the next summer institute there is an important celebration of the year's work at the SEMIS Community Forum (see Figure 5). This celebratory event has become an annual part of the scope and sequence as it offers an opportunity for the SEMIS steering committee to recognize projects, schools, and participant learning with awards and for coalition members to present their successful projects to one another and guests. Ethan explains:

The next session is the community forum, which is really a summative reflection on the year, looking backwards but also pointing forwards...so the whole year is an inquiry cycle. You can think of it of a spiraled cycle where every year folks are spiraling up in sophistication and engaging in inquiry in posing questions about their practice and what they're doing: reflecting on their practice, engaging on practice, reflecting in action as they're teaching, reflecting on action during the year and during our events...and then they think about the next year and what they're going to do.

The SEMIS scope and sequence illustrates that each point of contact is planned by the SEMIS steering committee with a clear commitment to an overall development of PPBE in the region. Sustained professional development implies a long-term commitment and given that the linear explanation offered in this section emphasized how each cycle rolls into the next year, the next section will propose a spiral that represents how the past experiences in

SEMIS do not disappear, but rather they are built upon and remain a part of the collective knowledge learned in the organization.

A spiral scope and sequence. Building upon the descriptions provided in the previous section in connection with the SEMIS steering committee members' articulation of the scope and sequence of professional development, the following is a presentation of a spiral model.

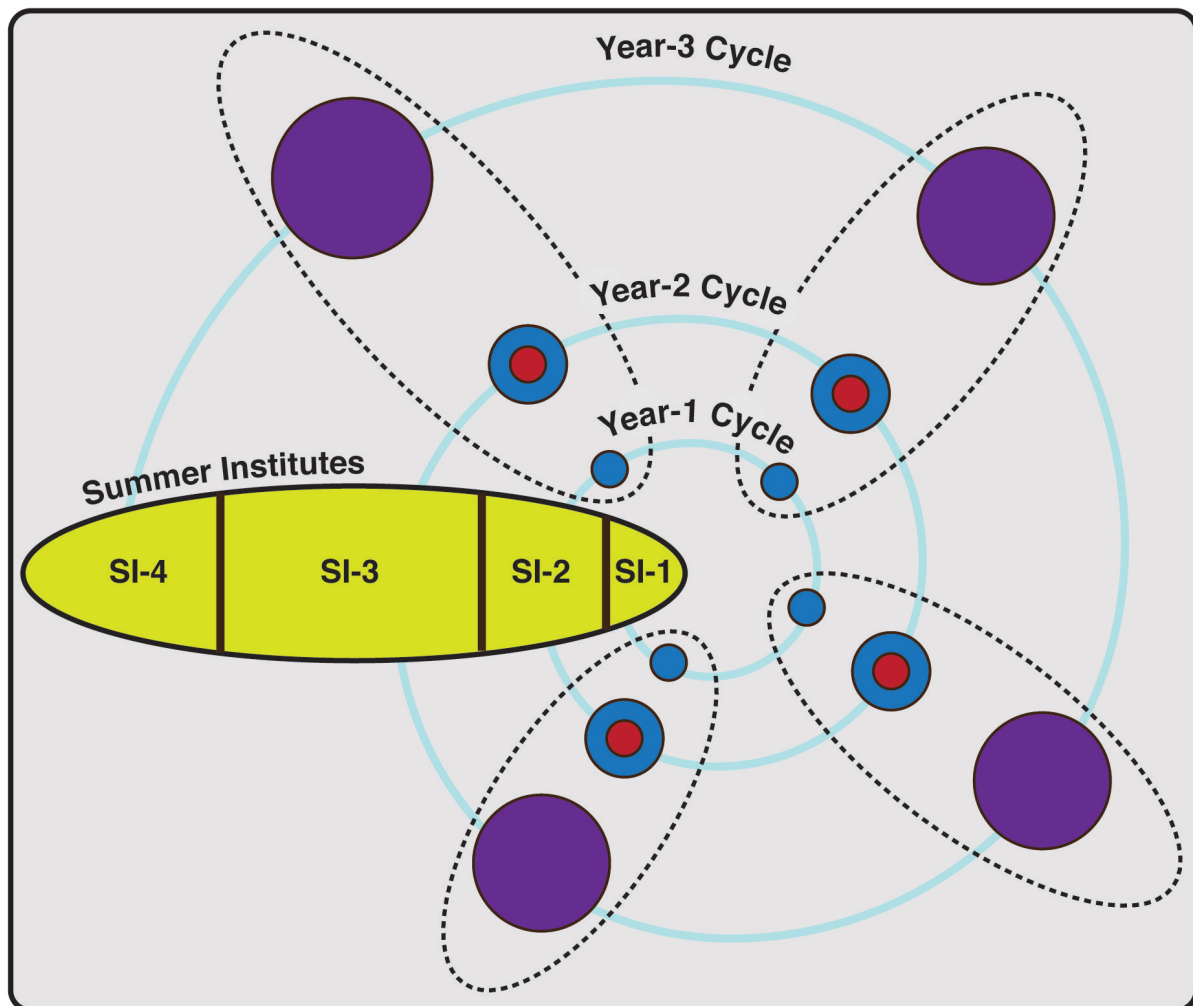


Figure 6. Proposed Spiral Scope and Sequence. This figure illustrates a scope and sequence for SEMIS professional development that builds from the linear version in Figure 5 to better articulate the spiraling nature of the learning organization's approach to sustained

professional development. Each dot along the path represents a coalition-wide meeting and the dotted ovals surrounding the group of each of the meetings illustrate the coaching support.

Figure 6 builds from the linear design shared in Figure 5 to illustrate the looping nature that represents the design approach of the professional development and spirals the workshops through three cycles that pass through annual Summer Institutes. The idea is that each cycle spirals through the Summer Institute each year and illustrates an ongoing path that allows for participants to grow over time within the structured learning environments that loop through important content each year.

In efforts to explain this model, the following will describe the design over three loops passing through four Summer Institutes. It should be noted that in Figure 5 and Figure 6 the model ends at the fourth SI, but that is only due to restrictions of capturing a scope and sequence in an illustration. The SEMIS scope and sequence continues on indefinitely. While SEMIS has a commitment to being flexible regarding teacher teams attending professional development, they emphasize that the ideal situation is that schools and community partners commit to all of the coalition-wide workshops as well. Given this ideal, with recognition that it isn't always the case that teams attend all the events together, the description and model illustrated in Figure 6 outlines a common experience in which SEMIS has anywhere from two to six teachers from each school team attend the coalition-wide workshops. The "Year-1 Cycle" of this sequence begins with a team of teachers attending an intensive four day summer institute (SI-1 in Figure 6) in which they are immersed in a place-based learning experience designed to facilitate the forming of relationships around meaningful common

interests in the community. This initial SI and “Year-1 Cycle” introduces participants to engaging in deep cultural-ecological analysis and to learning tools for self-assessment in the coalition. Ethan, describing how each SI builds on past experiences while simultaneously setting up a cycle of professional development, explains:

At the Summer Institute, we engage teachers...in a transformational learning process, and really focus on the big picture and knowing why. So it provides a context for the participants’ learning in a very broad way. It also focuses on adult transformational learning. So it’s looking to challenge. Our design is to challenge the assumptions that participants bring around their beliefs, around education, place-based education, their relationships with living systems, and so on. But it’s also structured around adult developmental learning principles where we are a learning community that’s based on inquiry. So it’s not a sitting structure. The assumption is that adults come in with their own interests, their own motivations. Those are diverse. You need to differentiate based on those interests. People need to set their own goals. This all follows along with how to teach adults and so each summer, we spin out a theme. For example: we had water; we had the social, ecological and economic history of Detroit; we’ve had various themes...There’s content in those themes. You have to know a lot about the specific theme, but it also provides a context for getting to deeper EcoJustice educational principles. So it’s really a context that establishes a common frame of reference and language for our inquiry throughout the year.

The key point in this description shared by Ethan is that SEMIS professional development is not a sitting structure and that, given the diverse levels of content knowledge and experience of the participants when they enter the organization, there is a need to accommodate and

differentiate. This need to be flexible and dynamic requires a model that illustrates the ability to cycle through common experiences and structured rituals that participants can predict and to see their development and the development of others in the coalition. After the SI-1, the team—which is illustrated in Figure 6 as the small circles on the path that is looping from SI-1 around through SI-2—attend four full day professional development workshops (see Figure 6). Rebecca, describing the recursive nature of this learning structure, articulates:

So, the scope and sequence is really that the Summer Institutes lay some groundwork....We always try in the Summer Institute to frame—or to sort of bookend—the time that we spend going out into the field and actually doing place-based education ourselves....We follow up with four PDs that try to translate the conceptual information that was worked on intensely in the Summer Institute with, “What do we do about this with our own kids? How do we work on projects?” And then we support teachers through both coaching and the PD time to actually try to do something with that information with their students.

Over the course of the year the school team, which ideally include a school administrator, is introduced to community partner organizations and given support through SEMIS for their school projects and professional growth in the form of funding and coaching to help them collaborate toward launching PPBE projects in their schools. As that group of teachers enters into the next Summer Institute, new teachers attend and join the group. This is illustrated in Figure 6 as the growing set of concentric circles following the path looping from SI-2 around through SI-3. The new and larger group of participants attends the four coalition-wide workshops and works to grow PPBE in their schools. This model is designed to support teachers who are in their second year to develop teacher leadership skills in

learning communities that hold the group accountable to setting goals as SEMIS school teams. The idea is that the projects that were launched in the “Year-1 Cycle” are now reflectively engaging the school teams in the practice of collaboratively assessing and identifying what PPBE projects are achieving in their classrooms and out in the community as they move through the “Year-2 Cycle.” Rebecca observes:

All of the four workshops that followed that year were developing teachers’ planning capacities for projects that were focused on the theme. So we did a lot of work with how do you backward plan, and how do you map curriculum, and how do you help students create projects that are relevant to these issues. A lot of what we do in the four PDs that follow the Summer Institute has to do with supporting teachers’ work and actually trying to translate what they learned in the Summer Institute into projects and classroom-based curriculum.

In theory, each loop or cycle in this design builds upon the learning experiences in the coalition and adds to the teams’ development of PPBE projects, their eco-ethical consciousness, and their ability to teach for socially just and sustainable communities. Ethan, when asked about the relationship between the scope and sequence and the content in the professional development, responds:

So there’s the general curricular knowledge, this pedagogical content knowledge...and then there’s content and concept. When we talk about EcoJustice Education, there’s a whole lot of content for teachers to actually understand the root causes of social and environmental crises....And if teachers do not have that content knowledge, even if they have the aims, even if they have some pedagogical methods, even if they know how to plan....You have to have the content knowledge in order to

engage in concept-based, inquiry-based instruction....It's a sort of circuitous route in terms of how students learn, but you have to know a lot. So our design also focuses on helping teachers acquire that knowledge....So what's actually taught and learned in what we call the enacted curriculum is different from the official curriculum in what you've planned. And within that interaction teachers develop pedagogical content knowledge. In other words, they develop ways of teaching concepts in context.

In Figure 7 the same model as illustrated in Figure 6 is shown from a different perspective to help visualize how the loops, or cycles, build from year to year to support the potential for whole schools to grow and learn through SEMIS. As the teams loop through the SI-3 and head into their third year of coalition-wide professional development accompanied by additional individual and school team coaching, the team has grown—illustrated in both Figure 6 and Figure 7 as larger single color circles that blends the previous concentric circles to denote the growth of the school team implementing PPBE in the school. At this stage the work of the group should be showing growth in the development of the three main foci of learning in SEMIS: EcoJustice Content, Coalition Building, and Sustaining a Movement.

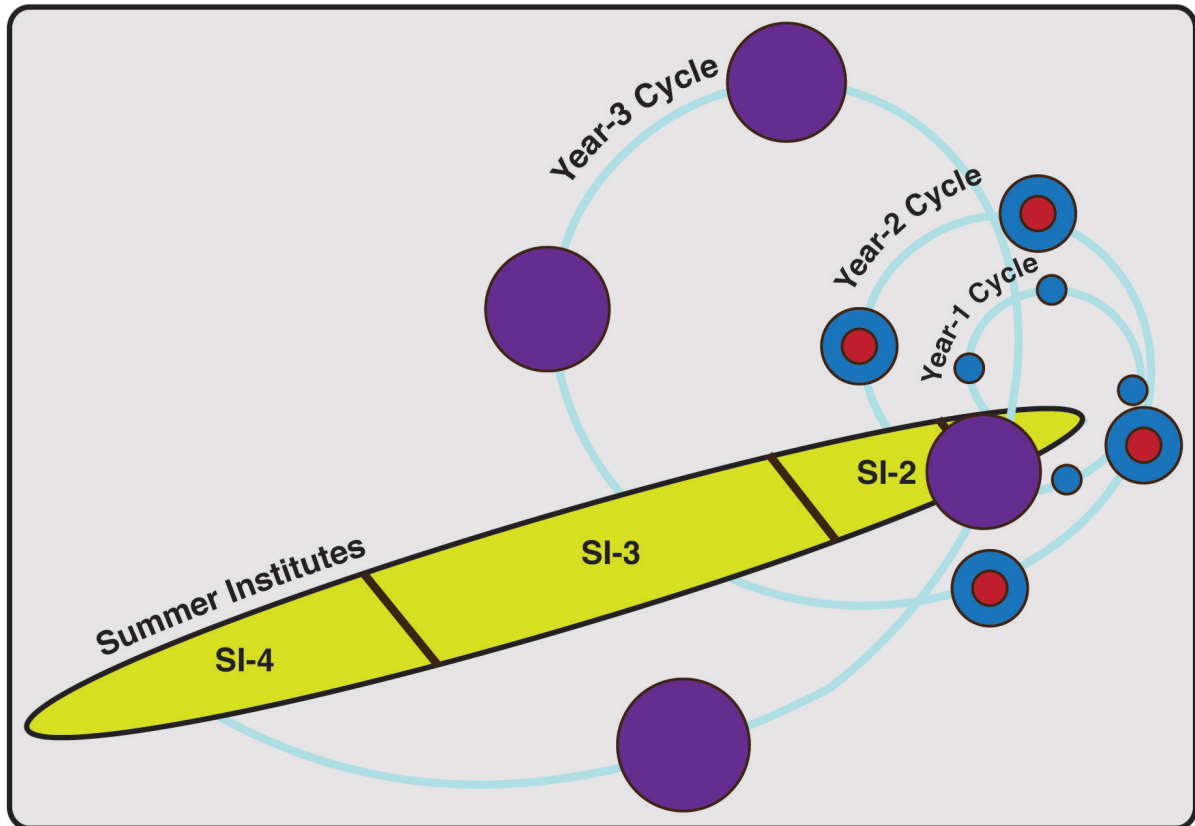


Figure 7. Proposed Spiral Scope and Sequence 2. This figure illustrates the same proposed spiral sequence illustrated in Figure 6, but from a different perspective to highlight the depth and cyclical nature of the design not captured in the flat model in Figure 6.

Recall, while these models only show three cycles through four summer institutes, the design is expected to continue indefinitely as the movement grows. The model makes this work seem like it happens in some sort of linear fashion, even with the addition of the spiral twist to the linear calendar. These models are only intended to help communicate the design and idea for a general trajectory for participating in SEMIS professional development over a sustained period of time. Rebecca reflects:

There's an ethics but there's not a linear, step-by-step. There's commitments and principles and the attempt to do something about those, but the path isn't a method.

Unless you consider trying to do your best with a set of strongly articulated ethical commitments a method. Which will not get you a step-by-step process. It'll get you a commitment to making relationships that matter.

However, the complex goals of the “three prong approach” to SEMIS professional development and the difficulty of learning to engage in this content are complicated by the fact that no two learners in the network of relationships are the same. SEMIS addresses the need for more individualized instruction through the provision of individual and team coaching.

Coaching. SEMIS professional development, despite a clearly articulated design for the scope and sequence, presents an added challenge to most traditional professional development models. SEMIS engages participants in ongoing adult learning within an EcoJustice Education framework. This framework presents content that can be difficult to engage due to the high knowledge demands it places on participants. A critical component of the SEMIS professional development is the individual and group coaching provided to learners in the coalition. Lowenstein et al. (2010) explain:

A central component of professional development must necessarily be a particular emphasis on helping teachers better understand ecojustice concepts and modes of inquiry and analysis first, and then to engage ways of “translating” these concepts in particular student and community contexts. (p. 104)

In line with research on teacher professional development, SEMIS works to provide additional contact hours that learners, or participants, spend with coaches in order to identify where they are in their development and set appropriate goals for progressing as PPBE educators. In the first years of SEMIS each member of the steering committee was assigned

to be a liaison to schools in efforts to provide this necessary individual and small group instruction. This liaison role was an early form of coaching and proved to be less efficient than the model that is currently emerging in SEMIS. Rebecca reflects:

We were still working with the model of liaisons to the school and we were learning that there were some limitations. We were also beginning to play with the idea of what a real coach would be but also how to do the work of encouraging teachers to learn what an EcoJustice framework would mean for doing place-based education....So that's a real complex task, right? We were realizing that to do it well, we would need to be in the schools in one-on-one relationships with the teachers more...in order to have a really strong teaching-learning relationship where Place-Based Projects and an EcoJustice way of thinking develops into strong curricula and strong projects—having someone there, like as a resident in a school would be the ideal thing.

Instead of placing the coaching responsibilities on the specific liaison for each school, SEMIS learned by trial and error that it made more sense—both financially and based on need in the school teams for more individualized attention—that the organization develop a coaching program. The formal role of a SEMIS coach isn't quite fully developed, but Becca, Rebecca, and Ethan have been acting in such a capacity, with Becca taking on the bulk of the coaching. The organization has made a recent commitment to a model that supplements the coalition-wide professional development with individual and team coaching support as a critical part of the professional development. Becca, in her role as coach, explains how coaching has opened up and modeled SEMIS as a flexible learning organization:

I think the way that we've changed is to be more open and flexible about accepting different entry points and saying, "We don't just have four meetings a year and a Summer Institute." We have those pieces, but the way that people engage happens in more ways than that. And it's not a one size fits all. We've become much more customized.

Reflecting on the strengths of the scope and sequence of the professional development in SEMIS and describing the coaching support, steering committee member Nancy explains:

I think that personal, one-on-one coaching that she [Becca] does with teachers in their environment is important and I think they get a lot out of it. It's when you're there with them in their place helping them and working on the projects. I think that is amazing. And I think that the teachers appreciate it, I think they get a lot out of it, and I don't know whether you would be able to have the same kind of impact on the school, teachers, the students, and the communities if that wasn't a big part of this model of how we're interacting with the schools.

Given this strength highlighted by Nancy, the learning in SEMIS is much more like a web or a complex network of relationships through which this general model brings everyone together to connect and touch base on their individual and collective growth in the coalition. Having provided an overview of the scope and sequence of the SEMIS professional development complete with a description of their theory of action in approaching the development of sustained professional development, the chapter will take a closer look at the specific tools developed by SEMIS called the "four powerful tools."

Four powerful tools: Protocols. Joseph McDonald, Nancy Mohr, Alan Dichter, and Elizabeth McDonald (2003) state, "Among educators especially, *just* talking may not be

enough. The kind of talking needed to educate ourselves cannot rise spontaneously and unaided from *just* talking. It needs to be carefully planned and scaffolded” (p. 4). Through the introduction of “carefully planned and scaffolded” protocols into the learning organization, McDonald et al. suggest that participants use protocols to help “imagine alternatives to ordinary habits or working together, learning, and leading” (p. 1).

Commenting on the ways in which SEMIS enacts this process, Shug reflects:

It was truly the process of adult learners getting to the point where they will become practitioners. Moving from theory to practice—with some cases moving from practice to the theory as a way to have a better understanding of the theories behind that approach.

This support is essential to the role of an intermediary organization like SEMIS. By providing these supports, they assume the responsibility of carefully planning and scaffolding content that fosters growth. In most cases educators immersed in Western industrial/consumer culture adhere to interpreting difference through dominant Western discourses.

As participants engage in the SEMIS professional development they are in need of a safe place to not only begin to identify and understand discourses—like anthropocentrism, ethnocentrism, androcentrism, etc.—but also how these discourses work in non-linear ways to shape how we perceive the world and how our actions are inextricable from this interpretive process (Martusewicz et al., 2011). Becca, reflecting on her learning in the organization, recalls:

It took me a long time to understand that my perspective comes from a fundamental belief that hierarchies cause a lot of damage. The fundamental one in my work is

disconnection from nature....I gave myself a little bit of distance from SEMIS at first because I didn't understand the EcoJustice perspective that connected with me and until I understood that perspective and how I fit with it, I was a little but standoffish....So it's been quite a big shift for me.

Following the advice of McDonald et al. (2003) to provide protocols to help the organization explore and form new habits, SEMIS engages participants in what they call "powerful tools." SEMIS, committed to the use of organizational protocols, has developed what they refer to as "powerful tools," in efforts to support a structured learning environment for the participants engaged in the organization's professional development. The organization has developed and introduced several potential protocols that may very well develop into rituals for the organization's articulated approach to professional development. Among those protocols offered by SEMIS, "four powerful tools" stand out: SEMIS Project Planning Guide, SEMIS Lesson Plan Template, SEMIS Rubric, and the SEMIS Portfolio. While all four of these protocols play a role in the professional development in SEMIS, the SEMIS Rubric stands out as a protocol that describes and situates the use of the others.

The SEMIS Rubric grew out of the same steering committee retreat meetings in 2009 as the SEMIS articulated approach to designing professional development. It was refined over the 2009-2010 school year and was published in its current edition by SEMIS in 2010. The SEMIS rubric has become a major reflective tool in the coalition and "helps assess our [SEMIS'] progress towards specific goals and to identify important next steps as individual and school teams" (www.semiscoalition.org/resources/powerful-tools). When educators work in groups to collaboratively assess their development, they engage in reflectively assessing their growth in ways that foster adult learning: collegial inquiry, mentoring, and leadership in

teams (Drago-Severson, 2004, 2008). The rubric—which follows a scale that ranges from “emerging” to “developing” to “advanced, transforming, and sustainable”—is broken into four dimensions, with three categories for development in each (see Appendix B).

The first of the four dimensions is “Community/Place-Based Education” and offers direction in how learners and project teams are developing (a) ecological aspects of place and content standards—the extent to which content standards are aligned with local learning outside of the classroom and in the community; (b) socio-cultural—the extent to which content standards are aligned with social justice issues relevant to and occurring in the local community (i.e. human habits and behaviors); and (c) political—the extent to which school projects involve or engage policy organizations and policy makers.

The second of the four dimensions is “Cultural Ecological Analysis” and provides direction in the learning of EcoJustice Education content as participants are developing (a) interconnection—the awareness of social relationships as a part of the larger ecological community and engagement of students in projects that support an ecological understanding (see Figure 2); (b) essential question—the extent to which the teacher, or school team, has an essential question that guides their work and emerges from the local community; and (c) cultural roots—the extent to which teachers engage in both their own recognition of the connections between culture, language, and history and student work that shows evidence that they are engaged in a “pedagogy of responsibility.”

The third of the four dimensions in the SEMIS Rubric is “Community-School Partnerships.” A significant part of learning to engage in a pedagogy of responsibility is to learn how to develop partnerships with organizations and leaders in the community. This dimension offers a break down of the development of (a) relationships—the extent to which

the teacher, or team, is partnered with a local organization; (b) communication—the extent to which the teacher, or team, is regularly in contact and co-planning with their partners; and (c) programming—the extent to which the partnership is producing co-planned curricula and developing the school as a community resource.

The fourth dimension of the rubric, titled “Community of Learners,” outlines the development of the school structural support needed to accommodate the learning in all four of the dimensions. This last dimension of the rubric is important because school support for this challenging learning is essential to the success of the education reform process. This dimension outlines development of (a) accountability and structure—the extent to which the school supports a professional learning committee (PLC) or meets to engage in critical reflection using the rubric as a protocol tool; (b) content learning—the extent to which the members of the learning group, or PLC, in the school hold each other accountable to development in all the dimensions; and (c) sharing information and content—the extent to which the school disseminates information and engages with other groups in the coalition. SEMIS uses the rubric to engage learners in goal setting (see the goal setting worksheet in Appendix B) which helps set benchmarks for meetings with coaches in efforts to progress both individually and as a school team. Additionally, the steering committee uses an application process for funding what they call “mini-grants.” This engages educators (see Appendix C) and community partners (see Appendix D) in a reflective process with the SEMIS Rubric.

The other three powerful tools identified by SEMIS contribute protocols designed to support the development outlined in the rubric and summarized in the aforementioned professional development. The SEMIS Project Planning Guide helps teachers plan projects

backwards from identified goals in both state and national standards and on the SEMIS rubric (see Appendix E). This worksheet helps coaches to take teachers and school teams step-by-step through curriculum planning in connection with the SEMIS Lesson Plan Template. This lesson plan template helps teachers to include deep cultural analysis in their projects. These protocols are helpful because as teachers are developing an eco-ethical consciousness, it can be challenging to include a new outlook into familiar environments like classrooms. The SEMIS Lesson Plan Template helps ensure that each lesson supports the goals outlined in the SEMIS Project Planning Guide. The template (see Appendix F) models planning for a pedagogy of responsibility. This protocol takes an educator through a process in which each lesson gets carefully aligned to standards, has clearly articulated objectives—or big ideas, explicitly identifies the EcoJustice Education concepts being developed in the lesson, identifies an area of stewardship, and connects the lesson back to the school's essential question. Additionally, each lesson requires teachers to identify what they need in terms of support from community partners and/or coaching.

The final of the four powerful tools identified by SEMIS is the SEMIS Portfolio. This tool, while developed in concept in 2011, was not fully integrated with support into the SEMIS professional development until the 2012-2013 school year. In previous years, the steering committee worked with teachers in the coalition to design a protocol that ensured PPBE projects could be documented in a way that worked well for the teachers and community partners working on the projects. Over the school year of 2011-2012, it became apparent that teachers did not have the time or the technological literacy to compile electronic portfolios for the PPBE projects they were working on in their schools. In efforts to provide sufficient support for the use of this tool, the SEMIS steering committee decided

to dedicate a significant amount of professional development time at the four coalition-wide workshops toward the development of project portfolios. In the 2012-2013 scope and sequence of coalition-wide workshops, SEMIS committed to the participants “using electronic media in SEMIS” for project portfolios in efforts to structure and model “reflecting on, assessing, and sharing” their PPBE projects (SEMIS, 2012a, p. 1). While this protocol has been introduced and supported, very few projects or school teams have reached the stage of being able to produce and submit a portfolio.

In theory, the SEMIS Portfolio provides examples of projects that can be shared and reflected upon by other groups in the coalition. SEMIS explains that this protocol serves four main purposes in the organization: (a) formative assessment, (b) transferability of knowledge and ideas within the coalition, (c) teacher learning and reflection, and (d) communication with school and community audiences. In short, the portfolios capture and communicate the projects being developed in SEMIS. The SEMIS Portfolio follows an outline provided to participants in PowerPoint template (http://semiscoalition.org/wp-content/uploads/2010/09/SEMIS_Portfolio_9_22_2011.pptx), and in Weebly—an online website building program for which SEMIS has developed a “Weebly Quickstart Guide for Teachers!” (<http://semiscoalition.org/wp-content/uploads/2011/11/weeblyQuickStart1.pdf>). The outline for each SEMIS Portfolio asks that each project include: (a) school community context; (b) project description; (c) project artifacts—photos, video, student work, lesson plans, etc.; and (d) reflections. The SEMIS Portfolios, as a culmination of engaging in the SEMIS professional development, is an emerging protocol for exhibiting the learning and growth of the participants in the coalition.

Growing whole school reform efforts and emerging powerful tools. In the 2012-2013 school year SEMIS piloted a strand of customized professional development with a focus on whole school reform. Under the directorship of Ethan, SEMIS has committed resources to begin working with whole schools to provide an emerging vision for whole school staff professional development that complements the aforementioned coalition-wide professional development. While this strand of work in SEMIS has not been formally adopted and refined by the steering committee, it has been supported in the organization and is becoming a more prominent facet of SEMIS professional development. The general idea of this strand of work is to foster PPBE in whole schools to support the growth of the intensive work occurring in the schools and community by teacher teams participating in the coalition-wide professional development. Ethan, in a presentation to faculty and administration at EMU, describes the emerging whole school professional development scope and sequence as having four major points of contact as a full staff through “in-service” workshops accompanied by school-based coaching.

This emerging scope and sequence begins with an introduction to PPBE and focuses on the question “What is community?” (SEMIS, 2013). Following an introduction to the EcoJustice Education framework, the school staff engages in rethinking how they define the concept of community, while participating in the co-development of a school-wide commitment to PPBE. Over the course of engaging in these workshops, and with targeted coaching support provided by SEMIS, this strand of professional development focuses on the following key points:

- Introduction—What is community?
- What is an EcoJustice approach to place-based education?

- Development of an essential question.
- Grade and cross-grade planning and standards alignment. (SEMIS, 2013)

These efforts are accompanied by a set of emerging tools. The first of these emerging tools is an “EcoJustice Essential Question Germinator” (see Appendix G). This tool helps each school as they design an essential question for the PPBE they intend to address in their school-wide professional development with SEMIS. Drawing from the “Understanding by Design” and the Coalition of Essential School’s tradition of developing “essential questions” as a part of curriculum planning (Wiggins & McTighe, 2005, 2012, 2013), SEMIS works with schools and teachers to not only co-construct a school essential question but also to ensure that the question is aligned with and supportive of PPBE. Another emerging tool is a school-specific “EcoJustice Curriculum Design Checklist” (see Appendix H) that accompanies the aforementioned “powerful tools” to help participants to focus on aspects of PPBE while they design projects and work collaboratively with SEMIS coaching to develop and assess curriculum. While these emerging tools have yet to go through the same rigorous co-development in the steering committee as the “powerful tools” described in earlier sections, they are important to mention as part of the whole school professional development strand emerging in SEMIS. Given this structural presentation and description of the scope and sequence of SEMIS’ sustained professional development, the next section describes a theoretical “Coalition” learning model that draws from SEMIS commitment to an “Ecological Understanding” (see Figure 2).

Theoretical Learning Model for SEMIS Professional Development

In the previous chapter, SEMIS is contextualized as a “learning organization” with a complex, articulated approach to not only learning as a steering committee but also providing

a supportive learning environment for all the SEMIS participants. Additionally, the articulated theory of action and scope and sequence for SEMIS professional development described in this chapter detail how SEMIS is situated in a commitment to EcoJustice Education as a systems approach to school reform and cultural change. This section provides further analysis of the SEMIS professional development using an EcoJustice Education framework and examines a theoretical learning model that draws from the HPL Framework to illustrate SEMIS' articulated commitment to learning as a coalition. This model, intended to support the steering committee's articulation of the SEMIS professional development, is accompanied by a proposed trajectory for the development of eco-ethical consciousness and a pedagogy of responsibility. SEMIS follows a unique learning model in their approach to designing and administering professional development. This model can be analyzed by bringing research in teacher learning to the steering committee's articulated sustained professional development. The next section examines a "Coalition" learning model as drawing from the HPL Framework to illustrate SEMIS' approach to learning in a network of relationships or the complex dynamic context in which participants engage in SEMIS professional development.

A "Coalition" learning model. For centuries people have studied how it is that people learn. Based on thirty years of research and literature with this focus, the National Research Council (2000), among several other prominent reports, introduced the *How People Learn* (HPL) Framework (Darling-Hammond & Bransford, 2005; Donovan et al., 1999). The HPL Framework provides insightful domains of teacher learning that assist educators in understanding development and learning in social contexts by focusing on "how people learn, how children develop over time, and how they acquire and use language" (Bransford,

Darling-Hammond, & LePage, 2005, p. 31). The HPL framework provides the foundation for an emerging learning model for the field of eco-democratic reform as it offers the opportunity to conceptualize teaching and learning from an ecological approach. The domains provided by the HPL Framework are described as four domains for thinking about learning: the learner, the knowledge, the assessment, and the community. The idea is that an effective teacher would be able to balance all four components of the HPL Framework, such that they would know and understand the learner, effectively connect knowledge with the learner, and be able to make visible the learner's development and thinking through formative assessment. This balancing act of an effective teacher all takes place situationally in a context influenced by "norms and modes of operation of the community in which it takes place" (Bransford et al., 2005, p. 33). In other words, all learning relationships take place in a larger set of relationships that are framed by the complex historical, socio-cultural situationality of any given locale. The HPL framework communicates important aspects of teacher learning in efforts to highlight the components of effective teaching. Drawing from this foundation and applying additional attention to the community—the spaces in which learning occurs—using an "Ecological Understanding," SEMIS articulates a "Coalition" that exists within and recognizes a larger social and ecological context.

It is from this point that I would like to highlight how SEMIS' unique approach as a learning organization draws from the HPL Framework to further describe the traditional community domain (see Figure 8) in an effort to understand the complicated nature of the historical, socio-cultural and ecological situationality in which all learning takes place. Figure 8, titled "Coalition Model: Learner in a Network of Relationships," illustrates a model that subdivides the community domain from the HPL Framework into three domains in

efforts to better describe the critical set of learning relationships among participants. This extension, or adaptation, of the HPL Framework draws specific attention to how SEMIS works to identify and value the sets of relationships illustrated by an “Ecological Understanding” (see Figure 2). In efforts to recognize the needs of the learners in the organization, SEMIS articulates a complicated approach to community relationships necessary for the kind of deep learning that ideally occurs in the organization. It is within the HPL framework’s community domain that SEMIS emphasizes and identifies learning as occurring through relationships taking place in an ecological definition of community. In order to communicate SEMIS’ articulated approach to professional development aimed at effective teaching and learning in an EcoJustice Education framework, further distinctions are necessary to situate this work in what the HPL framework identifies as the “community” domain and to illuminate the “Social” and “Ecological” relationships essential to learning. These further distinctions are important aspects of the community necessary to considering the HPL Framework and further developing teacher learning in an ecological learning model. The following explains how a “Coalition” learning model (Figure 8) drawing from the HPL framework describes SEMIS’ approach to learning as contributing to the development of an eco-ethical consciousness in a “Coalition.”

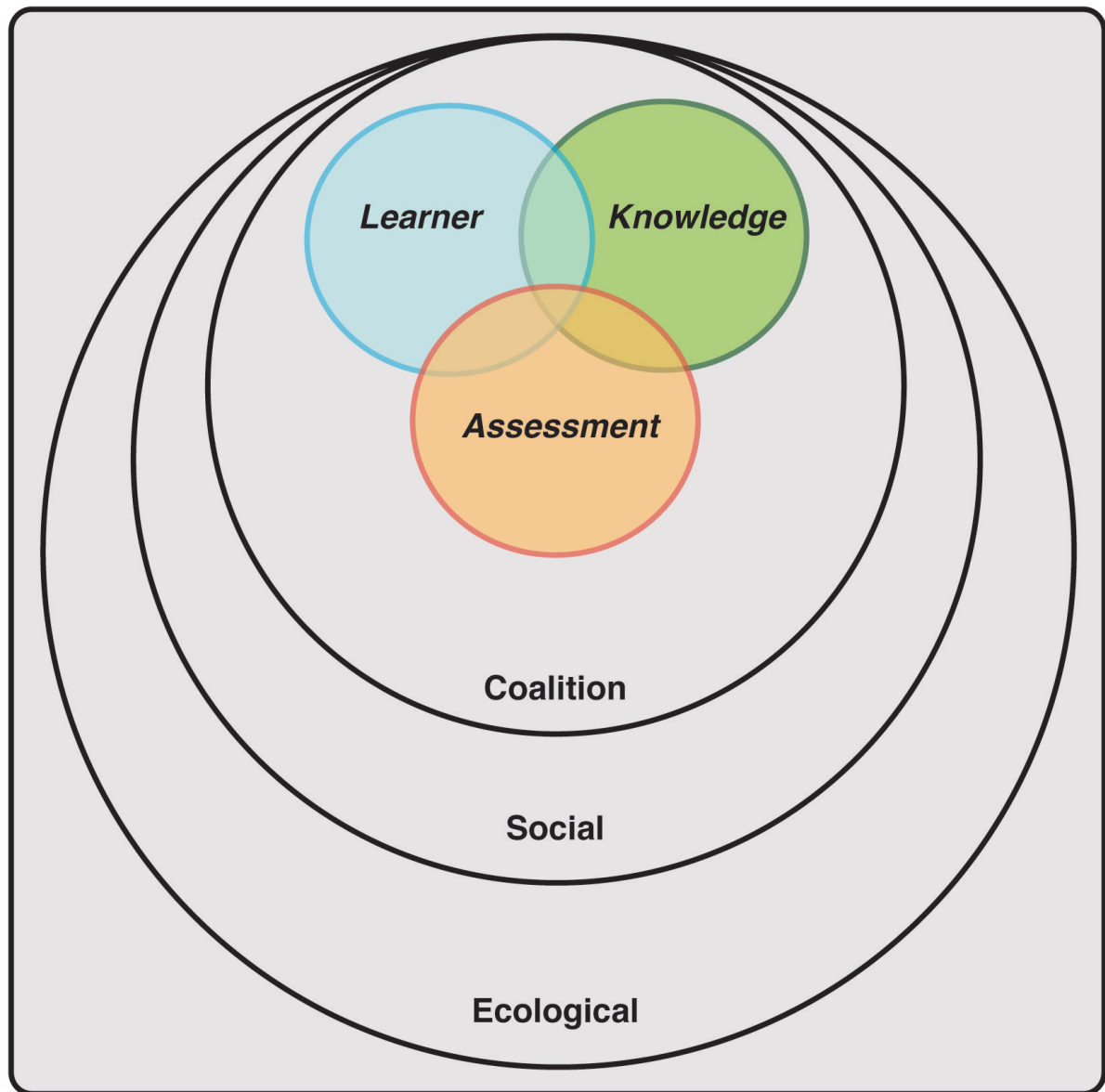


Figure 8. Coalition Model: Learner in a Network of Relationships. This figure illustrates a learning model based on the National Research Council (2000) articulation of the HPL framework. This figure subdivides the community context in the HPL Framework into three specific sets of relationships that embed the learning relationships within a coalition of learners in efforts to recognize and value these relationships as nested in larger social and ecological communities.

Community examined: “Ecological,” “Social,” and “Coalition” learning. The simple explanation of Figure 8, “Coalition Model: Learner in a Network of Relationships,” is that the community domain of the HPL Framework is subdivided into three domains of relationships. The first and largest domain is the “Ecological Community” which encompasses the set of all relationships in a given place. Situated within the “Ecological Community” is the “Social Community,” or the set of relationships between humans and human created structures. Within that set exists a smaller set of learning relationships or the “Coalition.” The idea is that no relationship between humans occurs separate from its dependency on a larger ecological context and within the complex historical, socio-cultural “Social Community.” In order to mediate important meaning-making relationships, SEMIS maintains that there ought to be a set of learning relationships in the organization that emphasize collaboration and democratic decision-making. The set of relationships within the “Social Community” can be defined as the “Coalition”—or a set of relationships defined through the research of Ellie Drago-Severson (2008) and what she refers to as the four pillars for adult learning. It is within the “Coalition” that teachers learn and find support as they develop the voice and agency to create democratic learning experiences. As mediators of the complex socio-cultural “Social Community,” these educators recognize the ongoing need to develop and apply an eco-ethical consciousness. Simply put, the “Coalition” is a small, democratic community of learners committed to developing and strengthening an eco-ethical consciousness—one that is situational, local, and in support of living systems. In summary, the model illustrated in Figure 8 situates the domains of the HPL Framework of knowledge content, learner strengths and perceptions, and assessment as all occurring within a supported coalition of learning relationships.

The “Coalition” is a crucial part of the model as it is the set of relationships in which structured learning and development take place. Research by Drago-Severson (2008) in adult learning suggests that “teaming, providing others with leadership roles, collegial inquiry, and mentoring” (p. 62) are four practices that support transformational learning for adults. These aspects of support for adult learning are provided for in the relationships in the “Coalition” and serve as supports for democratically engaging in what Argyris and Schön (1978) refer to as double-loop learning. A unique aspect of this domain is that teachers learn and develop together with diverse members of both the social and ecological community in their work to co-develop a situational eco-ethical consciousness from which they connect culturally relevant, ecologically responsible curriculum. Ethan, reflecting on SEMIS’ identity as a coalition of learners, shares, “We brought in the circle of relationships. And going back to...content knowledge to help teachers develop and reinforce aims. Such as having a justice-orientation, a community-centered orientation, and being connected to living systems.” In order to elaborate on the model in Figure 8, the following section will revisit the concept of eco-ethical consciousness previously examined in Chapter 4.

Eco-ethical consciousness. In order to further explain the “Coalition” learning model shown in Figure 8, this section clarifies two important concepts: (a) the complex situationality of place in connection with (b) the notion of an eco-ethical consciousness. The complex situationality—or specific context of place—to which I am referring is how we make meaning or how we see it as possible to transform the meaning we make from experiences. An eco-ethical consciousness represents a cultural-ecological perspective proposed as a method of analyzing and correspondingly living in ways that alleviate or eliminate unjust suffering and support local living systems (Martusewicz & Edmundson,

2005). This notion of eco-ethical consciousness informs the “Knowledge” domain in Figure 8. In other words, the “Knowledge” domain consists of EcoJustice Education content knowledge that teachers must learn as part of developing their own eco-ethical consciousness, and to enact a pedagogy of responsibility. This learning is both very situational and is based on how culture shapes the meaning we make. Eco-ethical consciousness brings into the foreground the hidden or ignored relationships in both the “Social Community” and the surrounding “Ecological Community.” It requires a set of skills and conceptual tools for recognizing and mediating relationships in a place—the situational, or relational, space and time in which we make meaning in the “Ecological Community.”

The intention of this assertion is that through an eco-ethical consciousness and enacting a pedagogy of responsibility, teachers can work to mediate learning experiences that helps students identify destructive cultural habits and recognize alternatives that emerge from learning in the “Ecological Community.” SEMIS’ approach to fostering the development of an eco-ethical consciousness in a support network, like the “Coalition” (see Figure 8), is designed for members to learn to recognize and teach about the complex communicating relationships that support living systems—or an “Ecological Understanding” (see Figure 2). This requires a deep commitment to recognizing and rethinking the underlying cultural assumptions that dominate how we frame the meaning we make from our experiences. Having revisited the concept of an eco-ethical consciousness in connection with the complex context of place within which SEMIS operates, the following addresses the “Learner,” “Knowledge,” and “Assessment” domains in Figure 8.

“Learner,” “Knowledge,” and “Assessment” aspects of an eco-ethical consciousness. Drawing from the HPL Framework, the “Learner” domain refers to “the

strengths, interests, and preconceptions” (Bransford et al., 2005, p. 32) which in the proposed model (Figure 8) include identifying and addressing the cultural assumptions of the learner. The idea is that when engaging in the development of an eco-ethical consciousness each learner comes to the learning experience with a set of assumptions, some of which are deeply embedded, taken-for-granted knowledge which impact their ability to engage in a pedagogy of responsibility. When enacting such a pedagogy it is important that teachers are not only aware of how these assumptions influence how and what is learned through the content they are teaching but also understand the unique development of their own professional learning as influenced by these assumptions. Teachers engaged in a pedagogy of responsibility need to be aware of and able to make choices as to how taken-for-granted assumptions influence the content they bring to their students. This is why SEMIS’ approach emphasizes that they, as educators, are engaged in the professional development of an eco-ethical consciousness. In other words, as teachers strengthen their own “Ecological Understanding” they are potentially able to recognize important cultural assumptions that students bring to the classroom. Teachers engaged in this process can help students to develop an eco-ethical consciousness while learning important content material in the classroom. This type of teaching requires educators to engage in learning about the cultural patterns of our socio-symbolic languaging systems with an “Ecological Understanding.” This understanding entails the awareness that to engage in and share this process should be thought of as an ongoing responsibility—or as stated by Martusewicz and Edmundson (2005) as a pedagogy of responsibility.

Given the importance of place and the meaning or meanings that are learned in relationship to place, the “Coalition” learning model describing SEMIS’ approach to

professional development (see Figure 8) emphasizes the fluid nature of the ongoing relationship between the “Learner”—knowing what cultural assumptions students bring to the classroom, the “Knowledge”—the EcoJustice Education content, and the “Assessment”—the curriculum used in the classroom to assess the learners’ grasp of the content. What makes this process unique is that teachers learn for and with their students as they engage in a pedagogy of responsibility together. This is why SEMIS emphasizes the importance of the “Coalition” domain. Without the support of the “Coalition,” adult learning that includes overcoming the cultural blind spots that result from deeply embedded cultural assumptions is extremely difficult. This model (Figure 8) emphasizes the importance of relationships within a “Coalition,” or a network of learning relationships nested in the larger “Ecological Community.” In other words, the model illustrates the types of relationships that SEMIS seeks to foster as a collaborative learning organization committed to an EcoJustice Education framework. In the next section, the “Coalition” learning model (Figure 8) is further examined and presented with an accompanying proposed trajectory that highlights content benchmarks for educator participant learning based on the SEMIS Rubric and the SEMIS articulated theory of action for professional development.

Proposed trajectory for an ecological approach to educational reform. In order to support the articulated theory of action for design and implementation of SEMIS professional development, the following articulated trajectory further clarifies the ways in which SEMIS works to take responsibility for providing the necessary structures and space for teachers to develop an “Ecological Understanding” (see Figure 2). To better understand the professional growth occurring in SEMIS, it is helpful to address the idea of a “Coalition”

model in connection with a proposed trajectory that builds from the aforementioned learning model (see Figure 8) and the SEMIS Rubric.

SEMIS strives to provide a “Coalition” community within which educators can engage in learning relationships fostered by the “four pillars of adult learning”: teaming, collegial inquiry, mentoring, and leadership (Drago-Severson, 2008). In other words, SEMIS implements and sustains adult learning in “teams” or collaborative partnerships. Within what Drago-Severson (2008) calls “teaming,” adult learners belong to a group experiencing and learning through opportunities to participate in “collegial inquiry,” “mentoring,” and enacting positions of “leadership.” Lisa, sharing her experience as a graduate student and classroom teacher, relates:

SEMIS is aiming to develop these relationships where we expect each other to respond critically in writing and through discussion with each other about these really deep questions. And that takes a lot of time. You have to be safe—it has to feel somewhat safe. And that takes relationships, right? It takes time to build those and doesn’t always happen as quickly as you want it to with five PDs a year.

The chart pictured in Figure 9, titled “Trajectory for the Development of an Eco-Ethical Consciousness,” functions as a rubric that outlines the objectives for participants of SEMIS. The chart illustrates an emerging proposed trajectory for an educator’s development in three areas that are connected back to an “Ecological Understanding” (Figure 2).

	Knowledge for Shifting to an Ecological Understanding	Learner in a Coalition: Recognizing a Network of Educators	Community in a Coalition: Building and Sustaining a Movement
EMERGING	<p>Educators begin to identify how culture is created through symbolic systems.</p> <p>Educators begin to identify what it means to teach in an EcoJustice Education framework.</p>	<p>Educators work with support from SEMIS and school administration to establish a learning community in the school.</p>	<p>Educators make connections with local community partners.</p> <p>Educators and community partners work to build a strong relationship through co-designed PPBE projects.</p>
DEVELOPING	<p>Educators continue to work deeply to understand the impacts of modern discourses on both social and environmental relationships and to recognize and value other knowledges. They work as a team to create developmentally appropriate EcoJustice Education curricula.</p>	<p>Educators work together with help from SEMIS in the form of coaching to regularly engage in collaborative planning and assessment using the “four powerful tools.” Developing leaders work as mentors to new teachers in the school learning community.</p>	<p>Educators have regular meetings with community partners to collaboratively plan and assess PPBE student work and project curricula.</p> <p>Educators and community partners work to implement a PPBE project that is rooted in the larger ecological community.</p>
ADVANCED TRANSFORMING & SUSTAINABLE	<p>Educators are working deeply to understand the impacts of modern discourses on both social and environmental relationships and to recognize and value other knowledges. They work as a team to collaboratively assess EcoJustice objectives in student learning.</p>	<p>Educators continue to work in a learning community with content specific coaching while regularly engaging in collaborative planning and assessment using the “four powerful tools.” Educator-led learning groups move from inquiry to action and design long term projects in the community.</p>	<p>Educators continue regular meetings with community partners to collaboratively plan and assess PPBE student work and project curricula.</p> <p>They work together to fine tune and extend the PPBE projects and increase engagement with the local community.</p>
SUSTAINED	<p>Educators are able to mediate student learning in ways that support citizen-stewards who understand and can promote healthy ecological and social systems affecting the local bioregion.</p>	<p>Educators sustain working from an “Ecological Understanding” and “Coalition” Learning model with sustained engagement in collaborative planning and assessment using the “four powerful tools.”</p> <p>Educators identify as leaders in a cultural shift.</p>	<p>Educators have regular meetings with community partners to engage in an ongoing relationship to plan and assess student work and project curricula together.</p> <p>Educators and Community partners work to sustain PPBE and engagement in the local community and region.</p>

Figure 9. Proposed Trajectory for the Development of an Eco-Ethical Consciousness. This figure illustrates a rubric that details the development of participants engaged in the three areas of foci in SEMIS professional development

The first column, “Knowledge for Shifting to an Ecological Understanding,” focuses on learning EcoJustice Education content knowledge and traces the development of some of the key benchmarks indicating what an educator needs to know in order to shift how they think and act, as well as teach others to enact the framework. This column outlines the

learning and development of an eco-ethical consciousness. The second column, “Learner in a Coalition: Recognizing a Network of Educators,” focuses on learning how to work together in a “Coalition.” An important aspect of developing a strong eco-ethical consciousness is recognizing and valuing the relationships—especially the network of learners in a coalition—that support transitioning toward both an “Ecological Understanding” and the accompanied teaching and learning in our communities. This column outlines how educators are mentored—or in SEMIS, coached—as they develop the skills to become local leaders in PPBE in a safe and structured “Coalition” supported by community partnerships. The third column, “Community in a Coalition: Building and Sustaining a Movement,” focuses on strengthening partnerships between schools and local community members. This aspect of development attends to the importance of recognizing and valuing the context and situationality of place—belonging to a larger “Social” and “Ecological Community” in which education can play a transformative role in strengthening local communities. This column traces the development of educators as they design and implement multi-disciplinary school curricula that connect the school community with the larger “Social” and “Ecological Communities.” In other words, all three of these columns are designed to track the stages of development as participants strengthen their eco-ethical consciousness and engage in the enactment of a “pedagogy of responsibility.”

The ideal role that SEMIS sets out to play is to provide space and support for educators to work through an EcoJustice Education framework and to learn how to teach using a “pedagogy of responsibility.” Figure 9 illustrates a proposed trajectory for this process; however, this is not a simple linear track. It is evident that this work requires structured objectives both in content and in how to foster a “Coalition” within which the

relationships mediate the tensions between dominant culture and the practice of enacting an eco-ethical consciousness.

Conclusion

This chapter presents the SEMIS steering committee's articulated theory of action for the development and administration of sustained professional development, illustrates the PD scope and sequence, and a theoretical "Coalition" model in connection with a proposed trajectory that illustrates SEMIS' articulated commitment to learning as a coalition. In this chapter and the previous chapter, SEMIS is described as a "learning organization." This designation as a learning organization provides the context for SEMIS to be understood as a diverse network of approaches that contribute to the professional development discussed in this chapter. The next chapter examines and analyzes themes that emerge from the SEMIS steering committee members as they articulate the complexity of the learning relationships in the coalition.

Chapter 7: A *Deep* Design of SEMIS—The Complexity of Learning Relationships

This chapter rounds out the story of SEMIS as narrated by the members of the steering committee and is the last of the three parts that work together to present the *deep* design of SEMIS. Recall, the story of SEMIS has been broken up into three parts: (a) the theory and structure of the SEMIS steering committee, (b) the design and analysis of SEMIS sustained professional development, and (c) the resulting themes articulated by members of the SEMIS steering committee. This chapter analyzes themes that emerge from the SEMIS steering committee members as they articulate the complexity of the learning relationships in the coalition.

While there are many themes that can be examined and explored further in SEMIS, among the strongest that emerge pertain to the design and function of this learning organization. These themes highlight the tensions between the organization's espoused theories of action and the lived experiences of theories in use. This chapter examines three primary themes: recognizing and valuing difference, identifying and addressing influences from Western industrial culture, and navigating the impact of school climate on teacher learning in SEMIS.

Recognizing and Valuing Difference

Recall that the SEMIS steering committee identifies SEMIS as a learning organization committed to an espoused theory framed by an EcoJustice Education framework. Emerging from that commitment is the theme of recognizing and valuing diversity. Drawing from an EcoJustice definition of diversity—a condition of difference from which everything exists—SEMIS is committed to valuing difference. This espoused theoretical commitment is embedded in a deep set of cultural assumptions that shape the

relationships in SEMIS and complicate the organization's democratic decision-making process as they work through what it means to teach for PPBE. Gloria, reflecting on the diverse nature of participants collaborating in SEMIS, shares:

We are claimed by the community and claiming the community. So the business people, the organizations in the area, the parents, and the teachers are assets and they claim the community and then the students learn in place....So it's a very great combination of partners and strengths and it's very collaborative and the networking allows for all of the different components to minimize the built-in challenges that each of us have as in our own specific reality. Whether I'm a teacher in a school or a person in a not-for-profit, there are forces against me. Institutionally, it's the institution stuff....We all have that kind of a challenge. Well, when you do it together, you feed the dream.

This articulation recaptures how the work of SEMIS is embedded in the cultural context of Western industrial culture and that a common commitment of the steering committee is a dream that it's not only possible to shift culture but to also work through the challenges posed to relationships in the organization and the larger community. As illustrated in Chapters 3 and 5, the SEMIS steering committee is comprised of members that share a common interest in PPBE and they all come to the work from different theoretical entry points. The steering committee collectively identifies recognizing and valuing difference in the organization as a strength, but it is also noted that it poses a challenge and requires regular attention. Ethan, reflecting on the organization's commitment to "emphasize mutuality in relationships" and the tensions that this commitment brings within a learning organization of diverse perspectives, shares:

These [differences] are perennial—they always exist. You can't resolve them. But you can creatively reflect on them and respond to them in increasingly sophisticated ways. It's helpful to surface them because you can see the complexity and you can also see that it's not an either/or situation.

When asked what SEMIS does as a steering committee to navigate the different individual espoused theories, Ethan responds:

One of the tensions that we've experienced in the organization is around identifying our strengths and making transparent—in the steering committee—to the collective, our identities and how we perceive our identities. That's been intentional...and it's involved figuring out how to respect each person and their strengths without essentializing them....So, there is attention to intention. We identify "How do you define yourself?" And, "Tell me how I can respect you." But then that's in tension with the danger that I then essentialize who you are and don't see you in your multiplicities.

Ethan's articulation encapsulates a major theme in the work SEMIS to design, plan, and implement sustained professional development in the region. They are in an ongoing process to come together and bring their expert knowledge to the group with the challenges of not being essentialized—or devalued—as they work together to form SEMIS. Additionally, recall in Chapter 5 that a condition of the context in which SEMIS exists is a fixed budget with limited resources and everyone on the steering committee fills several roles in the day-to-day operations. This further complicates their work to recognize and value difference as they not only have to both self and collectively identify their individual espoused theories of action but they also have to acknowledge the ways in which the multiple roles they each

serve influence the collective decision-making process. Trust is a theme that has emerged from the steering committee's articulation of this difficult, but worthwhile, commitment.

Trust. As members of the steering committee engage in the democratic process that is SEMIS, trust is noted as an important component of recognizing and valuing difference for members. While the SEMIS steering committee works to provide learning structures for participants that build and reinforce trust in the organization, they simultaneously work to build trust in efforts to recognize and value differences among themselves. The aforementioned commitment to identifying and valuing the different perspectives in the steering committee requires that the members trust one another. Gloria, reflecting on the importance of trust and the ongoing commitment of the organization to pursuing their goals explains:

I think we need to be free enough, and that doesn't happen until we build a relationship of trust....We need to be free enough to ask the hard questions of each other and of the places that we go, but do it in a way that's respectful and not attacking. Not that I am better than you are because I have this insight or that I have figured it all out. That's hard because what that requires is that you talk out of your heart and your emotions, not out of your head only. And I don't have anything against the head, but when we can be vulnerable with each other then it can really solidify trust. It doesn't just happen. It's the rest of our lives.

This point highlights that trust and awareness to the ongoing process of recognizing and valuing differences are implicit characteristics of SEMIS. Trust plays a significant role in every level of SEMIS as a learning organization. Ethan, explaining how trust is not only

essential to the steering committee work as learners and leaders but also for all the participants in the coalition, observes:

If you don't have organizational trust and you don't have trust among the people within the organization...if families don't trust teachers, if administration doesn't trust the teachers and families then, you can't have any substantial change... it's the basis for all effective teaching and learning in a school. So if trust doesn't exist at the school then the question is, "Can an intermediary organization create another kind of structure that will enable teachers to engage in a rigorous and robust teaching and learning experience—in our case around EcoJustice Education—with their students?" So one of the functions that I think our organization has helped to establish is a sense of trust—relational trust—within the network. Then what happens is that trust creates effectiveness and the effectiveness then creates more trust.

The members of the steering committee recognize that the work they set out to do is difficult and highly susceptible to being undermined by dominant practices in schools—a challenge that will be examined later in this chapter. However, the organization's commitment to recognizing and valuing difference emerges from a core aspect of EcoJustice Education. Recall in Chapters 1 and 4 how difference is the condition from which all meaning emerges—or it is through "differences that make a difference" that all meaning is constructed. Reflecting on the successes and challenges of SEMIS, Rebecca observes:

What I find amazing is that what we're enacting—in terms of the organization and the relationships—this incredible ecological system. Even when we mess up or when our all-too-human emotions flame out somewhere and cause damage, our abilities to regroup and rethink and take responsibility continues to create good stuff.

Rebecca's observation reflects how the work in SEMIS is in fact enacting a very unique model for how an intermediary organization can organize in an ecological model. Another theme that emerges from the organization's commitment to recognizing and valuing difference is their dedication to community partners.

A commitment to community partnerships. Sharing what she identifies as SEMIS' strengths, Danielle describes, "I see strengths in terms of the knowledge and the background that each of the steering committee people have that they bring to the organization and the work that they're doing with the kids." Shug, when asked to articulate the strengths of SEMIS, shares:

I think SEMIS' strength had to do with the diversity of the group as far as the different backgrounds that we had—the different knowledge-bases that we were coming from. We had different constituents we represented and what we wanted to be advocates for or keep in mind. But I think there was also strength within a genuine acknowledgment that the diversity of the group... That would be what would make it a successful endeavor. All of us consider ourselves lifelong learners—really wanting to be open-minded.... While we're continuing to develop and build the capacity of others, we ourselves are continuing to develop our own capacity as professionals and as people.

A unique aspect of SEMIS' design is that the steering committee works with a commitment to recognizing and valuing difference at every level of the learning organization. This brings them into partnerships with community organizations. Recall in the previous chapter the key roles played by the SEMIS community partners in both having input on the design of SEMIS and being participants in the professional development process. Reflecting on how

partnership plays a significant role in the aforementioned strengths in the organization's diverse perspectives, Gloria offers insight into the ongoing challenge in the organization to integrate community partners into the organization's democratic structures. When asked for her suggestions regarding community partnerships, Gloria responds:

Create partnerships in a totally different way and bring everybody to the table, because you can't just be with not-for-profits. You cannot just be with activists. We all need to be part of this diverse group that tries to work together.

Shug, touching on the same difficult task of working in the community to recognize and value difference, suggests:

I guess a key word is recognizing reciprocity. Organizations definitely have to realize that everybody has something that they're bringing to the table. And it's kind of like give one, get one. You know? Just know that there's going to be this kind of exchange of capital, if you want to think about it that way. Intellectual capital as well as other resources, venues, etc. It's reciprocity and knowing that there is a greater good to be served or a bigger picture that you all can relate to.

Despite the challenges, which in many ways validate the organization's commitment to recognizing and valuing difference, the steering committee members share a commonality in that they recognize their collective diversity as both a strength and a challenge. Shug, explaining the overall design for its success and difficulties, reflects: "Together our work can form more powerful energy—lots of energy—and resources that continue to be a compelling movement in the state."

In addition to working together as a democratically organized steering committee to share, build trust, and form strong partnerships that reflect their commitment to recognizing

and valuing difference, members of the steering committee are learning a lot about partnerships. Ethan reflects on his experience with university projects that partnered with organizations in the community and explains some of the challenges with forming these essential partnerships in SEMIS:

You could have surface partnership work but the question is, “What does deep coalition and partnership work look like?” I think that was a real turning point for me and a real challenge in thinking about the way that I perceive partnerships. Part of this work is that we all learn a lot of lessons together.

SEMIS has an approach to partnerships that brings community organizations into the coalition in a way that engages the partners in learning as full participants. This often means that community partners not only attend the professional development as part of the coalition of learners but also collaborate with the steering committee to help develop the SEMIS professional development. This differs from typical experiences familiar to many of the community organizations. Susan, reflecting on the requirements for community partners, shares:

Typically community partners are used to needing to know: “What kind of paperwork do I have to fill out?” And, “When do we have to get the reports in?” That kind of thing. So fulfilling the nuts and bolts of the contractual agreement and that doesn’t always line up philosophically or logistically with the heart of the agreement.

Susan goes on to explain how as a community partner in SEMIS with CCES she learned a lot about partnerships and the importance of clear communication, trust, and reciprocity. She reflects:

There was stuff that I wasn't that astute about. I don't want to say I was young and naive, but I was younger and more naive. So at that point it started, for me, becoming like, "Well, what's our real role here and is this helping us [CCES], or... what does this mean for the prior work I had been doing with these schools?" I wasn't very experienced in working through some of those things where you bring a partnership to a new partnership and then what happens to the original one? Does it dissolve and morph into this other one or does it keep its integrity and then that unit is part of a bigger unit?

Susan's recollection of her experiences shares some of the complexities that go into understanding reciprocity as a requirement in healthy partnerships. Not simply claiming reciprocity, but detailing as much as possible the mutual benefits for the collaboration as articulated by Shug and Gloria in their perspectives on partnerships. Gloria, explaining how within the more concrete expectations of partnerships there are added cultural dimensions to reciprocity that are essential to acknowledge, shares:

Don't come with the attitude that you are coming to offer or give, but come to find out what it is that you have that you can give if people want it. Come with the attitude of what can you receive. So it's a reciprocal give and take. Often it takes just sitting down and listening and observing until you figure out what is it, if anything, that you can give or do. I think the nature of not-for-profits—the competition, the vying for money, and the hierarchical structure—just doesn't allow us to be in partnership. At times it's very hard to be partners. It really is. The thing is, the less you have, the easier it is.

Gloria's articulation of larger socio-political influences on partnerships illustrates another major theme that emerges from the experiences of the steering committee: cultural value-hierarchies in Western industrial culture.

Cultural Value-Hierarchies in Western Industrial Culture: Institutional Hierarchies

SEMIS is a learning organization situated or deeply embedded in institutions shaped and governed by Western industrial culture. Immersed in this cultural context while trying to enact something very different can be complicated, to say the least. SEMIS' espoused theory of action—a commitment to an EcoJustice Education framework—exists in tension with the day-to-day dominant discourses that govern the relationships in the organization. Recall in Chapters 1 and 4, the explanation of value-hierarchies constructed in Western industrial culture. Just because SEMIS recognizes how dominant discourses like individualism, patriarchy, and Eurocentrism—to name a few—function in society, and even in the organization, doesn't mean that these discourses don't play a significant role in challenging the relationships and work. Ethan, reflecting on the challenges posed by SEMIS existing in and teaching to confront a dominant Western industrial cultural framework, explains, "It reinforced my experience that change is extremely complex. And also the politics of that research experience—where it was a politically charged atmosphere with which to share those complexities." In the previous chapters, and in connection with SEMIS' commitment to recognizing and valuing difference in a democratic learning organization, the challenge of organizing democratically is further complicated by SEMIS' existence within a hierarchical institution—or in the context of a university. Rebecca, reflecting on this situational challenge and the impact of assumed value-hierarchies in the organization, observes, "So you can work to try to make relationships horizontal, but if people assume that it requires

hierarchy then they can only experience it as domination.” Ethan, adding to this complexity and recognizing these assumed value-hierarchies and the role they play on teaching and learning, articulates, “When you look at those intersections, the work becomes really complicated really quickly.”

Universities and assumed value-hierarchies. Universities have a very strong historical, socio-political role in the cultural construction of what is constituted as knowledge or what it means to be educated in Western industrial culture. Embedded as an institution maintaining and perpetuating the Western industrial notions of progress discussed in previous chapters, universities have a long history of representing colonization in many marginalized communities. However, they also foster the opportunity to deconstruct those power relationships in culture and explore alternatives. Recall how EcoJustice Education in Chapters 1 and 4 is presented and discussed as a form of resistance to exploitation from educational institutions and that SEMIS is situated in line with that same approach—the examination of how dominant cultural assumptions governing how we, as humans, construct knowledge and how that process can be disrupted through education. Despite this potential, a challenge experienced by SEMIS’ steering committee members is that a dominant perception of universities as an elite form of knowledge has an impact on the collaborations they desire. Rebecca reflects:

I think one of the biggest conflicts that we’ve experienced as an organization—I don’t feel it now, but I felt it in the past—has been caused by the dichotomy between community organization and university. When we committed ourselves to being a learning organization around EcoJustice Education, it required someone be the teacher. It put some of us in a teacher position. I think that some of the dynamic

between some of our community partners who were in the learning role with us as a steering committee resisted being in a teaching/learning relationship. And that's complicated. It's complicated by the perception of the university professor versus the community partner—who's got the highest degree and all of that stuff that goes with that perception. So there were some pretty impossible moments....At that point in our organizational history there was a real barrier to being in that teaching/learning relationship....and it also caused a rift in the leadership team which was really unfortunate. It widened a relationship gap that began to interfere with the way the organization could work.

Rebecca's recollection of a tense moment for the steering committee highlights the difficulties of bringing diverse perspectives together in a learning organization with a commitment to organizing horizontally in a culture with perceptions about the power relationship between teachers and students. This tension emerges in connection with cultural perceptions of community organizations as inferior to university academics. Gloria, acknowledging how diverse perspectives complicate the organization's commitment to difference, explains her perception of belonging to a learning organization like SEMIS, "We are far from being experts because we're all learning. We're asking the hard questions of justice and among ourselves we don't always agree because we have all been co-opted to some degree or another by the system." Further reflecting on this challenge and why it exists in the work, Gloria goes on to explain:

Often attitudes are, "We're going to come with an old Christian missionary style, that I've got the truth...and I'm going to come and give it to you," and that is so oppressive. That's how we have conquered and eliminated people—entire groups of

people in the world. So when creating a partnership or coming to Detroit—or to any place—I think what we need to do, first of all, is find where is it that we have common ground....The universities are meant to be places where there's a great deal of freedom to explore, learn, and be creative. I think that is true of a lot of universities....I wouldn't say 100%, but many universities do this to the degree that the university, as an institution, allows it to happen. Certain professors can be nurtured, encouraged, and supported to do creative things and to think outside of the box. I think that was what SEMIS offered.

These experienced tensions are a part of the learning occurring in SEMIS. As a learning organization committed to an EcoJustice Education framework, SEMIS is charged with the responsibility to work together to identify how cultural assumptions and their correlated experiences impact how we, as humans, understand each other. Recall from Plumwood in Chapters 1 and 4, that there are dominant assumptions shaped by culturally constructed value-hierarchies that set up dichotomies that map out superior/inferior relationships. These cultural maps, or what Plumwood (2002) calls hierarchized-dualisms, hide the fact that nothing is as simple as a bi-polarized model that sets up the infamous Western Either/Or construction. However, these assumptions or dualisms, as false as they may be, are enacted and cause a great deal of exclusion and unjust suffering through the subjugation of the "Other" (Plumwood, 1993). The history touched upon by Gloria, in which the university represents a colonizing knowledge and a status symbol of power, informs how SEMIS experiences the hierarchized dualism of teacher/student and complicates the roles of the steering committee members as learners. While everyone identifies as a learner in SEMIS, the experience of being subjugated as a student is a point of tension for the organization.

SEMIS is committed to recognizing and reflecting upon how discourses work to produce and reinforce these value-hierarchized relationships. Moreover, the organization has to wrestle with the fact that recognizing and identifying the role value-hierarchies play in the organization does not necessarily eliminate them. Lindsey, reflecting on her experience in the steering committee and the tensions caused by cultural assumptions that members bring with them to the coalition, shares:

Here's an organization actively trying to dismantle value-hierarchies and make them visible so people can try to work on changing them, but we're also deeply embedded in these things and sometimes we don't realize when we're enacting them—enacting exploitation.

These cultural influences are so dominant in many of our day-to-day lives that they are bound to seep into the ideal spaces we create in order to enact change. SEMIS is not exempt from facing the challenges associated with addressing how dominant cultural assumptions work to subjugate and rationalize suffering in our often very different collective histories and lived experiences. However, SEMIS recognizes these barriers as an important part of the process and is not paralyzed by the resulting conflicts. Recall how in Chapter 5 the SEMIS steering committee identifies as democratically organized and aware of the important role that healthy conflict poses for learning. Linda, recognizing the limits of the falsely constructed—but ever-present—university/community hierarchized dualism, highlights how the university is often touted as a savior, reflects:

I mean it's the university—and we [SEMIS] are being able to share both intellectual, social, and actual physical resources with community members interested in helping kids at some point gain control of their own communities. We struggle a little bit

because the message is often getting garbled because it's spread out still on this trajectory of what the academy can do.

SEMIS is faced with the influence of Western industrial culture on the lived experiences of the participants at every level of the organization. A major influence is the cultural construction of the university as separate and superior to all those that don't belong to the so-called "academy." While the perception of the university as superior to the community can be a point of tension for members of SEMIS, this tension is exacerbated by the interconnected way in which dominant discourses work. No dominant discourse works in isolation, rather they work together with all the other dominant discursive processes acting on participants at all times, so in a patriarchal, Eurocentric, classist culture—to name only a few discourses—participants are constantly engaged in identifying how to recognize the role of such assumptions and not reproduce them in the organization. This is by no means easy work. Danielle observes, "It is hard because that's the way the system is set up. The system obstacles are kind of inherent." This observation highlights the recognition that there is a larger cultural system at work, but the question that SEMIS grapples with is: "Are these systems inherent or natural?" Challenging these cultural systems, SEMIS takes the position that while culture impacts relationships, change is possible and that as humans we have the potential, no matter how difficult, to rethink the maps that influence how we think and act toward one another and the more-than-human world. SEMIS recognizes and battles with being committed to such a process while being embedded in a university structure—a Western institution set up to function as an authority on knowledge. Rebecca, reflecting on SEMIS and their situated location within a university system, shares:

An interesting part about SEMIS is developing an organization with a clear mission to be a democratic organization. We're located in a university but we're partnering with community organizations and there are politics between community organizations and universities that are influenced by internal structures that are hierarchized. If you try to create a democratic organization within a university that includes decision-making partners who are community partners, you are bound to be battling perceptions of hierarchy and authoritarianism. Whether or not they're there. And that happened.

Recall in the previous chapters that SEMIS is based out of EMU. Despite the inherent challenges of organizing democratically within hierarchical institutions such as universities, SEMIS is modeling, that while it is not easy, it is possible. Linda, reflecting on SEMIS and the challenges of doing this work, asks:

How can you take away the hierarchical element that creeps in and really work on a consensus in a way that is not life-debilitating, but life-affirming and gives back?

Because these are all things we love to do, but once it gets ensconced in this kind of system where you can't do enough and then you don't have time to do enough, it just starts to unravel.

Part of SEMIS democratic potential is attributed by the steering committee to EMU. Ethan, reflecting on the role of EMU on SEMIS, articulates:

I think that an important foundational principal of SEMIS is that we're walking-the-walk and we're not using teachers and schools for research purposes, even though we're doing research. We're not using them for our own professional edification, even though we feel good about the work that we do. That is an orientation—which I

think every member of the steering committee brings to the work—and I feel is firmly rooted in the ethics of EMU. EMU, as a university—as an identity—has strong roots. Even though sometimes they're not articulated very clearly in real community partnerships and again, not like we always live up to this, but I think people appreciate this approach. I think the focus at EMU on practice-embedded research and not living within a knowledge economy where our intellectual products are commodified gives us a tremendous amount of slack and freedom. I don't think SEMIS could exist in most places because most places don't have that slack. In most university settings knowledge very quickly gets commodified and relationships become instrumental because of the ways of thinking and the socialization structures of the academy. EMU is unusual in that way and brings a lot to the region and the state, and also as an example nationally, for a university where both the students and the professors are able to engage in this kind of liberatory work.

Ethan's perspective of EMU is echoed by the other members of the committee, and it is certainly true that EMU has been supportive of EcoJustice Education through the College of Education's commitment to diversity, democracy, and increasingly to sustainability.

Supportive as EMU may be, the faculty involved in SEMIS experience pressures from the structure of the university that constrict the work and complicate the work involved in being a participant and leader in a learning organization. Ethan shares:

While EMU is supportive, there are expectations that complicate the work in SEMIS. We're asked to be scholars, to do a ton of service, and teach a four/four. So that's unusual for a university. You want to have a flat organization, but the bureaucratic structures and the resources that you have are disproportionately allocated. So what

do you do in that situation where structurally some people have more flexibility than others?

While SEMIS identifies as a learning organization committed to all the tensions and complexities of organizing horizontally, the experiences from the steering committee illustrate how decision-making is influenced by the cultural systems and structures in which they are embedded. This work takes its toll on the steering committee and impacts the members as they are all working at SEMIS in addition to either running or working for an organization, going to school fulltime, or teaching and researching as a professor. The demands of being on the steering committee can often be overwhelming.

Reflecting on the experience of being committed to organizing horizontally, but confronted with reverting to some aspect of hierarchy due to the demands of the work, Becca shares:

I do a lot of work. I am running around....I never get things like secretaries or staff to help at different hierarchical levels, because that's contrary to what we're trying to do. We're trying to work against the hierarchies, but there is a certain level of logistical stuff that just needs to be done.

Ethan, commenting on a similar experience of feeling like there is often more work than time to do it, reflects, "We're a democratic organization and folks want to own what we're doing as an organization, so they want to be involved, but they don't have the time or the capacity to be involved." This kind of demand and workload can be challenging for the members of the steering committee. Nancy, reflecting on the nature of being a member of the steering committee, shares, "How do you balance all of that and get everything that you need to get done, done? I periodically feel as though I'm not giving enough to the committee." Nancy's

experience is not unique, as noted by other members of the steering committee. Members of the committee report feeling as though they are working to do all they can, yet there is always more work that the organization could use in order to achieve the tasks they set out to do. Reflecting on the workload in addition to their primary employment and the demands of not only running the organization, but also engaging in learning that takes a lot of commitment, Shug asks: “How many of us that were there at the beginning were able to stay at the table?” SEMIS steering committee members are resilient and committed to the work of the organization, but are often susceptible to burnout or at the least the feeling that they are not able to give enough. Linda, reflecting on the demands of SEMIS, observes:

I’ve learned a lot by being here about the extent of the neoliberal agenda or the forces of mechanization and dehumanization, how deeply they are fed and honored in our culture....I worry about it sometimes. I worry when I see Ethan—and Rebecca even more—how much of their time is spent writing grants....I just worry about sacrificing people or sacrificing families.

Linda’s articulation about work and time on the steering committee highlights the ways in which SEMIS is situated within an economic neoliberal context. The historical socio-political events that have led to the current economic regime of neoliberalism play a significant factor influencing the work for this learning organization.

Economic pressures. In response to some of the tensions articulated in the previous sections, SEMIS is engaged in continuous efforts to eliminate the risk of burnout or unhealthy conflict in the organization. Ethan explains:

There’s also another tension between university professors and their roles and responsibilities and the fact that they have time, resource cushion, and flexibility.

Independent contractors and graduate assistants—who are almost all on the financial edge and are being paid by the hour—those sort of roles are embedded within university bureaucratic roles and expectations and history, and also the non-profit roles and expectations and history. And this is especially relevant within the current context of defunding.

One of the funding stresses that emerges in SEMIS is that their existence is dependent on grants, which often requires that they seek additional funding from other sources. In other words, as mentioned by Linda, some members have had to spend an exorbitant amount of their time researching and writing grants. This can be attributed to a funding structure in the United States that creates competition and the illusion of scarcity in funding for organizations. Gloria, commenting on the non-profit sector and the constant chase for money, describes:

I think that the not-for-profit structure is not the most helpful for us anymore because it's based on an approach of scarcity instead of abundance. It's not scarce. It's scarce because we create the scarcity, but in and of itself natural systems and the universe are abundant and there's enough for everyone. They're diverse. They're communal. So the not-for-profit system creates competition after money. It creates a hierarchical leadership style. I'm not saying this is true of all, but it's true of many. It creates a kind of a capitalistic overtone to it and it creates chasing after money.

The financial aspect of this work creates an added layer of tensions to the difficulties of striving to organize horizontally as a learning organization. The intersectionality of compounding influences on the stressful moments in SEMIS can be illustrated by the

following reflections. Lindsey, reflecting on working in a wage position and the constant threat of falling into financial crisis, shares:

You have GAs and you have a lot of the teachers who may not have stable employment, and community partners—all these people who are in vulnerable, marginalized positions working with university faculty and some community partners and teachers who are salaried. So their financial stability appears to be pretty much the same as it was with or without SEMIS—even though that may not be entirely accurate, it's how it appears. However, the rest of us are engaging in this and sometimes being compensated even to a small degree allows us to live our lives. Right? So when your whole livelihood is wrapped up in whether this happens or not it that creates a power dynamic of whether or not you speak out. Or whether or not you feel silenced and whom you feel silenced by.

Becca, sharing a similar observation, adds:

That was a tension because there is a perception that universities and whoever is affiliated with them have a lot of money and that wasn't the case. So there was that issue in the perception of different members and the way that community partners work together. Because I've worked on a lot of partnerships and the ones that are really successful are the ones that are writing a joint grant proposal together, but they're both paid as salaried positions. So that the folks who are doing the collaborating, no matter what their work looks like, they're salary is covered. I think it was a little bit different coming into it from a university perspective and a community partner's perspective, because there was some expectation by the community partners that the university must have a lot of money and they didn't. I

mean they've put up quite a bit in different circumstances, but SEMIS has not been bankrolled by the university. There was some tension there I think.

These statements shared by members of the steering committee illustrate the complex context in which SEMIS mediates the difficulties of recognizing and valuing difference in their commitment as a learning organization. As described in the previous chapters and in earlier sections, the SEMIS steering committee provides sustained professional development for participants who are coming to SEMIS from local area schools. The economic pressures in the midst of one of the largest recessions in the nation's history create instability in the organization; however, at the same time the economic collapse of the region and high rates of unemployment among skilled workers also creates an opening for more people to seek out alternative ideas to the current dominant ones that are failing people. Lindsey, reflecting on dominant economic discourses, shares:

I think people are starting to question that a little bit because of the economic circumstances that we're in. Which is kind of nice, because then we can talk about, "Well, what is meaningful work and what is the purpose of education really?"

An additional dimension and theme emerging from the SEMIS steering committee is their recognizing the difficult contexts in which schools are not always able to support PPBE.

Many of the teachers participating in SEMIS teach in schools that are resource deprived and staffed in ways that do not allow for the necessary supports for teachers to learn and implement a PPBE approach in their community schools.

Navigating the Impact of School Climate on Teacher Learning in SEMIS

A large aspect of the work in which SEMIS engages takes place in schools.

According to SEMIS' articulated theory of action as a learning organization teachers are

introduced to and engage in content that requires they launch PPBE projects in their schools and communities. It is through these projects, in connection with the professional development in SEMIS, that the participants are empowered to teach using a pedagogy of responsibility. SEMIS has hopes that, through schools and school reform initiated through and supported by SEMIS, teachers and their students engage in PPBE projects—or project learning that develops and fosters an ecological understanding of mutualism over current human-centered understandings of individualism. This requires that SEMIS navigate the dynamic tensions presented by the current educational climate for teachers and students in schools. While the argument can be made that no two schools are alike, there are certain aspects of the current school climate that get identified by participants as barriers to the objectives of SEMIS. These barriers are continuously being identified and reflected upon by the steering committee as they engage in both single and double-loop learning. In other words, SEMIS is constantly faced with how to integrate and support PPBE in schools. On one hand, SEMIS works to create spaces for participants to learn and engage through the professional development and supports detailed in Chapter 6. On the other, they are simultaneously faced with navigating the dilemmas posed by participants working through rigid school structures and schedules to implement and enact PPBE in their schools. Ethan, reflecting on the conflicting nature of policy on school climate, shares:

I think we're doing a pretty good job given our resources. I think it's also important from an equity perspective, and contextually, that if you choose to work in schools during the past four years...then you are working through a war on children, schools, communities, and teachers. Right now things are shifting so quickly. There's such an

abusive orientation through policy and how those policies are interpreted and enacted in schools right now.

When asked about the design of SEMIS and his experience in the organization, Ethan responds:

If you look at the evolution of SEMIS things have changed. Even five years ago it wasn't the same political context. What has happened for schools is... that support has been cut away. It's an undercutting of the public and so we're [SEMIS] situated within that larger context....The other thing to point out is that the SEMIS design is situated in a very specific historical context in terms of school reform right now. It's an environment of extreme psychological—and I would say physical—violence for teachers. It compromises their health. And it's very difficult, even in the most functional schools, to be a teacher right now because of the pressures and the expectations for what the definition of school is according to the policy environment. So teachers don't have time to take on anything new. They're looking to be validated, recognized, and they are looking for how to move their practice to the next level.

Ethan, when asked to elaborate on the political context to which he refers, states:

I think that the political context is really different now. I think we're in crisis and we're continually—not just SEMIS, but both K-12 and the universities—in crisis. The state of Michigan is in crisis....So there are a lot of things that are taking energy and I want to underscore that we're in a total manufactured crisis. SEMIS is situated within a manufactured crisis in education in which the typical strategy is to take and

enclose what should be in the commons—what should be in the public domain like, public education.

The SEMIS steering committee works to recognize that the crisis in education is manufactured by dominant cultural assumptions and that what gets enclosed in the current political climate can in fact be reclaimed. SEMIS, in association with the steering committee's engagement in double-loop learning, works through an EcoJustice Education framework to revitalize the commons. They work through the two main foci of EcoJustice Education to identify and understand the patterns in Western industrial culture that pose significant challenges to the second main foci—to teach how to live in ways that support diverse, democratic, and sustainable communities. SEMIS recognizes and addresses the political context and pressures on teachers in schools as an important part of developing an eco-ethical consciousness toward a pedagogy of responsibility. Gloria, in response to the current challenges faced by many of the participants of SEMIS, suggests:

Exactly what we need is a transformation of consciousness. The challenge is how in the world do you do that in a city that is bankrupt, a city whose government is fighting, a city that has an enormous number of foreclosures, poverty, and an education system that is bankrupt? All while teachers are doing all they can to teach.

This highlights that within the political context of the work, SEMIS identifies that teachers are extremely over-worked and bogged down with a workload that often does not leave sufficient time for their professional growth. Gary, a veteran teacher on the steering committee, recalls the demands of teaching on the ability to think through new ideas. He shares a story of coming home from teaching fulltime as high school geography teacher:

She [Rebecca] was home—she didn't come into school that day. I asked her how her day went and she said, "Oh, it went really well. I was reading something and it made me think, which sparked me to think about something I was working on. So I wrote some ideas down and I think I've got the piece for something coming together here." And I clapped my forehead and said, "Wow! The opportunity to do something in your day that can let you think and then go act somehow on that thinking." I'm not an entirely non self-reflective person, but I know colleagues that when they're in school they're constantly grading or doing something like that. I was not one of those, but I never had time to do that type of thinking. And that was one of the things that made me say, "You know, I'd like the chance to be able to do that." The chance to really have part of what I do be thinking about what's going on in a deep way. Time to read and reflect so that you can relate to the other things you read and observe. Most of the time, as teachers, that time doesn't exist. Especially if people are married and have families. We [SEMIS] can provide the professional development and people can... get the concepts and do the activities, but unless they have time to think, it's likely it hasn't really been internalized yet.

Gary goes on to explain how it is not only difficult and infrequent for teacher to find time to deeply engage in new content and ideas, but that the increasing pressures of evaluations, annual yearly progress, and high stakes testing add another layer of difficulty for participants in SEMIS. He shares:

I think that SEMIS is challenging for a lot of people. Especially in our current educational environment. Given the pressures on teachers are so great, it takes an

unbelievable level of commitment to believe in something and to be able to even undertake working with it.

Gary's observation of SEMIS in connection to the workload experienced by teachers helps to illustrate the impact of school climate on teachers and their learning in SEMIS. Lisa, working in a local school as an art teacher, observes:

What I'm finding is that teachers are seldom asked to respond critically—verbally or in written form—as part of their responsibility as a professional teacher. That's not a criticism of teachers, that's a criticism of how teachers are expected to perform in a professional environment, and thinking critically is not one of the expectations.

Thinking critically is a habit. You have to get into it to do it and to use it as a tool. It takes blood, sweat, and tears, and it's not always what you feel like doing after a twelve hour day when you're exhausted....I think about people at my school and what it would take to bring them into SEMIS and a lot of what I find necessary is that they need to take on learning a large amount of background knowledge. Beyond the learning expectations, they need to develop deep relationships with the people who are doing it. If all of the sudden while teaching full time, teachers went into a new organization that had huge expectations for professional learning—it could be very intimidating and probably overwhelming. So when I imagine SEMIS as something relatively foreign to me conceptually, even though my heart would be there, I think it could be very challenging.

Despite the challenges posed by school funding and the demand for teachers at schools that lack the structures that are supportive of professional growth, SEMIS strives to address those needs and work with teachers and administrators to establish a learning environment to

support professional growth toward cultural change. When asked about the possibility of cultural change through schools, Rebecca responds:

I think that some of the day-to-day pressures for teachers and students in schools would have to change and schools would have to make a commitment to their teachers being learners in this mode....With the right vision and the right commitment, a cultural shift through education is possible. It would mean that schools have to refuse the pressure from the state and federal governments.

Schools—and whole communities—would have to decide that they're not going to be slaves to the current accountability schemes. Overall accountability is not a bad thing, but when it's limited to a narrow, quantified, externally created criteria it's just playing into the major problems that we're facing.

Illustrated by the steering committee in this section is that teachers are educating in a challenging school climate. However, despite the socio-cultural, political, and economic restraints on teachers learning to enact positive change in their schools and community, the work in SEMIS continues as they strive to foster the tenacity and resilience necessary to engage in both the development of an eco-ethical consciousness and a pedagogy of responsibility within this difficult context.

Conclusion

This chapter presents a thematic analysis of how the organization articulates their commitment to recognizing and valuing difference, identifying and addressing influences from Western industrial culture, and navigating the impact of school climate on teacher learning in SEMIS. This chapter brings to conclusion the *deep* design of SEMIS. The next

chapter summarizes the implications of this study and provides recommendations for future research.

Chapter 8: Conclusion and Implications

The Southeast Michigan Stewardship Coalition (SEMIS) is an intermediary organization working to pioneer an approach to teacher learning. Their unique experiences and organizational context situate them as a case study from which other organizations can learn a great deal. The central aim of this study was to use a qualitative approach to provide a rich critical ethnographic case study of the design of SEMIS—or what is referred to in the study as a *deep* design. The steering committees' voices relate the story of SEMIS' design and this narrative reveals that while SEMIS is still growing as an organization, their identity as a unique learning organization informs the ways in which they approach the design and implementation of sustained professional development. This *deep* design of SEMIS aims to provide insight into the lived experience of working within an organization as it sets out to teach for a changing world. This study sheds light on the complex inner workings of a movement in the field of eco-democratic reform to work through grant-funded partnerships in the community to foster and support an EcoJustice Education approach to place-based education—or what SEMIS refers to as Powerful Place-Based Education (PPBE). In this study SEMIS offers insight into the strengths and challenges of working to unify theory and practice, as well as how to do so in a way that is intentionally aimed at shifting thinking and behavior in Western industrial culture. Employing a qualitative approach, this study implicitly advocates for the use of critical ethnographic case study to create a richer, fuller understanding of the story of a diverse network of learning relationships.

This conclusion provides a summary of the findings, a brief discussion of the study's implications, and offers recommendations for future research based on evidence that emerged

from the study's interviews, observations, artifact analysis, and the analysis of relevant literature.

The Research Questions

The study of the design of SEMIS is framed by the question “How does an intermediary organization grounded in EcoJustice Education engage in work aimed at fostering and supporting diverse, democratic, and sustainable communities?” The study of SEMIS sets out to examine the complex network of relationships informing the conceptualization of this organization's structural design and to illuminate the ways in which articulated theories of action inform SEMIS' approach to teaching and learning that are supportive of EcoJustice Education. This case study introduces a theory of action for a unique intermediary organization, while simultaneously uncovering a multitude of diverse influences and themes that emerge through the narrators' voices and provide rich insight into the design of the organization. Chapters 5, 6, and 7 combine to provide an in-depth description of SEMIS as a learning organization, their unique approach to designing and administering sustained professional development, and their commitment to navigating the challenges and complexities of this work. The following section provides a brief summary of how the three main parts to the *deep* design of SEMIS—the “learning organization,” the sustained professional development, and within the complexity of a network of learning relationships—address this question.

SEMIS as a learning organization. Chapter 5 presented the ways in which members of the SEMIS steering committee have come to conceptualize and articulate the function and structure of the organization as a learning community. This chapter introduces SEMIS as a learning organization and describes how the steering committee functions to

provide sustained professional development. A large portion of the work of SEMIS is the planning and implementation of professional development with teachers, administrators, and community partners. Chapter 5 illustrates the design and articulated identity of the steering committee as a democratic learning organization. In order to understand the *deep* design of SEMIS, it is important to recognize the ways in which the steering committee engages in decision making within a network of learning relationships to which they belong—working together in a coalition model. This examination of the structure and function of the steering committee provides a context for presenting the primary output of their work together: sustained professional development that supports PPBE in schools. As a learning organization, the steering committee has developed their approach to professional development into a scope and sequence. As SEMIS has grown, the steering committee has refined the process of planning professional development curricula. In this way, they have contributed to the development of a heuristic for understanding the development of an eco-ethical consciousness in connection with learning to enact a pedagogy of responsibility.

Sustained professional development. Chapter 6 drew from the perspectives of the SEMIS’ steering committee to present a composite articulation of SEMIS’ design for sustained professional development. This chapter examines the overall scope and sequence of professional development, and the support designed and offered by the organization to members of the coalition in efforts to illustrate the unique “Coalition” learning approach of SEMIS. This chapter examines and analyzes the ways in which SEMIS professional development has emerged through narrator-articulated objectives for the organization’s curriculum. The analysis in Chapter 6 elaborates on sustained SEMIS professional development to introduce a theoretical learning model for the development of an eco-ethical

consciousness toward a pedagogy of responsibility. SEMIS has a unique articulated approach to designing and administering professional development that highlights how the steering committee conceptualizes adult learning rooted in EcoJustice Education. With an emphasis on learning supports provided within the context of building a strong network of learning relationships in a “Coalition” model, SEMIS works with teachers to develop an “Ecological Understanding” and fosters the development of PPBE projects in their schools and classrooms.

Complexity of a network of learning relationships. Chapter 7 rounded out the *deep* description of SEMIS. This chapter examines the experiences of the steering committee as they reflect on SEMIS’ organizational design and presented key themes that emerge from the study to illustrate the complexity of the learning relationships in the coalition. These themes illustrate the articulated challenges faced by the organization’s commitment to recognizing and valuing difference, identifying and addressing influences from Western industrial culture, and navigating the impact of school climate on teacher learning in SEMIS. Close examination of the emerging themes exposes the complexity of learning relationships for the organization and provides insight into the lived experiences of members of the steering committee. These themes highlight the tensions between the organization’s espoused theories of action and the lived experiences of theories in use. This chapter examines three primary themes: recognizing and valuing difference, identifying and addressing influences from Western industrial culture, and navigating the impact of school climate on teacher learning in SEMIS.

The *deep* design of SEMIS brings into focus a tension present throughout the study and woven throughout each of the themes discussed: How can an organization so immersed

in a Western industrial culture work collaboratively toward fostering and developing an eco-ethical consciousness and a pedagogy of responsibility? The thick descriptions provided in Chapter 7 present a window into the personal experiences the SEMIS committee as they work through challenges that emerge for the organization as it strives to engage and reconcile this tension.

Implications and Recommendations

The case study of the design of SEMIS offers a starting point for further research to address questions that emerge from this study. This study focused on the design of SEMIS in efforts to provide a foundation from which the organization could be further researched. The study itself presents a unique case study example of an organization that is growing and learning as they engage in their work. As a researcher of SEMIS, I was able to listen to each member of the steering committee, analyze the organization's archived documents, and review the relevant literature in relationship to the research question.

The story of the design of SEMIS provides a starting point for researching a unique intermediary organization. This qualitative study, in line with all good qualitative research, illuminates themes and further questions. It is from the analysis of these themes and questions as brought into relationship with the documented experiences of the steering committee shared in this study that I base the following implications and recommendations for the field of eco-democratic reform, for school communities, and for broader policy work.

Eco-democratic reform. In Chapter 1, I provide an overview of an EcoJustice Education framework as part of eco-democratic reform work that has arisen in response to a very specific history and trajectory. EcoJustice Education is a critical and ethical framework through which one accepts the responsibility to identify the role that education both plays,

and ought to play in transitioning toward diverse, socially just, and sustainable communities. As part of a growing field of eco-democratic reform, SEMIS is comprised of a diverse group of participants working to critically and ethically address social justice issues and environmental degradation as linked to the powerful cultural assumptions—the “discourses of modernity”—of Western industrial culture. Additionally, SEMIS works in this context to foster PPBE in schools by supporting educators in developing and strengthening an eco-ethical consciousness and enacting a pedagogy of responsibility.

The *deep* design of SEMIS presents the organizational structure of SEMIS and contributes an articulated merging of ecological theory and practice—or praxis. This study offers insight into how enacting a theoretical framework such as EcoJustice Education requires a strong commitment to challenging deep assumptions regarding value-hierarchies constructed and enacted in Western industrial culture. While ample access to theoretical frameworks challenging these dominant cultural assumptions exists, this study provides a rare model for how an intermediary organization can engage in such work, while also presenting the complicated nature of enacting such praxis. To date this study is one of the only, if not the only, case study of an organization striving to enact an EcoJustice Education framework. While a defining characteristic of eco-democratic reform is that no two places or efforts are identical, the design of SEMIS offers insight into how organizations might work to organize democratically as learning organizations with similar commitments. Through engaging an EcoJustice Education framework and studying the organizational design the story of SEMIS, this work contributes to the broader field of eco-democratic reform as an example from which further research can be conducted to promote education that supports local living communities.

Education. The case study of the design of SEMIS offers insight into implications for understanding the importance for school change toward supporting PPBE. One of the major themes that exists for participants in the organization is the struggle to navigate the current dominant structures and limitations placed on teacher learning in many schools, districts, and communities. SEMIS, rooted in an EcoJustice Education framework, explicitly identifies as an intermediary organization working with educators to challenge Western industrial models of schooling. As articulated in the chapters framing the study, SEMIS works from the position that there is a great need for the development of educators who are able to critique and respond to the destructive consequences of Western notions of progress, hierarchical value systems, and individualism. Chapter 6 illustrates that students of all ages and levels of development need mentoring and support to guide them in the exploration of cultural habits of mind and the ethical evaluation of which of these habits support local living systems and ought to be sustained, and which undermine living systems and ought to be minimized or eliminated. This implies that at all levels of education, from pre-K through post-secondary education, there is a great need for structures that support developmentally appropriate PPBE. While there is much to be learned from researching what developmentally appropriate PPBE looks like for diverse learners, we can see that there is no way to start such research without the involvement of local advocates and educators who are engaged in thinking collaboratively and with an “Ecological Understanding” around that curriculum. In other words, strong effort in eco-democratic reform will look different in different places, but through enacting such efforts, documenting them, and sharing them, we can begin to understand how schools can move away from the monoculturalization of

curriculum—or the Western assumptions embedded in a “one size fits all” approach—and toward curriculum and pedagogy that is diversely defined by living local systems.

There is a need for research that examines potential strategies for schools looking to commit to the long-term development of systems that support the development of strong PPBE teachers. Teachers in a professional learning community need to be provided with the opportunity to work collaboratively toward the development of the learning and experiences necessary for enacting PPBE projects. Further, schools could benefit from bringing in elders and experts from the local community to work in collaboration with teachers, community partners, and students to inform and enhance the curriculum. Ideally this knowledge would in turn shape school structure, calendar, and professional development.

Policy. If PPBE is to make a significant impact in local communities, or if we are to even know if there is impact in connection with SEMIS, then funding is needed to develop instrumentation for evaluating the impacts of organizations like SEMIS on student learning in connection with the quality of local social relationships and the health of the overall ecological community. The study of SEMIS illuminates this tension. The implication for policy from this study is to invest in funding initiatives committed to creative and ecological approaches to learning. There is a need for funding organizations with a thorough understanding of and commitment to the complexity of shifting toward education that supports the development of citizenship in socially just and sustainable communities. In other words, efforts rooted in eco-democratic reform offer an important contribution to understanding how education can address and potentially alleviate disparities in race, class, gender, ability, etc. in ways that simultaneously address the need for ecologically sustainable communities. This requires that learning organizations such as SEMIS also take on the role

of educating and collaborating with funders and policy makers engaged in broader educational reform.

Recommendations for SEMIS

The implications and broad recommendations discussed in the previous section provide a context for a more specific set of recommendations for SEMIS. The study illustrates a clear need for the following; funding to obtain and retain more staff, increased involvement from community partners in the leadership structures, and further development for SEMIS in the context of teacher education and certification at the university.

Additionally, the following recommendations are offered.

The first recommendation is that the SEMIS steering committee embrace their identity as a learning organization and continue to devote time and resources to the organizational design. SEMIS should continue the work to refine their organizational theory of action as they move towards collaboratively mapping the systems in the organization. In other words, SEMIS has a sophisticated and developed approach to professional development that emerges from this study and the next step would be to collectively map out their work. This approach to mapping SEMIS can help the steering committee to identify and connect specific desired outcomes outlined in the study with content in the professional development. With a strong systems map the SEMIS steering committee can work to develop protocols that support their commitment to double-loop learning. This will help with the complexities of the relationships discussed in Chapter 7 as the organization can track the work and time contributed by each member of the committee to the organization.

It is likely, given the goals of the organization, that without more funding SEMIS will continue to face challenges of being understaffed; however, if they carefully track on and

prioritize organizational needs from moment to moment over the course of a one year 's scope and sequence, it can help to focus work for the steering committee and reduce the likelihood of burn out. This offers the potential for stronger retention for members on the steering committee. Additionally, this process will help SEMIS identify and develop authentic forms of assessment that can help them to track the effectiveness of the sustained professional development offered through the organization.

While SEMIS can be described as a learning organization committed to double-loop learning, they are often overburdened by responding to day-to-day needs and are thus susceptible to losing time that should ideally be allocated to rethinking the root causes of the challenges with which they are faced. In the case of SEMIS, this requires a significant commitment from the steering committee to the development and strengthening of their eco-ethical consciousness. In other words, the steering committee needs to continually engage in learning about the espoused theory in the organization—EcoJustice Education. As detailed in Chapter 7, this need for leaders to identify as students has the potential to create tensions among members. It is my recommendation that the steering committee engage in learning and practicing how to learn together in a coalition model. Each member of the steering committee has varying degrees of familiarity with the background content knowledge necessary for providing and maintaining the learning structures in the organization. It may be helpful for members of the steering committee to develop a set of learning materials, such as a reader, to provide an overview of the ways in which EcoJustice Education, adult learning, and organizational design theory play a role in SEMIS' approach to professional development. Additionally, SEMIS should perhaps take further steps to develop protocols for how the steering committee engages in learning together to be implemented in

conjunction with the aforementioned learning resource. In summary, this embedded support would enable a new member to be able to study the organization as he or she integrates into a leadership role.

Concurrent with the development of protocols for ongoing learning for the members of the SEMIS steering committee, I recommend that further research be designed to include the development of SEMIS in the context of teacher education. Such efforts could begin with further research and investment into evaluation. This research endeavor would require that SEMIS allocates or solicits resources for the development of instrumentation for measuring the impact of their professional development on student learning. While there may be too many variables to show any immediate impact linking teacher professional development to student achievement, it is my assertion that SEMIS can benefit from engaging in the collaborative evaluation of the areas described in the “Coalition” learning model and proposed trajectory introduced in Chapter 6. The case study of the design of SEMIS provided in this dissertation offers the foundation from which further research can contribute to the development of evaluative measures. The dilemma for SEMIS, and other similar organizations, is that current instruments available for evaluation do not fit the goals and objective of eco-democratic reform efforts. It is my recommendation that the efforts of SEMIS be further supported to include the development of such instrumentation. While SEMIS does include reflective questionnaires at the end of each coalition-wide workshop which the steering committee collaboratively consider in their design for the professional development workshops and coaching support, they should develop protocols for evaluating growth and assess the development of each criteria in the potential learning trajectory offered in Chapter 6.

Recommendations for Future Research

The close critical ethnographic study of the design of SEMIS offers a first step in ongoing research to bring the unique approach presented by this organization to the broader field of eco-democratic reform, EcoJustice Education, and teacher education. When I initially set out with an interest in studying SEMIS, I wanted to research the impact of the organization on the participants engaging in the professional development and their students. Further, it was my hope to launch a study with the potential to link SEMIS professional development with social and environmental indicators that illustrate how schools could play a role in communities transitioning toward socially just and sustainable communities. As I set out to explore this long-term project and identify the necessary methods and resources, I determined that this study would require both strong qualitative and quantitative research. In mapping out what it would take to conduct such a study, one of the first barriers was that SEMIS needed to be researched as an organization to establish the basis from which any future research would begin. While SEMIS articulates their work through publications, social media, and grant applications and reports, they are not fully represented by such documentation. It was upon this realization that I decided it would be critical to study the design of the organization before moving forward on any long-term study on the impact of SEMIS. After much research and consultation, it seemed logical to start with a critical ethnographic case study that would provide a context of the organization comprehensive enough to inform the planning of future research to support and explore any impacts. While the intent is that this study provide a base from which a plethora of future research is possible, I offer the following suggestions in connection with the aforementioned implications and recommendations.

First, I believe that this study makes the case that the methods used in this dissertation offer a unique and necessary set of research practices for understanding the complexity of learning organizations. It is my suggestion that similar case studies of designs be conducted on other organizations committed to intersecting fields. Specifically, I suggest that intermediary organizations that identify in any way as part of eco-democratic reform, place-based education, EcoJustice Education, and even critical environmental education and social studies education organizations, are examined for their theory of action and approach to teacher learning. The idea would be to build an understanding of the diversity and growth of these movements to inform rich case studies that would further clarify the field of eco-democratic reform and set up future research. Such research could begin with setting up case studies of the design of a group of organizations. In other words, in contribution to the growing fields these case studies would help to define the work in the context of a broader movement within which organizations can share resources and learn from one another while modeling this work for future organizations.

A targeted suggestion is that similar design case studies are conducted on each of the hubs in the GLSI. This would help on a number of levels in connection to each of the implications shared in this chapter. First, a close study of the GLSI in which each hub design is examined would help to communicate that place-based education is a growing movement in the region and would set the context for funders to understand this movement and its potential impact. Second, a set of case studies would offer the ability to design and launch valid and reliable research studies that began to design instrumentation that could both benefit each individual hub as well as the GLSI. Such research would also provide the broader foundation and context necessary for a further recommendation that these case

studies extend the methods in this dissertation to include perspectives of the participants and their students.

Given this dissertation's unique approach to providing a rich, or thick, description of the design, it was limited to the perspectives of the steering committee members—the leaders in the organization—in order to set the context for future research that would include observations, interviews, and analysis of artifacts from participants and their students. Such a study offers the potential to add to the articulated design as well as set up the conditions from which claims may be made and supported in working toward the designing of instrumentation for studying impact.

My next recommendation is that research teams be assembled to begin to pilot evaluation instruments that are specifically designed for the organization being studied. For SEMIS this would entail launching pilot studies that develop and test evaluative measurements that are linked to specific objectives and actions taken in their professional development. The designing of such instrumentation takes a long time because any claims to be made about the impacts of professional development must be grounded in valid and reliable instruments. Such testing, if done ethically, takes time and so it is my recommendation that following this study such efforts to pilot evaluation begin. Ideally, with deep design studies of a group of intermediary organizations in this broader movement that are extended to include participant perspectives and share piloted instruments customized to each organization would set the context and provide the base for further development of instrumentation and understanding of the broader movements.

Other future research that emerges from this dissertation, which would rely on the suggestions made in the previous paragraphs, is a long-term research project to further

articulate the development of a learning model for the field. SEMIS' approach to professional development suggests that engaging teachers in the development of an "Ecological Understanding" (see Figure 2) requires an understanding of how people learn that extends existing research on teacher learning. Future research should be done to launch the long-term development of the learning model introduced in Chapter 6. The trend in these suggestions is that while no one researcher can do all of these suggestions, each of the suggestions would benefit and would arguably need the others if any claims about impact, or generalizations, were to be made. In other words, this dissertation is only the tip of the iceberg for what gets introduced in the *deep* design of SEMIS.

References

- Abram, D. (1996). *The spell of the sensuous: Perception and language in a more-than-human world*. New York, NY: Vintage Books.
- Apffel-Marglin, F., & PRATEC. (1998). *The spirit of regeneration: Andean culture confronting Western notions of development*. New York, NY: Zed Books.
- Argyris, C. (1980). *Inner contradictions of rigorous research*. New York, NY: Academic Press.
- Argyris, C. (2002). Double-loop learning, teaching, and research. *Academy of management learning & education*, 1(2), 206-208.
- Argyris, C. (2008). Double-loop learning and organizational change: Facilitating transformational change. In J. J. Boonstra (Ed.), *Dynamics of organizational change and learning* (pp.389-402). England, UK: John Wiley & Sons Ltd.
- Argyris, C., & Schön, D. A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco, CA: Jossey-Bass Publishers.
- Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Boston, MA: Addison-Wesley.
- Barber, B. (1984). *Strong democracy: Participatory politics for a new age*. Berkeley, CA: University of California Press.
- Bateson, G. (1972). *Steps to an ecology of mind*. Chicago, IL: The University of Chicago Press.
- Bateson, N. (Writer). (2011). *An ecology of mind: A daughter's portrait of Gregory Bateson* [DVD]. USA: Bullfrog Films.

- Behar, R. (1996). *The vulnerable observer: Anthropology that breaks your heart*. Boston, MA: Beacon Press.
- Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. New York, NY: Anchor Books.
- Berger, P. L., & Neuhaus, R. J. (1977). *To empower people: The role of mediating structures in public policy*. Washington DC: American Enterprise Institute for Public Policy Research.
- Berry, W. (1995). *Another turn of the crank: Essays*. Washington, DC: Counterpoint.
- Berry, W. (2000). *Life is a miracle: An essay against modern superstition*. Washington DC: Counterpoint.
- Blank, M. J., Brand, B., Deich, S., Kazis, R., Politz, B., & Trippe, S. (2003). Local intermediary organizations: Connecting the dots for children, youth, and families: American Youth Policy Forum.
- Bowers, C. A. (1974). *Cultural literacy for freedom: An existential perspective on teaching, curriculum, and school policy*. Eugene, OR: Elan Publishers.
- Bowers, C. A. (1984). *The promise of theory: Education and the politics of cultural change*. New York, NY: Longman.
- Bowers, C. A. (1987). *Elements of a post-liberal theory of education*. New York, NY: Teachers College Press.
- Bowers, C. A. (1993). *Education, cultural myths, and the ecological crisis: Toward deep changes*. Albany, NY: State University of New York Press.

- Bowers, C. A. (1995). *Educating for ecologically sustainable culture: Rethinking moral education, creativity, intelligence, and other modern orthodoxies*. Albany, NY: State University of New York Press.
- Bowers, C. A. (1997). *The culture of denial: Why the environmental movement needs a strategy for reforming universities and public schools*. Albany, NY: State University of New York Press.
- Bowers, C. A. (2001). *Educating for eco-justice and community*. Athens, GA: University of Georgia Press.
- Bowers, C. A. (2005a). Commons. Retrieved January 15, 2012, from cabowers.net
<http://www.cabowers.net/dicterm/CAdict003.php>
- Bowers, C. A. (2005b). EcoJustice. Retrieved January, 14, 2012, from cabowers.net
<http://www.cabowers.net/dicterm/CAdict010.php>
- Bowers, C. A. (2005c). Is transformative learning the Trojan horse of Western globalization? *Journal of Transformative Education*, 2(3), 116-125.
- Bowers, C. A. (2006). *Revitalizing the commons: Cultural and educational sites of resistance and affirmation*. Lanham, MD: Lexington Books.
- Bowers, C. A. (2010). Educational reforms that foster ecological intelligence. *Teacher Education Quarterly*, 37(4), 9-31.
- Bowers, C. A. (2011). *Perspectives on the ideas of Gregory Bateson, ecological intelligence, and educational reform*. Eugene, OR: Eco-Justice Press, LLC.
- Bowers, C. A., & Apffel-Marglin, F. (Eds.). (2005). *Rethinking Freire: Globalization and the environmental crisis*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

- Bowers, C. A., & Flinders, D. J. (1990). *Responsive teaching: An ecological approach to classroom patterns of language, culture, and thought*. (Vol. 4). New York, NY: Teachers College Press.
- Bowers, C. A., & Martusewicz, R. (2006). Revitalizing the commons of the African-American communities in Detroit. In C. A. Bowers (Ed.), *Revitalizing the commons: cultural and educational sites of resistance and affirmation* (pp. 47-84). Lanham, MD: Lexington Books.
- Bransford, J., Darling-Hammond, L., & LePage, P. (2005). Chapter 1: Introduction. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 1-39). San Francisco, CA: Jossey-Bass.
- Charmaz, K. (2006). *Constructing Grounded Theory: A practical guide through qualitative analysis*. Los Angeles, CA: Sage.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2 ed.). Thousand Oaks, CA: Sage Publications.
- Darling-Hammond, L., & Bransford, J. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L., Rosso, J., Austin, K., Orcutt, S., & Martin, D. (2001). How people learn: Introduction to learning theory. *The Learning Classroom*. Stanford, CA: Stanford University School of Education.
- Darling-Hammond, L., Wise, A., & Klein, S. (1995). *A license to teach: building a profession for 21st century schools*. Boulder, CO: Westview Press.

- Donovan, M. S., Bransford, J. D., & Pellegrino, J. W. (1999). *How people learn: Bridging research and practice*. Washington, DC: National Academic Press.
- Drago-Severson, E. (2004). *Becoming adult learners: Principles and practices for effective development*. New York, NY: Teachers College Press.
- Drago-Severson, E. (2008). 4 practices serve as pillars for adult learning. *JSD*, 29(4), 60-63.
- Drago-Severson, E. (2009). *Leading adult learning: Supporting adult development in our schools*. Thousand Oaks, CA: Corwin Press & the National Staff Development Council.
- Ecologist (Ed.). (1993). *Whose common future? Reclaiming the commons*. Philadelphia, PA: New Society Publishers.
- Edgerton, S. (1996). *Translating the curriculum: Multiculturalism into cultural studies*. New York, NY: Routledge.
- Edmundson, J., & Martusewicz, R. (2013). Putting our lives in order: Wendell Berry, EcoJustice, and a pedagogy of responsibility. In A. Kulnieks, D. R. Longboat & K. Young (Eds.), *Contemporary studies in environmental and indigenous pedagogies* (pp. 171-184). Rotterdam, The Netherlands: Sense Publishers.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes*. Chicago: The University of Chicago Press.
- Errante, A. (2000). But sometimes you're not part of the story: Oral histories and ways of remembering and telling. *Educational Researcher*, 29(2), 16-27.
- Esteva, G., & Prakash, M. S. (1998). *Grassroots post-modernism: Remaking the soil of cultures*. New York, NY: Zed Books.

- Foucault, M. (2010). What is enlightenment? (C. Porter, Trans.). In P. Rabinow (Ed.), *The Foucault reader* (pp. 32-50). New York, NY: Vintage Books.
- Geertz, C. (1973). *The interpretation of cultures*. New York, NY: Basic Books, Inc.
- Geertz, C. (1988). *Work and lives: The anthropologist as author*. Stanford, CA: Stanford University Press.
- Geertz, C. (2000). *Local knowledge: Further essays in interpretive anthropology* (3rd ed.). New York, NY: Basic Books.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction* (2nd ed.). New York, NY: Longman.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. New York, NY: Longman.
- Gruenewald, D. A. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher*, 32(4), 3-12.
- Gruenewald, D. A. (2005). More than one profound truth: Making sense of divergent criticalities. *Educational Studies*, 37(2), 206-215.
- Guggenheim, D. (Writer). (2006). An Inconvenient Truth. In D. Guggenheim, D. Weyermann, J. Skoll, J. D. Ivers & L. Lennard (Producer): Paramount Vantage.
- Honig, M. I. (2004). The new middle management: Intermediary organizations in education policy implementation. *Educational Evaluation and Policy Analysis*, 26(1), 65-87.
- Jensen, D. (2000). *A language older than words*. New York, NY: Context Books.
- Jensen, D. (2004). *The culture of make believe*. White River Junction, VT: Chelsea Green Publishing Company.

- Langer, G. M., Colton, A. B., & Goff, L. S. (2003). Why CASL works: The framework for teachers' reflective inquiry. *Collaborative analysis of student work: Improving teaching and learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Lappe, F. M. (1982). *Diet for a small planet*. New York, NY: Ballantine Books.
- Lieberman, A. (2000). Networks as learning communities: Shaping the future of teacher development. *Journal of Teacher Education*, 51(3), 221-227.
- Lieberman, A., & Grolnick, M. (1996). Networks and reform in American education. *Teachers College Record*, 98(1), 7-45.
- Lieberman, A., & McLaughlin, M. W. (1992). Networks for educational change: Powerful and problematic. *The Phi Delta Kappan*, 73(9), 673-677.
- Lowenstein, E., Martusewicz, R. A., & Voelker, L. (2010). Developing teachers' capacity for ecojustice education and community-based learning. *Teacher Education Quarterly*, 37(4), 99-118.
- Lupinacci, J. (2013). Eco-ethical environmental education: Critically and ethically examining our existence as humans In A. Kulnieks, D. R. Longboat & K. Young (Eds.), *Contemporary studies in environmental and indigenous pedagogies: A curricula of stories and place* (pp. 185-200). Rotterdam, The Netherlands: Sense Publishers.
- Mander, J., & Goldsmith, E. (1996). *The case against the global economy: And for a turn toward the local*. San Francisco, CA: Sierra Club Books.
- Martusewicz, R. (2001). *Seeking passage: Post-structuralism, pedagogy, ethics*. New York, NY: Teachers College Press.

- Martusewicz, R. (2004). Editor's corner. *Educational Studies: A Journal of the American Educational Studies Association*, 36(1), 1-5.
- Martusewicz, R. (2006). Eros in the commons: Educating for eco-ethical consciousness in a poetics of place. *Ethics, place & environment: A journal of philosophy & geography*, 8(3), 331-348.
- Martusewicz, R. (2009). Educating for “collaborative intelligence:” Revitalizing the cultural and ecological commons in Detroit. In M. McKenzie, P. Hart, H. Bai & B. Jickling (Eds.), *Fields of green: Restorying culture, environment, and education* (pp. 253-267). Cresskill, NJ: Hampton Press.
- Martusewicz, R. (2013). Toward an anti-centric ecological culture: Bringing a critical eco-feminist analysis to EcoJustice education. In A. Kulnieks, D. R. Longboat & K. Young (Eds.), *Contemporary studies in environmental and indigenous pedagogies: A curricula of stories and place* (pp. 259-272). Rotterdam, The Netherlands: Sense Publishers.
- Martusewicz, R. (2013). Eros, education, and eco-ethical consciousness: Re-membering the “room of love” in Wendell Berry’s Hannah Coulter. *Educational Studies*. 49(5).
- Martusewicz, R., & Edmundson, J. (2005). Social foundations as pedagogies of responsibility and eco-ethical commitment. In D. W. Butin (Ed.), *Teaching social foundations of education: Contexts, theories, and issues* (pp. 71-92). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Martusewicz, R., Edmundson, J., & Lupinacci, J. (2011). *EcoJustice education: Toward diverse, democratic, and sustainable communities*. New York, NY: Routledge.

- Martusewicz, R., Lupinacci, J., & Schnakenberg, G. (2010). EcoJustice education for science educators. In M. Mueller (Ed.), *Cultural Studies and Environmentalism* (pp. 11-27). New York, NY: Springer.
- Martusewicz, R., & Schnakenberg, G. (2010). Ecojustice, community-based learning, and social studies education. In A. P. DeLeon & E. W. Ross (Eds.), *Critical theories, radical pedagogies, and social education: New perspectives for social studies education* (pp. 25-41). Rotterdam, Netherlands: Sense Publishers.
- McDonald, J. P., Hatch, T., Kirby, E., Ames, N., Haynes, N. M., & Joyner, E. T. (1999). *School reform behind the scenes: How ATLAS is shaping the future of education*. New York, NY: Teachers College Press.
- McDonald, J. P., & Klein, E. J. (2003). Networking for teacher learning: Toward a theory of effective design. *Teachers College Record*, 105, 1606-1621.
- McDonald, J. P., Mohr, N., Dichter, A., & McDonald, E. C. (2003). *The power of protocols: An educator's guide to better practice*. New York, NY: Teachers College Press.
- Merchant, C. (1983). *The death of nature: Women, ecology and the scientific revolution*. San Francisco, CA: Harper & Row.
- National Research Council. (2000). *How people learn: Brain, mind, experience, and school* (Expanded ed.). Washington, DC: National Academies Press.
- Newcomb, S. T. (2008). *Pagans in the promised land: Decoding the doctrine of Christian discovery*. Golden, CO: Fulcrum.
- Norberg-Hodge, H. (1991). *Ancient futures: Learning from Ladakh*. San Francisco, CA: Sierra Club Books.

Orr, D. (2004). *Earth in mind: On education, environment, and the human prospect*.

Washington, DC: Island Press.

Plumwood, V. (1993). *Feminism and the mastery of nature*. New York, NY: Routledge.

Plumwood, V. (2002). *Environmental culture: The ecological crisis of reason*. New York, NY: Routledge.

Polanyi, K. (2001). *The great transformation: The political and economic origins of our time*. Boston, MA: Beacon Press.

Prakash, M. S., & Esteva, G. (1998). *Escaping education: Living as learning within grassroots cultures*. New York, NY: Peter Lang.

Rasmussen, D. (2000). Cease to do evil, then learn to do. *Cultural Survival: Partnering with Indigenous Peoples to Defend their Lands, Languages and Cultures, Voices* (1.1).

Rasmussen, D. (2004). The priced versus the priceless. *INTERculture*, 147(1), 5-33.

Rasmussen, D. (2005). Cease to do evil, then learn to do good. In C. A. Bowers & F. Apffel-Marglin (Eds.), *Rethinking Freire: Globalization and the Environmental Crisis* (pp. 115-131). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Sachs, W. (1992). *The development dictionary: A guide to knowledge as power*. Atlantic Highlands, NJ: Zed Books.

Schön, D. A. (1973). *Beyond the stable state*. New York, NY: W. W. Norton & Company.

Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (3rd ed.). New York, NY: Teachers College Press.

SEMIS. (2008). *SEMIS summer institute agenda*. Eastern Michigan University. Ypsilanti, MI.

- SEMIS. (2009). *SEMIS summer institute agenda*. Eastern Michigan University. Ypsilanti, MI.
- SEMIS. (2010a). *SEMIS steering committee retreat notes*. Eastern Michigan University. Ypsilanti, MI.
- SEMIS. (2010b). *SEMIS summer institute agenda*. Eastern Michigan University. Ypsilanti, MI.
- SEMIS. (2011a). *Foundational principles of the Southeast Michigan Stewardship Coalition*. Retrieved from <http://semiscoalition.org/wp-content/uploads/2011/02/SEMIS-E-Binder2.pdf>
- SEMIS. (2011b). *SEMIS summer institute agenda*. Eastern Michigan University. Ypsilanti, MI.
- SEMIS. (2012a). *Professional Development Workshop: September 28, 2012*. Eastern Michigan University. Ypsilanti, MI.
- SEMIS. (2012b). *SEMIS summer institute agenda*. Eastern Michigan University. Ypsilanti, MI.
- SEMIS. (2013). *SEMIS Presentation: An Overview of the Organization*. Eastern Michigan University. Ypsilanti.
- Senge, P. (1994). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Currency Doubleday.
- Serres, M. (1989). *Detachment* (G. James & R. Federman, Trans.). Athens: OH: Ohio University Press.
- Shils, E. (1981). *Tradition*. Chicago, IL: The University of Chicago Press.

- Shiva, V. (1993). *Monocultures of the mind: Perspectives on biodiversity and biotechnology*. Atlantic Highlands, NJ: Zed Books.
- Shiva, V. (2005). *Earth democracy: Justice, sustainability, and peace*. Cambridge, MA: South End Press.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Smith, G. A., & Williams, D. R. (Eds.). (1999). *Ecological education in action: On weaving education, culture, and the environment*. Albany, NY: State University of New York Press.
- Sobel, D. (2004). *Place-based education: Connecting classrooms & communities*. Great Barrington, MA: The Orion Society.
- Warren, K. (1996). The power and the promise of ecological feminism. In K. Warren (Ed.), *Ecological Feminist Philosophies* (pp. 19-41). Bloomington, IN: Indiana University Press.
- Warren, K. (2000). *Ecofeminist philosophy: A Western perspective on what it is and why it matters*. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Wayne, K. R., & Gruenewald, D. A. (2004). Ecojustice and education: A special issue of educational studies [Special issue]. *Educational Studies* 36(1).
- Wiggins, G., & McTighe, J. (2005). *Understanding by design* (Expanded 2nd ed.). New York, NY: Pearson Teacher Education.
- Wiggins, G., & McTighe, J. (2012). *The understanding by design guide to advanced concepts in creating and reviewing units*. Alexandria, VA: Association for Supervision & Curriculum Development.

Wiggins, G., & McTighe, J. (2013). *The understanding by design guide to creating high-quality units*. New York, NY: Pearson Teacher Education.

Wilson, E. O. (1998). *Consilience: The unity of knowledge*. New York, NY: Alfred A. Knopf, Inc.

Yin, R. K. (2009). *Case study research: Design and methods*. Los Angeles, CA: SAGE.

Appendix A

SEMIS Community Partners

1. Neighbors Building Brightmore - <http://neighborsbuildingbrightmoor.org/>
2. Detroit Sierra Club - <http://www.sierraclub.org/ej/programs/mi.aspx>
3. Institute for the Study of Children, Families, and Community (iSCFC) -
<http://iscfc.emich.edu/>
4. Distributed Power - <http://www.distributedpower.us/home/>
5. Detroit Food and Entrepreneurship Academy - <http://detroitfoodacademy.com/>
6. Michigan Coalition of Essential Schools - <http://www.michigances.org/>
7. Detroit Youth Energy Squad (D-YES)/Warm Training Center -
<http://www.youthenergysquad.org/>
8. Eastern Michigan University, College of Education - <http://www.emich.edu/coe/>
9. Great Lakes Bioneers Detroit (GLBD) - <http://www.glbd.org/>
10. Southwest Detroit Environmental Vision (SDEV) - <http://www.sdevweb.org/>
11. River Raisin Institute (RRI) - <http://www.rriearth.org/>
12. Matrix Theatre Company - <http://www.matrixtheatre.org/>
13. Rap for Food - <http://www.rapforfood.org/>
14. Greening of Detroit - <http://greeningofdetroit.com/>
15. The Grace and James Lee Boggs Center to Nourish Community Leadership -
<http://boggseducationalcenter.org/>
16. Friends of the Rouge - <http://therouge.org/>
17. Chris Burke, University of Michigan Dearborn
18. Sarah Halson

19. Huron River Watershed Council (HRWC) - <http://www.hrwc.org/>
20. Washtenaw Intermediate School District (WISD) - <http://www.wash.k12.mi.us/>
21. Wayne RESA - <http://www.resa.net/>
22. Broadside Press - <http://broadsidepress.org/>
23. Ecology Center - <http://www.ecocenter.org/>
24. Mill Pond Bread - <http://www.millpondbread.com/>
25. Corporation for a Skilled Workforce - <http://www.skilledwork.org/>
26. Center for EcoJustice Education - <http://www.ecojusticeeducation.org/>
27. Michigan Energy Options - <http://www.michiganenergyoptions.org/>
28. The Organization for Bat Conservation - <http://www.batconservation.org/>
29. Public Art Workz (PAWZ) - <http://publicartworkz.tripod.com/>
30. Earth Force - <http://www.earthforce.org/>
31. Michigan Department of Natural Resources (MDNR) - <http://www.michigan.gov/dnr>
32. National Wildlife Federation (NWF) - <http://www.nwf.org/>
33. Buhr Park Children's Wet Meadow Project - <http://www.wetmeadow.org/>
34. Leslie Science and Nature Center (LSNC) - <http://www.lesliesnc.org/>
35. Ann Arbor Subaru, Research and Development - http://www.subaru-global.com/eco_research.html
36. Creative Change Educational Solutions (CCES) - <http://www.creativechange.net/>
37. Michigan Voices for Good Food Policy - <http://migoodfoodpolicy.wordpress.com/>
38. Souhegan High School - <http://www.sprise.com/shs/default.aspx>
39. Great Lakes Environmental Law Center - <http://www.greatlakeslaw.org/>
40. Michigan Sea Grant - <http://www.miseagrant.umich.edu/>

41. Hush House - <http://hushhouse2.tripod.com/>
42. Green Toe Gardens - <http://www.greentogardens.com/>
43. Detroit Black Food Security Network - <http://detroitblackfoodsecurity.org/>
44. Growing Hope - <http://www.growinghope.net/>
45. Harvest Kitchen - <http://www.harvest-kitchen.com/>
46. RoosRoast Coffee - <http://roosroast.com/>

Appendix B

SEMIS Rubric

DIMENSION ONE: Community/Place-Based Education												
A. Ecological Aspects of Place & Content Standards												
<p>Emerging</p> <p>Teachers and students start to identify ecological aspects of local living systems. Students are engaged outside the classroom in the local ecology.</p> <p><i>Example: Students visit local water source (pond) in a community mapping exercise.</i></p>	I	T	<p>Developing</p> <p>Teacher teams work to incorporate and align place-based curriculum and instruction to content standards. Teams begin working across content areas and/or grades to reinforce the place-based experiences.</p> <p><i>Example: Teachers build from the mapping exercise and the pond visit to connect it to specific content in the classroom curriculum. They consult a SEMIS Curriculum Coach for some assistance with identifying relevant GICE's/HSCCE's.</i></p>	I	T	<p>Advanced, Transforming & Sustainable</p> <p>Place-based curriculum and instruction is aligned with content standards, is interdisciplinary, multi-aged, and situates the school as a resource for environmental stewardship in the local community.</p> <p><i>Example: Multi-grade groups participate in regular local water monitoring and share their findings with local, regional, and global organizations.</i></p>	I	T				
	B. Socio-Cultural (i.e. Human Habits and Behaviors)											
	<p>Emerging</p> <p>Teachers and students identify socio-cultural aspects of local living systems. Students are engaged outside the classroom and are starting to connect ecological aspects with local socio-cultural aspects.</p> <p><i>Example: Students are doing a community mapping exercise and identify that people are using chemicals to spray their lawns and those same chemicals end up in the stream.</i></p>	I		T	<p>Developing</p> <p>Teachers work social justice issues into place-based curriculum and instruction. Teachers begin working across content areas to reinforce social impacts of cultural systems in relationships to the place-based experiences.</p> <p><i>Example: Students begin to study the impacts of spraying chemicals in the school curriculum while engaging in regular visits to local water sources to research and monitor pollution. They consulted a SEMIS Curriculum Coach for assistance with connecting these lessons to specific GICE's/HSCCE's.</i></p>		I	T	<p>Advanced, Transforming & Sustainable</p> <p>Place-based curriculum and instruction is aligned with content standards, is interdisciplinary, and situates the school as a resource for social aspects of stewardship in the local community.</p> <p><i>Example: Students develop an annual report of their findings, and suggestions. They create a Public Service Announcement (PSA) that is aimed at changing "spraying" dangerous chemical and even lawn care attitudes and behavior.</i></p>	I	T	
C. Political												
<p>Emerging</p> <p>Teachers and students identify and learn about the political aspect of local living systems. Students are engaged in research that takes them out of the classroom to learn about local, regional, and global policy that impact the local ecology.</p> <p><i>Example: Students research policy, or lack of policy, impacting local watershed or regulating cultural behaviors like spraying chemicals.</i></p>		I	T	<p>Developing</p> <p>Teachers work civic learning into place-based curriculum and instruction with a clearly defined component of civic action. Teams begin working across content areas to directly engage policy makers and political figures in their place-based experiences.</p> <p><i>Example: After researching, students write letters to policy makers, political figures, and organizations to initiate dialogue. Students send a PSA with an executive summary with their research and recommendations to the political organizations.</i></p>		I	T	<p>Advanced, Transforming & Sustainable</p> <p>School projects involve policy organizations and/or local government in curriculum and instruction thereby engaging students in shifting local policy.</p> <p><i>Example: Student work is recognized and/or engaged by a political figure or an organization. Students work initiates a shift in a local policy on lawn spraying.</i></p>		I	T	

DIMENSION TWO: Cultural Ecological Analysis

A. Interconnection		B. Essential Question		C. Cultural Roots	
Emerging	Developing	Emerging	Developing	Emerging	Developing
<p>Articulates some awareness and is responsive to basic Social and/or Ecological injustices.</p>	<p>Articulates evidence of consideration/understanding of social injustices as nested in a larger ecological context.</p>	<p>Articulates some awareness and is responsive to basic Social and/or Ecological injustices.</p>	<p>Articulates evidence of consideration/understanding of social injustices as nested in a larger ecological context.</p>	<p>Articulates some awareness and is responsive to basic Social and/or Ecological injustices.</p>	<p>Articulates evidence of consideration/understanding of social injustices as nested in a larger ecological context.</p>
<p>Example: The teachers design a lesson or unit that investigates students lives in relationship to the local water shed. As part of this lesson or unit they identify how lawn spraying effects the water and how this spraying also effects the local residents.</p>	<p>Example: The team consults a SEMIS Curriculum Coach and together they plan a series of activities and assignments that investigate how modern industry and practices like lawn spraying are based on decisions made that are culturally and environmentally damaging.</p>	<p>Example: The teachers design a lesson or unit that investigates students lives in relationship to the local water shed. As part of this lesson or unit they identify how lawn spraying effects the water and how this spraying also effects the local residents.</p>	<p>Example: The team consults a SEMIS Curriculum Coach and together they plan a series of activities and assignments that investigate how modern industry and practices like lawn spraying are based on decisions made that are culturally and environmentally damaging.</p>	<p>Example: The teachers design a lesson or unit that investigates students lives in relationship to the local water shed. As part of this lesson or unit they identify how lawn spraying effects the water and how this spraying also effects the local residents.</p>	<p>Example: The team consults a SEMIS Curriculum Coach and together they plan a series of activities and assignments that investigate how modern industry and practices like lawn spraying are based on decisions made that are culturally and environmentally damaging.</p>
<p>School essential question addresses cultural aspects of a local problem.</p>	<p>Teachers can articulate evidence of curriculum and instruction aimed at addressing the team's essential question.</p>	<p>School essential question addresses cultural aspects of a local problem.</p>	<p>Teachers can articulate evidence of curriculum and instruction aimed at addressing the team's essential question.</p>	<p>School essential question addresses cultural aspects of a local problem.</p>	<p>Teachers can articulate evidence of curriculum and instruction aimed at addressing the team's essential question.</p>
<p>Example: "What is the role water plays in our daily, local lives?"</p>	<p>Example: Teacher teams produce student artifacts from assignments aimed at addressing and exploring the team's EQ. For instance, students write essays about how they use water in their daily lives with analysis of how they have a positive or negative impact on local healthy community.</p>	<p>Example: "What is the role water plays in our daily, local lives?"</p>	<p>Example: Teacher teams produce student artifacts from assignments aimed at addressing and exploring the team's EQ. For instance, students write essays about how they use water in their daily lives with analysis of how they have a positive or negative impact on local healthy community.</p>	<p>Example: "What is the role water plays in our daily, local lives?"</p>	<p>Example: Teacher teams produce student artifacts from assignments aimed at addressing and exploring the team's EQ. For instance, students write essays about how they use water in their daily lives with analysis of how they have a positive or negative impact on local healthy community.</p>
<p>Teachers begin to understand and identify how culture is created through symbolic systems.</p>	<p>Teachers and students begin to look beyond limits of the dominant modern culture to incorporate sustainable ways of knowing and living into student learning.</p>	<p>Teachers begin to understand and identify how culture is created through symbolic systems.</p>	<p>Teachers and students begin to look beyond limits of the dominant modern culture to incorporate sustainable ways of knowing and living into student learning.</p>	<p>Teachers begin to understand and identify how culture is created through symbolic systems.</p>	<p>Teachers and students begin to look beyond limits of the dominant modern culture to incorporate sustainable ways of knowing and living into student learning.</p>
<p>Example: Teachers engage in analysis of local history, stories, and teachings situating local behaviors like lawn care in a larger cultural and ecological context. For instance, teachers might address the notion that a lawn is a culturally constructed concept and pose the questions, "why do people have lawns?" and "why do people spray toxic chemicals on their lawns?"</p>	<p>Example: Teachers specifically address how individualism and anthropocentrism work to shape our relationships to lawns. The language Arts teacher incorporates a play called "The Stick of 76" to introduce how Anthropocentrism shapes the responses to oil spills and cultural dependencies on oil. Each lesson investigates how Anthropocentrism, Individualism, and Consumerism play a role in spraying toxic chemical on lawns. Together, they not only identify the limits of the dominant modern culture, but they begin to investigate alternatives.</p>	<p>Example: Teachers engage in analysis of local history, stories, and teachings situating local behaviors like lawn care in a larger cultural and ecological context. For instance, teachers might address the notion that a lawn is a culturally constructed concept and pose the questions, "why do people have lawns?" and "why do people spray toxic chemicals on their lawns?"</p>	<p>Example: Teachers specifically address how individualism and anthropocentrism work to shape our relationships to lawns. The language Arts teacher incorporates a play called "The Stick of 76" to introduce how Anthropocentrism shapes the responses to oil spills and cultural dependencies on oil. Each lesson investigates how Anthropocentrism, Individualism, and Consumerism play a role in spraying toxic chemical on lawns. Together, they not only identify the limits of the dominant modern culture, but they begin to investigate alternatives.</p>	<p>Example: Teachers engage in analysis of local history, stories, and teachings situating local behaviors like lawn care in a larger cultural and ecological context. For instance, teachers might address the notion that a lawn is a culturally constructed concept and pose the questions, "why do people have lawns?" and "why do people spray toxic chemicals on their lawns?"</p>	<p>Example: Teachers specifically address how individualism and anthropocentrism work to shape our relationships to lawns. The language Arts teacher incorporates a play called "The Stick of 76" to introduce how Anthropocentrism shapes the responses to oil spills and cultural dependencies on oil. Each lesson investigates how Anthropocentrism, Individualism, and Consumerism play a role in spraying toxic chemical on lawns. Together, they not only identify the limits of the dominant modern culture, but they begin to investigate alternatives.</p>
<p>Teachers, addressing the role of language with students, introduce the idea that a lawn is a culturally constructed concept, and they pose the questions to their students, "why do people have lawns?" and "why do people spray toxic chemicals on their lawns?"</p>	<p>Example: Part of the PSA project specifically reframes the relationship people have with the local living system through addressing their understanding of a lawn as part of that living system and as connected to the local watershed. In the PSA, students make suggestions for alternatives to lawns.</p>	<p>Teachers, addressing the role of language with students, introduce the idea that a lawn is a culturally constructed concept, and they pose the questions to their students, "why do people have lawns?" and "why do people spray toxic chemicals on their lawns?"</p>	<p>Example: Part of the PSA project specifically reframes the relationship people have with the local living system through addressing their understanding of a lawn as part of that living system and as connected to the local watershed. In the PSA, students make suggestions for alternatives to lawns.</p>	<p>Teachers, addressing the role of language with students, introduce the idea that a lawn is a culturally constructed concept, and they pose the questions to their students, "why do people have lawns?" and "why do people spray toxic chemicals on their lawns?"</p>	<p>Example: Part of the PSA project specifically reframes the relationship people have with the local living system through addressing their understanding of a lawn as part of that living system and as connected to the local watershed. In the PSA, students make suggestions for alternatives to lawns.</p>
<p>Advanced, Transforming & Sustainable</p>	<p>Advanced, Transforming & Sustainable</p>	<p>Advanced, Transforming & Sustainable</p>	<p>Advanced, Transforming & Sustainable</p>	<p>Advanced, Transforming & Sustainable</p>	<p>Advanced, Transforming & Sustainable</p>
<p>Student work shows evidence of: - an evaluation of how language shapes culture - an analysis of the impact culture has on knowledge - an understanding of how cultural knowledge impacts living systems</p>	<p>Curriculum and instruction engages students in rethinking language in ways that incorporate intergenerational wisdom and sustainable cultural ways of knowing.</p>	<p>Student work shows evidence of: - an evaluation of how language shapes culture - an analysis of the impact culture has on knowledge - an understanding of how cultural knowledge impacts living systems</p>	<p>Curriculum and instruction engages students in rethinking language in ways that incorporate intergenerational wisdom and sustainable cultural ways of knowing.</p>	<p>Student work shows evidence of: - an evaluation of how language shapes culture - an analysis of the impact culture has on knowledge - an understanding of how cultural knowledge impacts living systems</p>	<p>Curriculum and instruction engages students in rethinking language in ways that incorporate intergenerational wisdom and sustainable cultural ways of knowing.</p>
<p>Example: The PSA on Lawn Spraying and ongoing watershed monitoring are incorporated into public workshops. Watershed monitoring data shows an improvement in the health of the watershed, and students observe a change in lawn spraying behaviors in subsequent community-mapping activities.</p>	<p>Teachers produce evidence of work with community partners that engages the community in addressing the team's essential question and documents evidence of cultural change.</p>	<p>Example: The PSA on Lawn Spraying and ongoing watershed monitoring are incorporated into public workshops. Watershed monitoring data shows an improvement in the health of the watershed, and students observe a change in lawn spraying behaviors in subsequent community-mapping activities.</p>	<p>Teachers produce evidence of work with community partners that engages the community in addressing the team's essential question and documents evidence of cultural change.</p>	<p>Example: The PSA on Lawn Spraying and ongoing watershed monitoring are incorporated into public workshops. Watershed monitoring data shows an improvement in the health of the watershed, and students observe a change in lawn spraying behaviors in subsequent community-mapping activities.</p>	<p>Teachers produce evidence of work with community partners that engages the community in addressing the team's essential question and documents evidence of cultural change.</p>

DIMENSION THREE: Community-School Partnerships

A. Relationships					
Emerging	I	T	Developing	I	T
Advanced, Transforming & Sustainable	I	T			
<p>The teacher team begins to become acquainted with local community organizations. They begin working with a community partner in the coalition to explore local needs and opportunities to work together.</p> <p><i>Example: The SEMIS liaison arranges a meeting between a local community partner in the coalition and the school team.</i></p>			<p>Community partners offer activities linked to projects. There is time allocated from both schools and community partners to develop projects together.</p> <p><i>Example: The school team and SEMIS liaison arrange time for the community partner(s) to offer programming at the school. For instance, CP visits and teaches about water sheds and water testing.</i></p>		<p>A strong partnership between school and community partners is evident in co-planned and implemented projects.</p> <p><i>Example: The School team and community partner(s) work to implement a series of lessons/experiences in the field that work to monitor stream health and publish an annual PSA.</i></p>
B. Communication					
Emerging	I	T	Developing	I	T
Advanced, Transforming & Sustainable	I	T			
<p>The liaison facilitates some communication between school team and community partners.</p> <p><i>Example: SEMIS liaison recognizes that a local clean water action organization would be a good partner with the school's project so they facilitate a introduction meeting.</i></p>			<p>Liaisons facilitate regular communication between school team and community partners, while the school team takes initiative to make personal connections with community partner representatives. Community partner(s) make themselves available for consultation on project planning.</p> <p><i>Example: For example, teachers call community partners to discuss how they might incorporate programming into a unit or lesson.</i></p>		<p>School teams have established ongoing communication with community partner(s) that is not dependent on a SEMIS liaison.</p> <p><i>Example: School team (maybe individual teachers) meet regularly to co-plan projects with a community partner.</i></p>
C. Programming					
Emerging	I	T	Developing	I	T
Advanced, Transforming & Sustainable	I	T			
<p>Community partners come to the school, or schools attend programming offered by the organization.</p> <p><i>Example: The Science class participated in a stream analysis of macroinvertebrates and an introduction to water testing procedures.</i></p>			<p>School teams and community partners work from offered programming, adapting to the school's needs with co-created projects and curriculum.</p> <p><i>Example: The Community Partner and the teacher plan a series of trips to a local water source to map the community and research how lawn spraying impacts the local water shed. They then test the water quality and monitor and research the health of the local stream. A meeting with the Community Partner, the school team and a SEMIS Curriculum Coach outlines how the co-created programming aligns with GLCE's/HSCF's.</i></p>		<p>School team and community partners evaluate shared programming and design long term public education programs that incorporate the school as a community resource.</p> <p><i>Example: School team and community partner evaluate the PSA created on Lawn Spraying and incorporate action plans to educate the local community on this issue. They meet to continue monitoring the health of the water shed and identify additional threats to health that get incorporated into future curriculum.</i></p>

DIMENSION FOUR: Community of Learners

A. Accountability and Structure					
Emerging	I	T	Developing	I	T
School team engages in critical reflection on teaching, learning, personal, and project growth. Administration supports the teacher team as a community of learners.			Teachers regularly use a rubric as a tool for reflecting on individual, team, and school growth. Teachers regularly look at student work and modify what they do based on evidence.		The Community of Learners is accepted and supported by school systems.
Example: School team establishes a weekly shared time to check in and discuss content of their professional learning community (PLC) content. For example, a team of teachers reading <i>Water Wars</i> checks in and discusses the themes and ideas for an hour a week.			Example: Teachers set aside some of the established shared time to evaluate growth (strengths and challenges) regarding content in the rubric. They share student work and talk about how they assess the work together as a team. They meet with a SEMIS Curriculum coach to discuss how they evaluate student work.		Example: Teacher teams regularly meet during shared teacher planning time that is administratively supported. For instance teachers are granted a shared prep time once-per-week during which the team meets to check in and discuss content and planning. Teachers are also given a half day per semester for sharing how they evaluate student work.
B. Content Learning					
Emerging	I	T	Developing	I	T
School team begins to engage each other in learning about Ecojustice and Place-Based content outside of the scheduled SEMIS PD.			Teachers exhibit a level of responsibility to the content learned and hold each other accountable for ecojustice concepts in their discussions.		The community of learners extends out in the community beyond the school. The local community looks to the school as a resource for restoring and building assets of community.
Example: Teacher team all watch the film "Blue Gold" individually and then discuss the content in regards to their essential questions.			Example: Teachers each show the film or work a lesson that derives from their shared learning from viewing and discussing the film. They have a critical/reflective discussion on how it went during the team planning time.		Example: Students and teachers host a public viewing and invite community partners to help with the student run discussions/ round tables.
C. Sharing Information and Content					
Emerging	I	T	Developing	I	T
The school team shares how they address the school essential question with each other and with the SEMIS coalition.			The team collects and shares artifacts of student and teacher work to share with larger audiences.		The school team shares what they do with a broader community, including dissemination and publication of student and teacher work.
Example: Teachers talk about their plans and essential questions at a PD day or in a shared planning meeting with the SEMIS Liaison.			Example: Each teacher submits 4 artifacts at each SEMIS Liaison visit. They engage their students in the SEMIS newsletter contests.		Example: Teachers and Students present work and experiences through public events. For instance GLBD Conference session on SEMIS Teaching or Publication in the SEMIS Newsletter, or Portfolios on the SEMIS Website, etc.

SEMIS Goal Setting Worksheet

Dimension One: Place-Based Education	
Describe your goal for this dimension of SEMIS work:	
10/	
11/	
1/	
2/	
3/	
5/	SEMIS Community Forum

Dimension Two: Critical Ecology Analysis	
Describe your goal for this dimension of SEMIS work:	
10/	
11/	
1/	
2/	
3/	
5/	SEMIS Community Forum

Dimension Three: Community-School Partnerships

Describe your goal for this dimension of SEMIS work:

10/	
11/	
1/	
2/	
3/	
5/	SEMIS Community Forum

Dimension Four: Community of Learners

Describe your goal for this dimension of SEMIS work:

10/

11/

1/

2/

3/

5/

SEMIS Community Forum

Appendix C

SEMIS Mini-Grant Request for Teacher Project Proposals

The Southeast Michigan Stewardship Coalition (SEMIS) issues teacher mini-grants of \$250 to support projects that align with SEMIS EcoJustice Education goals as they are elaborated on the SEMIS rubric. Teachers in schools may combine mini-grants (e.g. two teachers may submit a proposal for \$500).

The purpose of the mini-grant proposal process is to help you focus project funds and articulate how projects will support Coalition goals.

Proposal Guidelines

I. Proposal Narrative (1-3 pages)

1. Overview: Please give an overview of the project that includes:
 - a. Summary description of the project (one or two sentences)
 - b. Participating teachers
 - c. Participating community partners
 - d. Number of students
2. Goals: Please use the SEMIS rubric to identify how the project will move you and your students forward along the developmental continuum in EcoJustice Education (for example, from “Emerging” to “Developing” in Dimension 2.B.). Projects that involve students at the “Developing” or “Advanced” level of “Political” engagement (Dimension 1.B and 1.C on the rubric) and/or the “Developing” or “Advanced” level of “Cultural Roots” (Dimension 2.B and 2.C on the rubric) will be given priority for funding.
3. Student learning: What are the core understandings/skills students will develop through this project (you may use Common Core standards to describe these)? How will your project help students to become better stewards?
4. Partnerships: Please describe how the project will be used to create or strengthen coalitions (e.g., with community partners, between teachers in the school, students from different grades, collaboration with teachers and students in other SEMIS schools, with families)?
5. Assessment: Please describe how you plan to document, celebrate, and evaluate student learning.
 - a. Describe student-learning artifacts (e.g. photos, videos, podcasts, essays, reflections, art, etc.) you and your students could post on Weebly and use in your Project Portfolio.

- b. Attach any student assessments and assessment rubrics you are planning to use to assess student learning.
6. Community Need: Please describe the community need you plan to address with this project. Note that “community” refers to members both on and off school grounds.

II. Budget

7. Describe in detail how the funds will be used.

To be completed upon the completion of the project:

1. Reporting, Student Presentations, and Portfolio Development:

During and following the project completion, you will be required to use the portfolio process and work with participating teachers to describe and reflect on your project. Please see our website for more details on the portfolio and to download portfolio materials and contact us if you have any questions about this process. Students from projects that receive funds are also responsible for presenting their work at the annual SEMIS Community Forum on May 13, 2013.

<http://www.semiscoalition.org/portfolios>

2. Receiving funds:

For schools to receive project funds, all invoices must be submitted to Arthetus Abraham (aabraham@emich.edu) by May 1, 2013. If invoices are not received by this time, funds will be re-allocated.

**E-mail proposals to: Ethan Lowenstein: ethan.lowenstein@emich.edu
Please contact Ethan Lowenstein with any questions
regarding the proposal process.**

Proposals should be completed in the early fall. Funding is allocated on a rolling basis and equitably distributed throughout the Coalition. Funding will be available until all funds are exhausted; so early proposal submission is recommended.

Appendix D

SEMIS Mini-Grant Request for Community Partner Proposals

The Southeast Michigan Stewardship Coalition (SEMIS) issues grants of up to \$1,000 per year to support community partners in their work with schools and to assist schools in meeting SEMIS EcoJustice Education goals as they are elaborated on the SEMIS rubric.

The purpose of the grant proposal process is to help you focus project funds and articulate how projects will support Coalition goals.

Proposal Guidelines

I. Proposal Narrative (1-3 pages)

8. Overview: Please give an overview of the project that includes:
 - a. Brief summary statement of project
 - b. Participating community partners
 - c. Participating teachers
 - d. Number of students
9. Goals: Please use the SEMIS rubric to identify how the project will move participants along the developmental continuum in EcoJustice Education (for example, from “Emerging” to “Developing” in Dimension 2.B.). Projects that involve students at the “Developing or “Advanced” level of “Political” engagement (Dimension 1.B and 1.C on the rubric) and/or the “Developing” or “Advanced” level of “Cultural Roots” (Dimension 2.B and 2.C on the rubric) will be given priority for funding.
10. Partnerships: Please describe how the project will be used to create or strengthen coalitions (e.g., with community partners, between teachers in the school, students from different grades, collaboration with teachers and students in other SEMIS schools, with families) NOTE: Preference will be given to proposals that involve and partner multiple SEMIS schools.
11. Assessment: Please describe how you plan to document, celebrate, and evaluate student learning.
 - a. Describe student-learning artifacts you could collect to include in the Project Portfolio.
 - b. Attach any student assessments and assessment rubrics you or the teachers are planning to use to assess student learning.

II. Budget

12. Describe in detail how the funds will be used.
13. Describe matching funds or in-kind contributions from your organization to this project (\$1,000 minimum matching funds or in-kind contribution required).

To be completed upon the completion of the project:**2. Reporting, student presentations, and Portfolio Development:**

During and following the project completion, you will be required to use the portfolio process and work with participating teachers to describe and reflect on your project. Please see our website for more details on the portfolio and to download portfolio materials and contact us if you have any questions about this process. Students from projects that receive funds are also responsible for presenting their work at the annual SEMIS Community Forum on May 13, 2013.

<http://www.semiscoalition.org/portfolios>

2. Receiving funds:

For community partners to receive project funds, all invoices must be submitted to Arthetus Abraham (aabraham@emich.edu) by **May 1, 2013**. If invoices are not received by this time, funds will be re-allocated.

**E-mail proposals to: Ethan Lowenstein: ethan.lowenstein@emich.edu
Please contact Ethan Lowenstein with any questions
regarding the proposal process.**

Proposals should be completed in the fall. **No proposals will be accepted after December 21, 2012.** Funding is allocated on a rolling basis and is limited so early submission is recommended.

Appendix E

SEMIS Project Planning Guide

SEMIS Project Planning Guide	
Project Name:	School Name:
Community Partners:	Student Leaders:
Teachers Name / Subject / Grade	
Stewardship Theme: Check all that apply <input type="checkbox"/> Water stewardship <input type="checkbox"/> Animal habitat stewardship <input type="checkbox"/> Stewardship through the arts <input type="checkbox"/> Food security <input type="checkbox"/> Land Stewardship <input type="checkbox"/> Other: _____	
Student Count: Grade Level / # of Students	Length of Project:
Project Abstract:	

Project Description: Please describe the project outcomes, focusing on the following questions
How will this learning unit foster Stewardship among all participants?
How will a local sense of Stewardship connect to Stewardship of the Great Lakes bio-region?
How is this learning unit connected to the unique identity of the school community?

Project Description Continued: Please describe the project outcomes, focusing on the following questions
What environmental issue(s) or community need(s) will this learning unit address?
What will change in the community as a result of this effort (e.g., new information, new partnerships between school and community, new services or products, political action?):
How will you measure/assess this change?

Project Description Overview				
Evaluation/Evidence:	Ecojustice and Stewardship concepts and Enduring Understandings:	Skills:	Essential Question(s):	GLCE's/HSCE's/Subject Standards Met through Project
What changes in the school and community will students and community members make? What will we see, hear, and feel as a result of their efforts <i>I will know that students have gained understanding if they are able to...</i>	What are the EcoJustice big ideas you want students to understand and remember? How will you help students to better understand the cultural roots of the social and ecological crisis?	What are the important habits of mind and heart you want students to practice and develop?	What is your school's essential question? What other inquiry questions are you using to create a spirit of student and community investigation and problem solving?	How does this project relate to standards in your subject area?
1	1	1	1	
2	2	2	2	
3	3	3	3	
Student hours involved in this project: _____ Students will be outside working on this project for approximately _____ hours (per week/per month?) during the school year.				

Appendix F

SEMIS Lesson Plan Template

Lesson Topic/Title:

Teachers involved:

Subject Area(s):

Community Partner(s):

Standards: GLCE'S/HSCE's

Objectives/Big Ideas

Students/community members will...

Know/Understand:

Be Able to Do:

What skills and habits of mind will this lesson help develop?

EcoJustice Concept(s) in lesson:

How are you connecting the lesson to EcoJustice concepts and questions?

- | | | |
|--|--|--|
| <input type="checkbox"/> Androcentrism | <input type="checkbox"/> Ethnocentrism | <input type="checkbox"/> Progress and Growth |
| <input type="checkbox"/> Anthropocentrism | <input type="checkbox"/> Hierarchized Thinking | <input type="checkbox"/> Scientism |
| <input type="checkbox"/> Commodification | <input type="checkbox"/> Individualism | <input type="checkbox"/> Value Dualisms |
| <input type="checkbox"/> Commons & Enclosure | <input type="checkbox"/> Mechanism | <input type="checkbox"/> Other(s): |

Stewardship Area(s):

- Animal Habitat
- Arts
- Food Security
- Land
- Water
- Other(s):

Relevance or Connection to School's Essential Question

Materials Needed

Activities/Procedure

Assessment/Evaluation

How will I know what students have learned?

SEMIS Support

What do I need to actualize this lesson?

A) Curriculum Coaching:

B) Community Partner Support:

C) Liaison Support:

D) Other Support:

Appendix G

EcoJustice Essential Question Germinator

The following checklist is designed to help you make sure that the EcoJustice essential question that you design as a school is a powerful one.

Powerful EcoJustice essential questions are “fertile” (like rich soil teeming with life) because they have the following qualities:

<u>Potential Question:</u>		
Criteria for a powerful EcoJustice essential question:	Check Here	Comments/questions
The question generates more and more questions.		
There is no “right answer” to the question.		
There are multiple approaches to answering the question.		
The question elicits multiple perspectives and voices and therefore engenders passionate debate.		
Answering the question can dramatically affect a person’s and community’s quality of life.		
All students can connect to the question regardless of prior experience, culture, grade level, ability, and learning style(s).		
The question can be used to drive instruction in every discipline and provide conceptual “bridges” between disciplines.		
The question provides a way to meet multiple state and national content standards.		
The question addresses cultural aspects of a local problem (e.g. How does consumerism lead to polluting the rivers and lakes in our watershed?).		
The question helps students develop a deep understanding of EcoJustice concepts (e.g.		

consumerism, ethnocentrism, the illusion that we are dis-embedded from nature, etc.).		
The question is local, <i>place-based</i> , and can only be understood within the “history of one’s place.”		
The question can effectively create a “bridge” to global issues, histories, debates, cultural mindsets, and conflicts.		
The question can “anchor” the school and community in common inquiry, discourse, debate, and action.		
The question leads to the opportunity for building deeper relationships and networks with “the community” (including other SEMIS schools, families, community elders, organizations, local government, non-profits, businesses, etc.).		
The question leads to local and regional civic action around issues of social and environmental stewardship.		
The question articulates EcoJustice concepts in a language that can be understood and embraced by multiple audiences including students, other colleagues, administration, parents, and local community members.		

Appendix H

EcoJustice Curriculum Design Checklist

The following checklist is a tool designed to help you reflect on your curriculum design.

<u>Your Essential Question:</u>		
Criteria for a powerful EcoJustice curriculum design	Check Here	Comments/questions
GOALS		
FOCUS ON SIGNIFICANT CONTENT At its core, the _____ (project, unit, etc.) is focused on teaching students important knowledge and skills, derived from Common Core standards and key concepts at the heart of academic subjects.*		
DEVELOP 21st CENTURY SKILLS Students build skills valuable for today’s world, such as critical thinking/problem solving, collaboration, communication, and stewardship, which are taught and assessed. Skills include <u>how to analyze</u> the cultural mindsets that contribute to a local problem (e.g. How does consumerism lead to polluting the rivers and lakes in our watershed?), and how to develop an <u>informed vision</u> for the present and future.*		
INTERDISCIPLINARY AND CROSS-GRADE CONNECTIONS Includes concepts, themes, questions, and understandings that provide conceptual “bridges” between disciplines and allow for vertical alignment across grades, so that students develop more sophisticated understandings as they get older.		
PROCESS		
ENGAGE STUDENTS IN COMMUNITY INQUIRY Uses local community, watershed, and Great Lakes region as the context for engaging in a rigorous, extended process of asking questions, using resources, and developing answers.*		
ORGANIZE TASKS AROUND ESSENTIAL QUESTIONS Project/unit work is focused by an open-ended question (or questions) that students explore or that captures the task they are completing.*		
ESTABLISH A NEED TO KNOW (RELEVANCE) Students see the need to gain knowledge, understand concepts, and apply skills in order to answer the Essential Question(s) and create project products, beginning with an Entry Event that generates interest and curiosity. Students see that seeking answers to the Essential Question(s) and		

engaging in project inquiry can dramatically affect their community's and their own quality of life.*		
CREATE DISCUSSION AND DEBATE The project/unit and essential question elicit multiple perspectives about important issues of community concern and allow for students to engage in class, school, and community debate. Attention is given to creating a safe and respectful environment for discussions and debate to occur.		
ENCOURAGE VOICE AND CHOICE Project/unit is differentiated so that students make some choices about the products to be created, how they work, and how they use their time, guided by the teacher and depending on age level and experience with problem-based learning.*		
INCORPORATE REVISION AND REFLECTION The project/unit includes processes for students to use feedback to consider additions and changes that lead to high-quality products, and think about what and how they are learning.*		
ARTICULATE QUALITY CRITERIA Clear and high expectations for project quality are articulated in the form of checklists and/or rubrics. Students are involved in helping to create these quality criteria.		
INFORMED STEWARDSHIP ACTION		
PUBLIC ENGAGEMENT AND CIVIC ACTION Students present their work to other people, beyond their classmates and teacher. Students take local and regional civic action around issues of social and environmental stewardship.*		
COALITION BUILDING Project/unit provides opportunities for building deeper relationships and networks with "the community" (including other SEMIS schools, families, community elders, organizations, local government, non-profits, businesses, etc.) and finding local wisdom about how to live more sustainably.		

*Quoted or adapted from "PBL Essential Elements Checklist," 2011, Buck Institute for Education