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Examining the Role that Environmental Studies Programs in Advancing the Environmental Justice Movement: A Case Study of Bard College's Environmental and Urban Studies Program

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Examining the Role that Environmental Studies Programs in Advancing the Environmental
Justice Movement: A Case Study of Bard College's Environmental and Urban Studies Program

Senior Project Submitted to
The Division of Social Studies
of Bard College

by
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Annandale-on-Hudson, New York

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This project is dedicated to my loving parents who have always encouraged me to work hard and never take any opportunity granted.

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Introduction

The environmental justice (EJ) movement is a network of organizations and individuals who are fighting to secure the right to a healthy environment for all people. At the forefront of the movement are the frontline communities that bear the disproportionate impact of environmental burdens, burdens that have been largely created by a society that these communities have been marginalized from. These communities, often lacking the resources and political clout needed to participate fully in environmental decision making processes, collaborate with various organizations and institutions in order to gain leverage against the groups that harm their environments and livelihoods. One such collaboration occurs between EJ communities and institutions of higher education.

Colleges and universities have access to an abundance of knowledge and resources that can be used to support EJ communities. Environmental studies programs at these institutions are actively training the next generation of environmentalists to tackle the greatest environmental problems faced by society, which will necessitate an examination of the social inequities that both exacerbate and are exacerbated by environmental issues. This project will examine the role that environmental studies programs have played in advancing the EJ movement, focusing on the ways in which the curriculum structure of these programs can be shaped to better reflect the ideologies of the EJ movement. I explore this topic using the Bard College Environmental and Urban Studies (EUS) program as my case study. In my analysis, I will determine the extent to which the curriculum of the Bard EUS program embodies the ideals of the environmental justice movement and prepares students to actively uphold these ideals in their work as environmentalists.

In Chapter One, I provide a literature review that first outlines the emergence of the modern environmental justice movement. The second section of the literature review examines the extent to which environmental pedagogy has reflected the changes that have occurred within the environment movement. Chapter Two will outline the methods I used to conduct my research. In Chapter Three, I introduce my case study through a brief history of the Bard EUS program. I recount this history using archival research in addition to the information provided in my interviews with past and current faculty members in the program. Chapters Four and Five will take an in-depth look at two components of the Bard EUS curriculum that reflect the ideals of the EJ movement: interdisciplinarity and civic engagement.

Chapter 1: A Review of the Literature on the History of the Environmental Justice Movement and the Movement's Influence on Environmental Pedagogy

The environmental justice movement has challenged many of the core values of the traditional environmental movement, which in turn has had a major influence on the trajectory of mainstream environmentalism. At the same time, the environmental justice movement has also influenced the way that environmentalism is being taught in higher education by shaping environmental pedagogies to better reflect the movement's goals of equity and inclusion. As the movement has grown over the years, universities and colleges have been implicated in environmental justice struggles across the country. Academic institutions and their professors and students have actively participated in the movement through citizen science alliances¹ and other forms of community interaction and support. In addition, academics have played an important role in synthesizing the theoretical underpinnings of the actions and goals of the movement. As conceptions of environmentalism have shifted over the years, environmental studies programs have begun to rethink the ways in which they teach the environment.

This literature review will track the development of the environmental justice movement, and examine the ways in which the movement has impacted environmental pedagogies in higher education. I will first explore the development and evolution of the environmental justice movement as it rose to challenge the dominant environmental ideology. I will provide an overview of the traditional environmental movement, the anti-toxics movement, and the broadening of the modern environmental justice movement. In the second section, I will discuss the implications that these shifting environmental ideologies have had on environmental

¹ For more information about citizen science, see Conrad, C. C., & Hilchey, K. G. (2011). A review of citizen science and community-based environmental monitoring: issues and opportunities. *Environmental monitoring and assessment*, 176(1), 273-291.

pedagogy in higher education by focusing on trends toward intersectionality in addition to examining the role of objectivity in environmental pedagogy.

The Rise of the Environmental Justice Movement

The term ‘environmental justice’ came into popular use in the 1980s, but marginalized communities have been fighting for the right to a healthy environment long before their struggles were widely recognized. Prior to the 1980s, marginalized communities were largely ignored by the mainstream environmental movement, which focused primarily on protecting ‘pristine nature’ and the technocratic management of natural resources and spaces (Silveira, 2001; Taylor, 2011). This section will explore the ways in which the environmental justice movement rose to prominence as it challenged the core values and ideologies of the traditional mainstream environmental movement. I will begin with a brief history of the traditional environmental movement, and then discuss the emergence of the anti-toxics movement in the 1980s. Finally, I will discuss the ways in which these battles against pollution have evolved into the modern environmental justice movement, which centers social justice issues and foregrounds the voices of frontline communities.

A Brief History of the Traditional Environmental Movement

The traditional environmental movement was primarily based upon notions of conservation and preservation in response to the effects of industrialization on the natural environment at the end of the 19th century (Silveira, 2001; Taylor, 2011). Conservation focuses on the management of natural resources; and preservation focuses on the protection of natural spaces from any human

influence (Silveira, 2001). Romantic writers—such as Muir, Emerson, and Thoreau—helped to solidify images of pristine nature as the object of protection while urban spaces were disregarded by the movement. For this reason, environmentalism was primarily a movement of wealthy white men with interests in hunting, fishing, and other outdoor recreational activities (Silveira, 2001; Taylor, 2011). Marginalized populations did not see their own struggles reflected in this movement because their conceptions of ‘environment’ did not align with these images (Taylor, 2011).

The conservation and preservation foci of the traditional environmental movement were rooted in the top-down control of natural resources and ignored any social issues connected to the environment (Catton & Dunlap, 1978; Silveira, 2001; Taylor, 2011). This period of environmentalism was categorized by the “Human Exceptionalism Paradigm,” which is the idea that humans are able to surpass biological and ecological limits and therefore sustain continual progress (Catton & Dunlap, 1978, p. 42). According to this view, culture was considered separate from and superior to nature, and the key to unlimited progress was to be found in technological innovation (Anzagasty-Rodríguez, 2006; Cole, 2007). With an influx of new and unforeseen environmental issues in the latter half of the 20th century, citizens and academics began to see that the connections between culture and nature were far more complicated (Catton & Dunlap, 1978; Silveira, 2001). Catton and Dunlap (1978) argue that this period brought about a transition to the “New Environmental Paradigm,” which recognizes that humans are one part of a complex ecological system that is finite, unpredictable, and in many ways uncontrollable (p. 45). This paradigm shift was in part triggered by the growing anti-toxics movement beginning in the late

1970s, when the national public began to recognize the connections between environmental degradation and the degradation of health in communities across the country.

The Anti-Toxics Movement Bridges the Gap between Culture and the Environment

The reality that humans are in fact subject to ecological limits became glaringly clear as communities across the nation began to recognize that the poor health of their families and neighbors was directly linked to environmental degradation. These communities believed that their high rates of illness were linked to various locally unwanted land uses such as landfills, toxic waste incinerators, and recycling facilities (Epstein, 1997; Dillon & Sze, 2018; Layzar, 2016; Taylor, 2011). Additionally, Rachel Carson's *Silent Spring* (1962) brought to the national public's attention the harmful effects that toxic chemicals like DDT had on both the environment and human health (Carson, 2002). The realization that pollution is a social problem was further bolstered by studies that found that low-income communities and communities of color are faced with the disproportionate siting of toxic facilities in their neighborhoods (Taylor, 2011; Layzar, 2016; Dillon & Sze, 2018). These findings led to accusations of environmental racism, which is an important factor that contributes to environmental injustice.

Environmental justice scholars have examined which communities are most vulnerable to environmental injustice, and many studies have highlighted the importance of race as one of several determining factors (Bullard, 1994; Cutter 1995; Taylor 2000). Dr. Robert Bullard, who is considered the father of environmental justice, defines environmental racism as “any policy, practice or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups, or communities based on race or color” (Bullard, 1994, p. 1037). The history

of segregation and systemic racism in the United States left a legacy of political disempowerment amongst black and brown communities who, to this day, do not receive equal protection under the law—including environmental laws. This has been demonstrated in more recent cases, such as the water contamination in Flint, Michigan (Pulido, 2016). Scholars recognize that other factors, such as low-income status, also make certain communities more vulnerable to environmental inequities (Cutter 1995). Marginalized communities across the nation became increasingly aware of the fact that their environments were not deemed worthy of protection by the traditional environmental movement, and they began their own grassroots organizing to fight against the environmental injustice they faced.

The activists involved in the anti-toxics movement recognized that environments are socially constructed, and that these social constructions have important implications for what we deem worthy of protection (Scholsberg, 1999; Anzagasty-Rodríguez, 2006; Taylor, 2011). They opposed the idea that the term ‘environment’ should only refer to pristine natural spaces, and they broadened the term to encompass all spaces where people live, work, and play (Taylor, 2011; Dillon & Sze, 2018). This broadening of the term helped to close the artificial divide between culture and nature created by the traditional environmental movement. However, the government and corporations were slower to make such a connection, which led to lagged responses to community organizing against locally unwanted land uses. This was the case in many of the most well-known battles against toxics such as the hazardous waste contamination in Warren County, NC² and Love Canal, NY³. In these and other stories of toxic contamination,

² For an outline of the environmental justice struggle in Warren County, NC, see McGurty, E. M. (2000). Warren County, NC, and the emergence of the environmental justice movement: Unlikely coalitions and shared meanings in local collective action. *Society & Natural Resources*, 13(4), 373-387.

³ For an outline of the Love Canal disaster, see Fjelland, R. (2016). When laypeople are right and experts are wrong: Lessons from love canal.

an important aspect of the struggle was for the right to self determination (Taylor, 2000). The communities fighting these battles often lacked the resources and political clout to participate in decision making processes that affected their communities and livelihoods, so they turned instead to alternative methods, such as community science, to gain leverage.

When community members began to experience the ill effects of living near unwanted land uses such as landfills and waste incinerators, the burden of proof that the unwanted land uses caused their health issues fell on the community. For this reason, community members often turned to community science as a means to gather the proof they needed to support their cause (Bacon, 2013; Lave, 2015). When government officials were slow to conduct effective health assessments, community members took matters into their own hands by reaching out to scientists and researchers at local universities or colleges or through their own social networks. Scientific reports helped communicate the scope of the problem to the general public in a concise manner and garnered support for their cause (Fjelland, 2016). This was seen in the case of Love Canal where citizen driven community science efforts helped to bolster the community's case (Fjelland, 2016). The process of gaining leverage in the absence of important resources was incredibly difficult for communities that were already overburdened with poor living conditions. However, over time, a network began to form across the nation to support communities in their struggles through the sharing of resources and knowledge (Epstein, 1997).

These networks eventually broadened the environmental justice movement to incorporate struggles beyond the anti-toxics movement, including issues of food insecurity, gentrification, indigenous sovereignty, and more (Taylor 2000). Members of the environmental justice network recognize that all of these socio-environmental problems are inherently linked, and that real

solutions will require systemic changes and an overhaul of our current notions of environmentalism. The modern environmental justice movement strives not only to address these issues, but to center them within the environmental movement, because they realize that the health of our environment and the health of our communities are inherently linked.

Broadening the Scope of Environmental Justice

As the network of organizations and communities fighting their own environmental justice battles developed, a more cohesive framework for environmental justice emerged. In 1991, the *Principles of Environmental Justice*⁴ were developed by delegates to the First National People of Color Environmental Leadership Summit. These principles have served to guide this ever-growing movement as different communities and organizations within the network integrated different environmental justice issues beyond the realm of the anti-toxics movement, such as issues of housing security, food security, indigenous sovereignty, and more into the EJ movement's agenda.

Unlike the traditional environmental movement that valued one specific conception of the “environment,” diverse definitions of “environment” and “environmental justice” are used by the different groups within the environmental justice network, and no singular definition prevails over others (Schlosberg, 1999; Taylor, 2011). Rather, Schlosberg (1999) recognizes that the network structure of the environmental justice movement celebrates plurality by allowing different communities and organizations within the network to retain their own definitions of the environment and their own approaches to environmental justice based on their social experiences

⁴ For more information about the principles, visit <https://www.ejnet.org/ej/principles.html>.

and identities. This sense of plurality is crucial for community members to feel empowered and supported by the larger movement, as they strive for their ultimate goal of self-determination.

As was the case with the anti-toxics movement, the broader environmental justice struggle runs parallel to the struggle for democracy. Environmental justice communities not only suffer from the disproportionate exposure to environmental burdens, but also from the stress that comes from feeling like they cannot do anything to ameliorate their situations. Their struggle is also about the right to participate in decision-making processes that they have all too often been left out of, due to a lack of political clout and important resources (Taylor, 2011; Dillon & Sze, 2018). The environmental justice movement strives to ensure that people of color and other marginalized people are included in democratic decision making processes, especially when the decisions directly impact their environments and livelihoods. Furthermore, the modern environmental justice movement also recognizes that the struggles of environmental justice communities must be centered in environmentalism because these communities are living on the frontlines of environmental disaster.

Environmental justice scholars today recognize that environmentalism needs to do more than merely include social justice concerns as an additional component for the movement to consider. Many authors are increasingly suggesting that social justice issues must be *centered* in environmentalism in order for just and sustainable progress to occur (Taylor, 2011; Dillon & Sze, 2018; Baker, 2019). They recognize that issues of systemic racism and poverty are directly linked to environmental issues, and that one cannot be solved without the other. Dillon and Sze (2018) make the connection between the modern day Black Lives Matter movement, which is primarily viewed as a social justice movement, and the environmental movement by examining

the ways in which police brutality and pollution both restrict the breath of people of color. In the realm of climate justice, Baker (2019) provides an “anti-resilience framework” that questions the use of the concept of “resilience” in energy transitions. She poses the question: “What are we hoping to bounce back to?” (p. 6). The author suggests that our energy system requires transformation over resilience. She argues that the system must be decolonized as it is decarbonized, which means that frontline communities must be meaningfully included in energy transitions and must be the first to benefit from them.

As the environmental movement has evolved over the years to include and eventually center issues of social justice, environmental studies programs have attempted to keep up with these changes in order to train the next generation of environmentalists. The next section explores the ways in which scholars of environmental pedagogy are learning from the environmental justice movement and grappling with the inclusion and centering of social justice issues.

How has the Environmental Justice Movement Influenced Environmental Pedagogy?

Many of the same transitions away from traditional environmental ideologies that happened in the development of the environmental justice movement are mirrored within environmental studies programs in colleges and universities across the nation. These programs strive to train the next generation of environmentalists using current approaches and best practices, which are increasingly influenced by environmental justice ideologies. However, much like the environmental movement in general, many of the traditional ideologies continue to pervade ways of thinking about and interacting with the environment in higher education (De Chiro, 2006; Cole, 2007; Maina-Okori et al., 2018). I will discuss two ways in which traditional

environmental ideologies linger in environmental pedagogy in colleges and universities and the ways in which scholars are seeking to transform environmental education to better reflect the modern environmental justice movement. First, I will discuss the nature/culture divide that persists in environmental education, and how scholars are seeking to challenge this divide through intersectionality and interdisciplinarity. Next, I will discuss how the pursuit of objectivity has upheld dominant ideologies in environmental pedagogy while excluding a wide range of actors from participating in environmental knowledge production, in addition to the ways in which scholars are rethinking the role of objectivity in the environmental classroom to be more inclusive of alternative forms of knowledge production.

Intersectionality in Environmental Studies: Closing the Gap between Nature and Culture

Scholars generally recognize that environmental pedagogies in higher education have traditionally been grounded in the same nature/culture divide that dominated the traditional environmental movement (De Chiro, 2006; Cole, 2007; Maina-Okori et al., 2018). This divide manifests at different levels of environmental academia, including at the classroom and program levels. At the classroom level, environmental pedagogy has traditionally lacked diverse sociocultural perspectives on environmental knowledge production, and scholars have sought to address this lack by introducing intersectional environmental analyses (Maina-Okori et al., 2018). At the level of the program, environmental studies programs have been grounded in the tradition of disciplinary specialization, which divides the hard sciences (representing nature) from the social sciences (representing culture). Although environmental studies programs have tended to be ‘multidisciplinary’ in that they include multiple disciplines, many scholars are

advocating for increased interdisciplinarity in environmental programs, which would better represent the ideals of the environmental justice movement (De Chiro, 2006; Kahn & Humes, 2009; Maina-Okori et al., 2018).

As the environmental justice movement recognized the interconnections between social and environmental issues (Taylor, 2000), scholars recognized the importance of intersectionality in environmental pedagogy for challenging the nature/culture divide (De Chiro, 2006; Kahn & Humes, 2009; Maina-Okori et al., 2018). The concept of intersectionality was developed by Black feminist scholar, Kimberlé Crenshaw, to challenge the mainstream feminist movement, which largely catered to the struggles of white women while ignoring the struggles of women of color (Crenshaw, 1991). She recognizes that the experience of black women is shaped largely by the intersections of their racial and gendered identities, and she uses intersectionality as a lens through which to highlight “the need to account for multiple grounds of identity when considering how the social world is constructed” (Crenshaw, 1991, p. 1245). Crenshaw’s concept of intersectionality has been applied to many different fields, including the study of environmental justice.

Environmental justice scholars have recognized that environmental justice work is inherently intersectional, because of its focus on the ways in which the “intersection of specific economic, social, and environmental conditions” impact a person’s ability to access a clean environment and participate in environmental decision making processes (De Chiro, 2006, p. 99). De Chiro (2006) recognizes that an intersectional approach to environmental justice issues can expose the compounding discriminations faced by some in addition to exposing the privilege of others in terms of access and participation (p. 99). The author argues that environmental

pedagogy must mirror the intersectional nature of environmental justice to help students understand these interconnections. Scholars can integrate the concept of intersectionality into environmental pedagogy on two levels: 1) on the level of the classroom, professors can integrate intersectional environmental literature into their syllabi, and 2) on the level of the program, professors can offer classes that build an interdisciplinary curriculum. I will first discuss how environmental education literature has integrated an intersectional lens into environmental pedagogy in the classroom.

In the Classroom: Intersectional Environmental Literature

Including a diverse array of intersectional environmental literature in environmental curricula can highlight the complexity of the human relationship to the environment and exposes students to a wide variety of perspectives with which to approach environmental learning. Maina-Okori et al. (2018) explore the ways in which environmental education literature has sought to address various intersectional issues, such as the exclusion of women and other marginalized groups. They highlight various movements such as ecofeminism, queer pedagogy, and Indigenous and decolonizing perspectives. Like the recent trend in the environmental justice movement calling for the centering of social justice issues, the authors call for a refocusing on issues of social justice and sovereignty within intersectional environmental pedagogy.

Much of the existing intersectional environmental pedagogy literature highlights the intersection between singular social antagonisms—such as issues concerning race, gender, or sexuality—and environmental issues (Kahn & Humes, 2009). For example, there is a deep

literature in the field of ecofeminism⁵ that considers the intersections between struggles against the patriarchy and environmental struggles. However, scholars are calling for the expansion of intersectional approaches that would address multiple intersections in addition to considering non-human actors, such as a biocentric approach (Kahn & Humes, 2009; Maina-Okori et al., 2018).

Biocentric approaches to environmental pedagogy seek to challenge anthropocentric ideologies, including the intersectional approaches described above, by assigning intrinsic value to nature and non-human species (Kahn & Humes, 2009; Ritchie, 2013; Rottman, 2014). Kahn and Humes (2009) suggest that the inclusion of non-human species in environmental justice considerations can deepen intersectional analyses by challenging fundamental power structures. They do not disregard the importance of social analyses in environmentalism, but rather argue for expanding and connecting these analyses to create a “total liberation pedagogy” that works “intersectionally across and in opposition to all oppressions” (p. 181). Other authors highlight the necessity of centering Indigenous ways of knowing in intersectional biocentric analyses (Maina-Okori et al., 2018; Ritchie, 2013). Both Ritchie (2013) and Maina-Okori et al. (2018) recognize that Indigenous knowledge connects humans to place by highlighting the relationships between humans and nature, including connections between humans and non-human species.

Exposing students to intersectional analyses in the classroom challenges the nature/culture divide by revealing the complex ways in which people with diverse and multi-layered social identities interact with their environments. The next section will explore how scholars can integrate the concept of intersectionality at the program level.

⁵ For more information about ecofeminism, see Buckingham (2004), Gaard (2015), and Mallory (2018).

In the Program: Interdisciplinary Courses

At the level of the program, environmental studies programs should seek to offer classes that are interdisciplinary in nature, in order to embody an intersectional approach to environmental pedagogy. Disciplinary specialization has been a major part of academia since the beginning and has been crucial for building foundational knowledge about the world (Brewer, 1999). However, Brewer (1999) recognizes that specialization has had several limitations, particularly in an environmental context, including the production of fragmented knowledge that is often not easily applied to real-world problems (p. 327). Additionally, disciplinary specialization perpetuates the nature/culture divide by separating the hard sciences (representing nature) from the social sciences (representing culture) (Cole, 2007). Interdisciplinarity, defined as “the appropriate combination of knowledge from many different specialities—especially as a means to shed new light on an actual problem,” could offer a solution to these problems that aligns with intersectional approaches to pedagogy (Brewer, 1999, p. 328).

Interdisciplinarity offers a more holistic approach to environmental pedagogy by highlighting the real-world complexities of the human relationship to the environment. Just as intersectionality accounts for “multiple grounds of identity” in how the social world is constructed, interdisciplinarity accounts for multiple disciplinary approaches in how the social world is constructed. Brewer (1999) recognizes that environmental problems are often constructed from a particular disciplinary standpoint, whereas a more accurate portrayal of these problems should be grounded in an interdisciplinary standpoint (p. 329). Scholars recognize that

environmental issues must be approached from a problem-oriented perspective which requires collaboration between different disciplines (Brewer, 1999, Lélé & Norgaard, 2005).

However, there are several institutional barriers to achieving interdisciplinarity within both research and university settings. One problem lies in the existing dominant paradigm of specialization. Those seeking to apply interdisciplinarity must find a way for these new programs and courses to coexist within the dominant disciplinary structures, which often creates significant tension (Brewer, 1999, p. 332). Another institutional barrier arises in how certain disciplines are often considered to be more valid for addressing particular problems. Lélé and Norgaard (2005) recognize that “the relative importance or validity of a direction of inquiry or approach is not determined simply by some objective recognition by academics of its ability to generate more valid knowledge than another approach,” but rather that societal forces determine the validity of one discipline over another in different cases (p. 968). This designation of validity manifests in the distribution of resources (such as funding) that different disciplines receive to conduct research, and interdisciplinary programs must also compete for these resources by asserting their validity over the traditionally accepted disciplinary approaches.

Another barrier is created by the incompatibility of the different disciplines’ research methodologies, research ‘languages,’ as well as the assumptions and values underlying their research (Brewer, 1999; Lélé & Norgaard, 2005). These incompatibilities prevent collaboration between different disciplines that have entirely different ways of producing knowledge. Lélé & Norgaard (2005) recognize that these differences arise between hard sciences and social sciences (such as the differences between biology and anthropology), but also between different disciplines within each of these categories (such as the differences between biology and physics),

creating compounded difficulties for spanning differences. The authors note discrepancies in values, theories, models, and worldviews as the most significant barriers to interdisciplinarity at both levels (p. 968).

Despite these challenges, scholars believe that interdisciplinarity is still a worthwhile pursuit, and they offer potential solutions to overcome these challenges. Brewer (1999) suggests that interdisciplinary approaches may be more successful if they “take root in the interstices between existing programs, without threatening the dominant paradigm” (p. 332). He also emphasizes the importance of training the next generation of interdisciplinary researchers. Other scholars suggest that professors teaching interdisciplinary courses should encourage their students to think with flexibility and plurality. Scholars recognize the importance of critical thinking and self-reflection on the value judgements that underlie different disciplines, as well as a willingness to keep an open mind about different methods of knowledge production (Jones & Merritt, 1999; Lélé & Norgaard, 2005). Additionally, both Brewer (1999) and Lélé and Norgaard (2005) recognize the need for incentives and motives at the institutional level. Although common concern for environmental issues can provide incentive for the creation of interdisciplinary courses, a more sustained approach will require institutional incentives that deconstruct traditional barriers to collaboration.

Increasing the number of interdisciplinary courses within environmental studies programs will train the next generation of interdisciplinary researchers to be able to embody the flexible and plural ways of knowing needed to further explore interdisciplinary connections in environmental knowledge production. Interdisciplinary course options coupled with the

incorporation of intersectional environmental analyses in the classroom will effectively train students to find solutions to real-world issues that incorporate an inclusive array of perspectives.

An intersectional approach to environmental pedagogy at both the classroom and program levels challenges the nature/culture divide that most explicitly manifests in academic settings as a division between hard science and social science. Cole (2007) notes that this division is particularly ingrained within academia due to the common practice of positing scientific knowledge as ‘objective’ in contrast to ‘subjective’ social science. Rethinking the role of objectivity in the environmental classroom will also be critical for addressing this division. A new approach to objectivity will have additional benefits for environmental pedagogy, a topic which will be explored in more detail in the final section of this review.

Rethinking the Role of Objectivity in the Environmental Classroom

In the modernist tradition, academic settings have strived to create ‘apolitical’ and ‘objective’ spaces of critical thought (Wing, 2003). Scholars are expected to discuss and disseminate objective facts, not their personal or political opinions, and so they developed protocols for reducing bias in their research, such as the scientific method. However, notions of objectivity were later challenged by postmodern scholars, who began to question whether or not objectivity was actually an attainable goal. These scholars claimed that all research is grounded within the researcher’s subjective reality, and that it is impossible to divorce knowledge from its social context (Lerum, 2001; Wing, 2003). Furthermore, they recognize that a veil of objectivity is often used to legitimize Western ideologies, which can then be used to justify processes of colonization and exploitation (Cole, 2007; Lerum, 2001).

In this sense, objectivity is used as a rhetorical tool to establish the validity and superiority of one type of environmental knowledge production over others. This suggests that other forms of knowledge production, such as religion, superstition, or even less formal kinds of science, such as citizen science, are biased and unreliable (Wing, 2003). This can present many challenges to environmental justice communities, who rarely have access to the highly technical scientific protocols used by professional researchers. For example, in the story of Love Canal, when community members began to suspect that the health complications faced by people in their community were directly linked to the toxic contamination found in their community, they conducted their own surveys which demonstrated this link (Fjelland, 2016). However, when the state conducted its own highly technical scientific impact assessment, the link between the health complications and the contamination was obscured, causing the state to lag in its response to relocate community members away from the toxic contamination. This example illustrates how the prioritization of ‘objective’ scientific knowledge over other kinds of knowledge can create significant harm in a community.

Despite these postmodernist critiques, many scholars do not believe that academia should abandon the pursuit of objectivity altogether, which could lead to a moral relativism that would diminish our ability to assess competing claims and make knowledge that is both useful and relevant in real world contexts (Wing 2013). Rather, these scholars suggest the adoption of more nuanced approaches (Lerum, 2001; Wing, 2003). These scholars seek to move beyond the objectivity/subjectivity duality by upholding the most basic assumption of science: that a real world exists independent of human cognition, and that hypotheses about that world can be tested

using controlled methods of observation and experimentation, while simultaneously recognizing that social factors are embedded within every step of the research process (Wing, 2003).

This approach allows scholars to meaningfully contribute to real world environmental problem solving without claiming universal authority through the cloak of objectivity. This leaves room for alternative forms of knowledge production to be considered. Scholars can implement this more nuanced approach by letting go of what Lerum (2001) refers to as their “academic armor,” which is created when researchers hide their personal identities and moral values from their research and remain emotionally detached from their work. In environmental pedagogy, this approach calls on professors to encourage students to interrogate the moral values that underlie their work as environmentalists and to stimulate emotional investment in the classroom.

Morality in Environmental Pedagogy

In the modernist tradition, researchers have tended to conceal their personal identities from their research, which contributes to their academic authority as ‘objective’ researchers over their research subjects. Contemporary scholars argue instead for the case of “strong objectivity,” which Wing (2003) describes as the process of taking into account the social processes, assumptions, and moral values that influence a researcher’s work (p. 1809). Lerum (2001) suggests that because a researcher’s personal bias is unavoidable, explicitly stating their subjective positions and biases “can actually strengthen rather than invalidate an objective stance” by revealing the assumptions and biases that may influence the researcher’s findings (p. 468).

In a classroom setting, this means that professors should encourage students to interrogate their own social positions in relation to their research as well as the moral values that underlie their work as environmentalists (Anazagasty-Rodríguez, 2006; Cole, 2007; Kruidenier and Morrison, 2013). Anazagasty-Rodríguez (2006) explains that the study of environmental justice has deeply moral roots, and that the process of teaching this subject necessitates the “conscientization” of students in which they deepen their awareness of their social and cultural realities (p. 94). Similarly, Kruidenier and Morrison (2013) recognize that helping students work through the moral values that underlie their environmental knowledge is also helpful for preparing students to participate in civic deliberations about justice.

Scholars suggest that exposing students to real-world examples of environmental organizing and political work can force students to think critically about their own assumptions and moral values, as they encounter diverse perspectives and value systems (Anazagasty-Rodríguez, 2006; De Chiro, 2006; Kahn & Humes, 2009). Cole (2007) posits environmental education as an inherently political act due to the recognition that environmental literacy transfers “culturally specific” bodies of knowledge to students that “foster particular ways of thinking and acting in the world” (p. 39). Exposing students to real world political negotiations can stimulate critical thinking about moral value systems, and it can also stimulate emotional investment in the learning process.

Emotional Investment in the Classroom

Another way that scholars have traditionally maintained their academic authority as ‘objective’ researchers is by maintaining an emotional detachment from their work (Lerum,

2001). However, contemporary scholars recognize that emotional investment in research and education can be beneficial for both professors and students in a variety of ways (Lerum, 2001; Palmer et al., 2018; Ritchie, 2013). Lerum (2001) describes how emotional investment in research can lead to important personal transformations that may influence one's findings, as researchers who are emotionally invested in their work are more likely to challenge their personal values and assumptions.

Similarly, scholars claim that emotional investment in the classroom can change the way that students understand environmental issues (De Chiro, 2006; Goralnik et al., 2012; Kahn & Humes, 2009; Ritchie, 2013). Goralnik et al. (2012) explain how emotional involvement in learning can improve attention, focus, and memory and can also create in students "a sense of responsibility to address issues" (p. 414). An important goal of environmental academia is to inspire the next generation of environmentalists to find solutions to environmental problems. Scholars recognize that education can be crucial for cultivating counter-hegemonic knowledge, which challenges dominant ideologies. This knowledge can stir feelings that inspire protest and rebellion against dominant systems (Kahn & Humes, 2009; Ritchie, 2013). Ritchie (2013) describes the role that "hegemonic apathy" has played in the creation of the current climate crisis and argues that in order to effectively combat the climate crisis, environmental pedagogy must prioritize emotion over cognition (p. 36).

Environmental academia has not abandoned the goal of objectivity entirely, but scholars are increasingly recognizing their role in the production of environmental knowledge. As the divide between objectivity and subjectivity blurs, researchers engage with the world more honestly and effectively by recognizing the influence of their personal biases and value systems

on their research. This challenges the authority of Western processes of knowledge production, leaving room for other forms of knowledge production to enter the realm of environmental decision making as researchers recognize that all environmental knowledge is political to some extent.

Conclusion

Environmental justice is quickly moving to the forefront of the environmental movement as it becomes increasingly clear that environmental outcomes are directly linked to our social identities. In order to embody the ideals of the environmental justice movement, scholars have begun to rethink traditional approaches to environmental pedagogy. These scholars are challenging the nature/culture divide by advocating for intersectionality and interdisciplinarity in environmental studies curricula, and rethinking the role of objectivity in higher education in order to challenge the dominance of Western forms of knowledge production. These approaches help to ensure that a diverse array of perspectives are included within environmental knowledge production, and that students will become active participants in environmental problem solving. Higher education presents a unique opportunity for addressing the greatest environmental problems of our time, and scholars have a responsibility to ensure that the next generation of environmentalists are trained to address these problems effectively and equitably.

In the next few sections, I will examine the Bard Environmental and Urban Studies program as my case study in order to understand the extent to which the program embodies the ideals of the EJ movement and prepares students to advance the goals of the EJ movement. First, I will discuss the methods used for my research. Next, I will lay out a history of the program and

its goals, referencing a series of influential documents in addition to including several faculty members' perceptions of the development of the program. The following two chapters will delve into an examination of the program's pedagogy, according to the two important themes that emerged from this literature review: interdisciplinarity and civic engagement.

Chapter 2: Methods

This project seeks to examine the ways in which environmental studies programs advance the environmental justice movement. I use the Environmental and Urban Studies (EUS) program at Bard College as my case study. First, I map out the development of the Bard EUS program, beginning with the Community, Regional, and Environmental Studies program founded in 1971 at the college. In order to construct this history, I relied on an analysis of key documents which was supplemented with information from semi-structured interviews with current and former faculty members. The interviews allowed me to include faculty perspectives on key moments in the programs in addition to their perspectives on how the goals of the program have changed over time. I also included information from a course list analysis. Next, I explore the ways in which the Bard EUS program has shaped its curriculum in order to assess whether or not the curriculum reflects the ideals of the environmental justice movement and trains students to

uphold these ideals in their future work as environmentalists. I will focus on two key subjects that were highlighted in the literature review: interdisciplinarity and civic engagement. These sections rely on an analysis of key documents, information from the semi-structured interviews with current and former faculty members, semi-structured interviews with current students, responses from a student survey, and a course list analysis. Each method will be described in more detail below.

Analysis of Key Documents

I analyzed five documents that were key to the development of the program in order to understand the structure and goals of the program, and how they have changed over time. The first document was an untitled planning document for the Center for Community, Regional, and Environmental Studies from 1975. The second document was the Mellon grant proposal, resubmitted in 2010. The third document was a statement released by the EUS steering committee in response to student protests in February 2016. The fourth document was the self study conducted in 2018 and released in 2019 for the program's first program review. The fifth document was the steering committee's response to the recommendations from the external review released in fall 2019. These documents informed a large portion of the history of the EUS program laid out in Chapter 3. They also contributed important information to Chapters 4 and 5.

Student Survey

In order to gain the perspective of current students, I conducted a survey for students who had moderated into the program or were considering moderating into the program. The survey questions can be referenced in the appendix.

The survey was sent to EUS students via our program's listserv, and responses were recorded anonymously. The survey questions focused on the student experience in the program. First, it collected demographic information about the students' age, gender, racial identity, and whether the student was from a rural, urban, and/or suburban area. Next, the survey collected student information about what year the student was and if they had moderated into the program. The next four sections asked the students about their experiences in the program, their understanding of key issues and concepts, in addition to any experiences they had with activist/civic engagement during their time at Bard. These sections were labeled Environmentalism, Environmental Justice, Activism/Civic Engagement, and Other. The final section asked respondents to indicate if they would be willing to participate in a follow up interview.

Semi-Structured Interviews

Semi-structured interviews allowed me to gain a deeper understanding of how faculty and students perceive the structure and goals of the program, in addition to illuminating their particular experiences with the program.

I conducted a series of semi-structured interviews with seven current and past faculty in addition to three current students. The sample interview questions can be referenced in the appendix. The questions were focused on their experiences with the Bard EUS program, and

their experiences with environmental and social justice activism. These interviews were conducted through zoom and lasted approximately 30-45 minutes long. I recorded the interview using the Zoom recording feature, and I took notes.

I recruited current and past faculty members who were influential in shaping the EUS program over the years by emailing them. I began with the current and former directors of the EUS program and current members of the steering committee. My faculty advisor, who is a steering committee member, provided me with the names and contact information of former faculty members who have helped shape the program. I used snowball sampling to recruit other influential faculty members by asking my interview subjects if they knew of any other faculty members that have been influential to the program.

In order to recruit current students, I included a question on the survey asking the respondents if they would be willing to participate in a follow-up interview. Only four students indicated that they would be willing to participate in a follow-up interview, and only three responded when I followed up. I interviewed one senior, one junior, and one sophomore. The senior and junior had already moderated into the program, and the sophomore had not yet moderated.

The interviews with faculty members helped inform the history of the program in Chapter 3, and provided a large portion of the data for Chapters 4 and 5. In order to protect the identities of faculty members, I will not be attributing the quotes that I include, except in particular instances. The interviews with students helped to inform Chapters 4 and 5 in combination with the responses from the student survey, but the student perspective is somewhat lacking and requires further research.

Course List Analysis

Finally, I conducted a course list analysis of the EUS course lists each semester beginning in Fall 2010. I recorded the total number of courses offered, and then recorded the number of EUS courses, graduate level courses, and cross listed courses. Then, I categorized the cross listed courses by program. This allowed me to find the average number of cross-listed courses offered by each program each semester.

Chapter 3: A History of the Bard Environmental and Urban Studies Program

The term “environmental studies” was first coined by George Perkins Marsh in his book entitled *Man and Nature (1864)*, but environmental studies programs did not become popularized in colleges and universities until the 1990s (Marsh, 2021). Many academic disciplines dealt with the “environment” as a topic, but there were no programs dedicated entirely to environmental studies for most of the 20th century. An early precursor to environmental studies programs was the Yale School of Forestry established by the famous environmentalist Gifford Pinchot in 1900 (Pinchot, 1998, p.152). The first degree in environmental studies was awarded by The New York State College of Forestry at Syracuse University in 1956 (ESF Office of Communications, n.d.), and the first full-fledged environmental studies program in the United States was established in 1965 at Middlebury College (About the Program, n.d.).

The first iteration of the Bard Environmental and Urban Studies program was established in 1971 and was one of the first environmentally-focused programs to develop in response to the rising public environmental consciousness that was developing across the nation at the time. With the publishing of Rachel Carson's *Silent Spring* in 1962 and the first Earth Day in 1970, the national public began to awaken to the devastating impacts of toxic chemicals on the environment and human health. Bard's program, referred to as the Center for Community Regional and Environmental Studies (CRES), was created to prepare students to tackle real-world environmental problems while simultaneously serving to support and empower the local community to tackle various environmental and social issues affecting the region. This chapter will track the development of the Bard Environmental and Urban Studies program over time, beginning with the history of the Center for Community, Regional and Environmental Studies.

Timeline

- 1860** — Bard College was founded, originally named St. Steven's College, as an Episcopalian seminary school for men.
- 1864** — George Perkins Marsh coined the term "environmental studies" in his book entitled *Man and Nature*.
- 1900** — Gifford Pinchot established the Yale School of Forestry, which can be considered an early precursor to contemporary environmental studies programs.
- 1940s** — St. Stephen's College renamed themselves Bard College after their founder John Bard. The college opens to women.
- 1950s** — The New York State College of Forestry at Syracuse University established a BS in environmental studies, awarding its first degree in 1956.

- 1960s** — Various professors at Bard were teaching classes related to the environment, but there was no program related to environmental studies.
- 1962** — Rachel Carson published *Silent Spring* which stirred national public awareness of the impacts of toxic chemicals on both the environment and human health.
- 1965** — Middlebury College created a full-fledged Environmental Studies Program, making it the oldest undergraduate ES program in the United States.
- 1970s** — The first Earth Day took place on April 22nd in 1970. During this decade, environmental and social activism, including student protests, erupted across the country and in the Hudson Valley. Environmental consciousness was spreading across the nation.
- 1971** — Three professors from different disciplinary backgrounds joined together to start the Center for Community Regional and Environmental Studies (CRES) at Bard, one of the earliest environmentally focussed programs in the country and one of the first interdisciplinary programs at the college.
- 1990s** — Environmental Studies became a popular and prevalent major in colleges across the nation.
- 2004** — CRES changed its name to the Environmental Studies program at this time. The Dean of the College, Michele Dominy, appointed a commission to review the environmental studies program and to build a new curriculum to better prepare students to make a difference in the world.
- 2008** — The program used the commission's findings to apply for a grant from the Andrew Mellon Foundation in order to be able to expand the program in the necessary directions, including hiring a director and dedicated faculty lines. The grant proposal was initially put on hold.
- 2010** — The program reapplied for the Mellon Grant, and they received the grant. The program changed its name to the Environmental and Urban Studies program.
- 2016** — Michele Dominy became the interim director of the program. The new version of the EUS 101 course is first taught by Olga Touloumi. Additionally, EUS faculty release a statement in response to student protests on campus.

2018 — The Mellon Grant funding ended. The program undergoes its first program review.

A History of the Center for Community, Regional, and Environmental Studies (CRES)

In the early 1970s, three professors from a range of disciplinary backgrounds at Bard, Professor Jeffrey Adams (Regional and Economic Studies), Professor William Maple (Ecological Studies), and Professor Bernard Tieger (Community and Sociological Studies), came together to form the Center for Community Regional and Environmental Studies (CRES). At the time, many professors in different disciplines were teaching classes related to the environment, but no program existed to connect these different classes. The founders of CRES had a specific interest in the community and local affairs, and they hoped to create a program that would work alongside community members and organizations to address environmental and social issues that became increasingly salient in the political context of the time. In an interview with a faculty member who became involved with CRES a few years after its creation, she described the CRES program as being a consequence of the civil unrest happening across the country and on Bard's campus. She explained how in the 1970s, "everything was bubbling and percolating up. That was a time when the environmental movement was emerging,...the civil rights movement was at a peak, student rebellion was at a peak. I know that Bard at the time was very revved up, as you might expect."

Within this context, the professors began to craft a program to address these various issues. An untitled planning document for the program from 1975 describes the necessity for such a program and lays out the program's goals:

We envision the Center as being multidisciplinary, problem solving and community oriented. The Center will concentrate on the local Mid-Hudson Valley as a 'laboratory.' The Center will focus on the study of the social, economic and ecological impacts of community change and development, and will have three major responsibilities.

1. The Center will administer a multidisciplinary major at Bard College in Community, Regional and Environmental Studies.
2. The Center will actively participate in the development of programs and techniques to increase the awareness and ability of the community to deal with the impacts of change.
3. The Center will sponsor, conduct and disseminate community based research.

CRES was one of the earliest environmentally-focused programs in the country, which in addition to being stimulated by the civil unrest of the time, could likely be attributed to the college's unique location in the Hudson Valley where early environmentalism laid some of its first roots. A major theme of this new program was "a sense of place," focusing on how people interact with their environments and how environments shape and create cultural values. The program was committed to working alongside the local community on social and environmental issues that were important to community members. In addition to establishing a multidisciplinary major for Bard students, the program prioritized community based research and to the creation of educational opportunities for community members (Untitled Planning Document, 1975, p. 6-10). The planning document describes how the Mid-Hudson region can function as a "natural laboratory for study" offering the "chance to observe the battle over the use of land and other natural resources" as the area's abundant "natural environmental areas" were increasingly targeted for development (Untitled Planning Document, 1975, p. 11).

The importance of the college's location was also mentioned in several faculty interviews. One faculty member described how the campus's proximity to the Hudson River connected students to the river's rich history of diverse landscapes, which included areas of untouched wilderness and areas with varying degrees of urban development from the exurbs to the metropole. The faculty member also cited the importance of the particular resources located on and near the campus, such as "the heritage buildings, Montgomery Place, the Saw Kill River, the proximity to diverse communities like Kingston, Hudson, and Poughkeepsie, and the proximity of NYC."

The faculty member also cited the importance of the particular resources located on and near the campus, such as "the heritage buildings, Montgomery Place, the Saw Kill River, the proximity to diverse communities like Kingston, Hudson, and Poughkeepsie, and the proximity of NYC." The location of the college will remain an important distinguishing feature of the program and will be mentioned in later iterations of the program.

CRES was one of the first multidisciplinary programs at the college. Around the mid-1970s, the Social Studies Division approved Community, Regional, and Environmental Studies as a new major within the division (Untitled Planning Document, 1975, p.2). According to the planning document which describes a basic curriculum for the program, CRES majors were required to take various introductory courses like Introductory Economics, Introductory Sociology, Introductory Biology, and more. The planning document also lists several suggested courses such as Economic Development, Labor Sociology, and the History of Planning. The CRES curriculum was designed to give students a strong foundation in both the hard and social sciences. The courses listed on the planning document mostly fell into the category of social

science, but there were a few hard science courses included on the list relating to the fields of biology and ecology. The program did not have any faculty or staff lines dedicated solely to EUS, instead relying on faculty members from other programs to teach cross-listed courses.

Another important component of the proposed curriculum was the required internship that students would be asked to complete in their junior year with a local organization. The planning document explains that “the internship [is] an exciting prospect for the student to combine the theory learned in the first two years of the program with practical problems encountered in planning or action agencies” (Untitled Planning Document, 1975, p. 4). The document goes on to explain how the internship experience will also inform the student’s senior project. The internship requirement has remained an important component of later iterations of the program as well, until it was recently removed during the COVID-19 pandemic. The internship requirement, in addition to the program’s commitment to community education and community based research, set an important precedent for the program’s on-going encouragement of civic engagement, which will be the topic of Chapter 4.

By the 1990s, environmental studies programs had become popularized across the nation. The CRES program remained structurally the same until the early 2000s, when the program underwent a series of changes. In 2004, the CRES program changed its name to the Environmental Studies program in order to emphasize that the environment was key to what made the program distinctive. At this time, Michele Dominy, a faculty member who had been teaching courses cross-listed with Environmental Studies became the Dean of the college. As the Dean, Professor Dominy felt “it was clear that this program was so important and lacked some critical resources and areas of expertise as well as the coherence that it needed in the moment.”

For these reasons, she appointed a commission to assess the Environmental Studies program and to design a new curriculum that would better “ground students and prepare them to make a difference in the world as environmental studies majors.” The findings of this commission were later used to apply for a Mellon grant in 2008, in order to receive funding to support an expansion of the program’s capacities.

The Environmental Studies program applies for a Mellon Grant

The commission’s findings were consolidated into a proposal for a grant from the Andrew Mellon Foundation in 2008, which was at first put on hold and later granted to the program in 2010. The Mellon grant proposal created a new vision for the Environmental Studies program, which became the Environmental *and Urban* Studies program in 2010. The proposal outlined “a new and innovative practice-based curriculum” that would integrate “the natural and built environment, the environmental and social sciences and practicum opportunities for students” (Mellon Grant Proposal, 2010, p. 1).

In order to materialize this new vision, the program applied for the Mellon grant to receive funding to be able to expand the program’s capacities in four ways: 1) “the appointment of a director to the EUS program,” 2) “the appointment of an Assistant to the EUS Director,” 3) “course replacement incentives for faculty, who teach in EUS but whose primary appointments are in traditional disciplines,” and 4) “mini research grants for collaborative faculty/student projects, colloquium/capstone presentations, and student travel to enhance the civic engagement component of the program” (Mellon Grant Proposal, 2010, p. 1).

An important component of the Mellon grant proposal describes the reasoning behind renaming the program to Environmental *and Urban* Studies. The proposal states that “since 2008, we have re-conceptualized and expanded the reach of our Environmental Studies program by integrating the burgeoning field of Urban Studies into the program. In doing so, we have further developed Bard’s tradition of pedagogical and curricular innovations, in this particular case by focusing on ‘lived and built environments,’ rather than the more conventional model that aligns environmental studies primarily with nature” (Mellon Grant Proposal, 2010, p. 1). This reconceptualization was particularly innovative in relation to other environmental studies programs of the time, and largely aligned with the environmental justice movement’s redefinition of the environment to include spaces where we live, work, and play.

Some faculty members that I interviewed recognized that the “*and Urban*” was also somewhat of a marriage of convenience, seeing as both the environmental studies and urban studies programs at the time were struggling to secure staffing and funding. One faculty member explained,

The fact that they called it Environmental and Urban studies was half accident and half they really meant it. Part of it was trying to deal with the fact that two really key urban studies professors left Bard the year before, and they had students who wanted to do urban studies, and now suddenly they had no one to teach it. Including urban studies in the environmental program was a way to kind of shore this up, because there were many other scholars hired at the same time as me to fill this blank....They saw this opportunity to bring those skills together through the interdisciplinary approach.

Despite the incorporation of urban studies, many aspects of the program were reminiscent of the structure of the CRES program as outlined in the CRES planning document. First, the unique location of the college was re-emphasized in the proposal, presenting many of the same potential benefits for the program as were described in the CRES planning document in the 1970s. “With

its historical relation to the ports and cities of the Hudson Valley, including New York City, the Hudson River will form both a laboratory and stepping-off area for an integrated understanding of global environmental transformation” (Mellon Grant Proposal, 2010, p. 2). Second, there is a strong emphasis in the proposal on the interdisciplinary nature of the program, which aims to “bridge the humanities and natural sciences” (Mellon Grant Proposal, 2010, p. 2). Finally, there is a reiteration of the importance of civic engagement through the continuation of the internship requirement, a practicum requirement, and more.

After the grant was received, Michele Dominy became the interim director in 2016. The program hired professor Eli Dueker as an EUS faculty member in 2014, with the goal of transferring directorship to him in time. Professor Dueker became the EUS director in 2018. The program also hired an Executive Administrator, which was later reconfigured as an EUS Co-Curriculum Coordinator position. The program reconfigured the EUS 101 course to offer a wider breadth of material. Additionally, the program was able to significantly expand its course offerings in exciting directions. The grant from the Andrew Mellon Foundation was largely considered a success for the program, and one faculty member described the proposal as “one of the most powerful documents to have come out of the college in terms of a curricular initiative and carving a path for the program’s future.”

EUS stands in solidarity with Black Out Bard

In February 2016, another defining moment for the program occurred in response to student-led protests, referred to as Black Out Bard, sparked by national politics and their “localized

refractions”⁶. Black students demanded that their peers stage a walkout in protest of the school’s failure to address racism on campus. The EUS steering committee released a statement in solidarity with the student’s demands. The statement reads,

Prompted by these developments and a desire to engage with broader scholarly discussions about environmental, institutional, and systemic racism, the Environmental and Urban Studies Steering Committee affirms and redoubles the commitment of EUS as an interdisciplinary program to address issues of race, class, gender, and difference in EUS classes. We wish also to emphasize that many of these same concerns and conversations are already central to the varied methodologies, theories, and disciplinary approaches offered by Environmental and Urban Studies courses, colloquia, and practica.

One faculty member in an interview described this as a turning point for the EUS program, arguing that “EUS was at this point where realizing that issues of racism in particular were something that needed to be addressed directly.” He described the statement as a full faculty effort, although he recognized that certain faculty were more prominent in the response than others. Another white female faculty member in the program described how the election of Donald Trump had personally affected her and the way in which she taught her classes. She explained how this election prompted her to start thinking more seriously about racism, and to think of ways in which she could “change the curriculum and create a safe environment for [her] students in the face of all that bigotry.”

In another faculty interview, the faculty member explained how the program wanted to emphasize actions over words in their response. The statement describes how the program had already been addressing issues of racial injustice in several of their course offerings, and that the program is committed to expanding course offerings in those areas and reorienting the focus of the program to commit to anti-racist values. He also explained how older white faculty members

⁶ I received this untitled statement released by the steering committee in February 2016 from personal communications on March 1, 2021.

were somewhat less enthusiastic about this new agenda, considering it to be “less academic,” but that no faculty members were resistant. “Ever since then, we’ve been working to bring environmental justice and environmental racism to the forefront...I think our future is about making this vision more real to more people on campus.”

The EUS program undergoes its first program assessment

In 2018, the program began their first program assessment, which is required of all programs at the college every nine years. The process begins with a self-study conducted by the program itself, followed by an external review conducted by three professors from other institutions of higher education in New York.

The self-study’s results highlighted the need to clearly define the concept of interdisciplinarity at the level of the program, as well as in the classroom and in faculty research. “Gaining clarity on what the concept means for the program will help us think about refining the curriculum as we plan for the future” (Self-Study, 2019, p. 37). The study highlights the related issue of core curriculum autonomy, alluding to the issues caused by having to share faculty with other programs. Finally, the study also describes a need for a better understanding of the student experience.

When selecting the professors for the external review of the program, the director and steering committee were committed to selecting a team that would represent diverse perspectives, and they ended up selecting an all-women team (Personal Correspondence, April 7th, 2021). The reviewers were Katayoun Chamany from the New School (chair), Melissa Checker from Queens College, and Devorah Gallagher from Duke University. The external

review involved several different steps, involving faculty members, staff, and students in the process. Many of their suggestions touched on the need to develop the coherence of the program. Importantly, they also highlighted the need for the program to “expand the diversity profile of the students in the majors and give greater consideration to issues of diversity, social justice and equity” to which the program responded that they “agree[d] that the diversity profile of EUS students could be greatly shifted in concert with our greater attention to issues of social justice and equity⁷. Following the external review, the program director and steering committee released a statement in response to the suggestions made by the external reviewers. Their response highlighted five key next steps for the program:

1. Gaining support from the administration to firmly establish EUS as an autonomous interdivisional program (hiring processes finalized, incentives for participation in EUS provided to faculty from other programs).
2. Securing funding for a series of EUS faculty planning workshops geared toward answering big questions including program rebranding, curriculum review and transformation.
3. Establishing a dedicated EUS space (labs, classrooms, offices) that fully address classroom and community-building needs.
4. Gaining approval of a budget for EUS in 2020 that fully covers the costs of our community-engaged and science-based classes.
5. Successfully hiring EUS program tenure-track faculty.

The Curricular Committee has postponed their response to the results of the program review due to the COVID-19 pandemic. In an interview, a faculty member shared with me that he believed “[the Program Review] made it very clear that we had a lot of work to do, but that the direction we were trying to go in was the right direction.”

Conclusion

⁷ This information comes from a response written by the EUS program in Fall 2019 to the suggestions made in the external review. I received access to this document through personal communications on April 26, 2021.

The Bard EUS program has had a strong commitment to integrating social and environmental issues through an interdisciplinary curriculum with civic engagement components since the program's inception as CRES in 1971. In the first decades of the program, they emphasized involvement in the local community to illustrate the social dimensions of environmental research. Although the program has had courses that address issues of environmental justice (who has access to a healthy environment) since the beginning of the program, these issues were not centered until after the environmental studies and urban studies programs were fully integrated and issues of racial justice came into the spotlight after the 2016 election results. In response to student unrest, the program has reemphasized their commitment to tackling issues of race, class, gender, and difference, and this commitment is likely to inform future changes to the structure and curriculum of the program.

The next two sections will examine two important facets of the Bard EUS program's curriculum that have allowed the program to align itself with the goals of the environmental justice movement: interdisciplinarity and civic engagement. Chapter 4 will describe how the Bard EUS program has been working toward an interdisciplinary curriculum despite major institutional barriers stemming from the dominant paradigm of disciplinary specialization. Chapter 5 will examine how the program has implemented civic engagement components in a way that strengthens the academic rigor of the program as an applied field.

Chapter 4: Striving for an Interdisciplinary Curriculum

A defining feature of the Bard Environmental and Urban Studies (EUS) program is the interdisciplinary nature of its curriculum. The landing page of the program's website boldly states that "EUS is an interdisciplinary program that examines the interdependence of human societies and the physical environment" (Bard EUS Website). As noted in my literature review, interdisciplinarity is regarded as a desirable trait for environmental pedagogy, in that it embodies the intersectional nature of the environmental justice movement and challenges the nature/culture divide that dominates traditional environmental ideologies. Traditionally, academia has been divided into disciplines, and students are expected to choose a discipline in which they will specialize. Although academic disciplines have been useful for creating foundational knowledge, real world environmental problem solving that accounts for justice concerns requires a more holistic approach. This chapter will examine the ways in which the Bard EUS program practices interdisciplinarity at the level of the program in addition to the benefits and challenges of implementing an interdisciplinary curriculum. Like many other interdisciplinary programs, the

Bard EUS program has experienced many challenges in implementing a truly interdisciplinary curriculum due to the dominant paradigm of disciplinary specialization. Interdisciplinarity is key for programs who seek to embody the ideals of the environmental justice movement, and the program will need to find ways to assert their academic validity in order to compete for limited institutional resources.

Non-disciplinary approaches to knowledge production

The Bard EUS program's website explains that the program seeks to train students to "have a substantial background in the physical and social sciences, humanities, economics, and policy, while enhancing their understanding of the relationship between built and natural environments" (Bard EUS Website). The ambitious scope of the program has been around since the program's inception as CRES, although the planning document for CRES describes their curriculum as 'multidisciplinary' rather than 'interdisciplinary'. The document explained that the development of the CRES major would lead to "the development of multidisciplinary studies without diluting the traditionally important disciplines" (Untitled Planning Document, 1975, p.2). However, in more recent program documents (the Mellon grant proposal and the program's self study), the term 'interdisciplinary' is used to describe the program's curriculum.

Both multidisciplinary and interdisciplinarity are forms of non-disciplinary knowledge, which Van den Besselaar and Heimeriks (2001) define as knowledge that "[combines] elements from various disciplines, as an interaction among two or more different disciplinary specialties,

in order to answer practical questions and to solve practical problems” (p. 706). According to the authors, the difference between multidisciplinary knowledge and interdisciplinary knowledge is the “level of integration of the different disciplinary approaches they are based on” (p. 706).

Multidisciplinary knowledge approaches a topic of study from different disciplinary perspectives without integrating the theoretical perspectives or findings, whereas interdisciplinary knowledge integrates the disciplinary perspectives to create “its own theoretical, conceptual and methodological identity” (Van den Besselaar & Heimeriks, 2001, p. 706). The program remains committed to non-disciplinary knowledge production, but has shifted its focus in recent years to the more integrated approach of interdisciplinarity.

Although the program aspires to create a truly interdisciplinary curriculum, they recognized in their self-study that the program has been unable to achieve true interdisciplinarity and remains at the level of multidisciplinary in several regards. The program review states:

As a program we find ourselves in constant tension between providing multidisciplinary vs. interdisciplinary training. The program’s cross-divisional nature doesn’t currently allow for consistent practice of interdisciplinary thinking for faculty members, but does allow for strong multidisciplinary training of students. The challenge is to create more opportunities for faculty to practice interdisciplinarity, which would aid in creating pedagogical strength in preparing our students for interdisciplinary thinking and research (p. 9).

This chapter will explore some of the challenges the program has faced in practicing interdisciplinarity. First, I will discuss the benefits that interdisciplinarity has had in working toward goals of environmental justice in addition to the ways in which the program has succeeded in creating an interdisciplinary curriculum. In almost all of my interviews with both faculty and students, the interdisciplinary nature of the Bard EUS program was touted as a

defining feature that, in the opinion of several of my interviewees, set the program apart from others of its kind.

Benefits and Successes of Working Towards an Interdisciplinary Approach

As mentioned in Chapter 1, interdisciplinarity can be applied at different scales within higher education in order to help students gain knowledge that is useful for real-world problem solving. An interdisciplinary approach is necessary in order to support the goals of the environmental justice movement, because it rejects the nature/culture divide that is perpetuated by the disciplinary distinction between the social and physical sciences. Interdisciplinarity aligns with the concept of intersectionality, which highlights “the need to account for multiple grounds of identity when considering how the social world is constructed,” by requiring a careful examination of the intersections of multiple disciplinary perspectives on socio-environmental issues (Crenshaw, 1991, p. 1245). This approach exposes the complexities of the human relationship with the physical environment and can highlight the inequities that drive environmental injustice such as differences in access to a clean environment and the ability to participate in environmental decision making processes.

The Bard EUS program has been working toward an interdisciplinary approach from the very beginning. The multidisciplinary approach of CRES laid the groundwork for the interdisciplinary approach of the EUS program by building relationships across different disciplines and putting them in dialogue with one another. The place-based approach of the program provided a helpful format for faculty from different disciplines to work together on common issues. Furthermore, when the program integrated environmental studies with urban

studies, they began to move beyond the multidisciplinary approach of CRES, by creating an entirely new and integrated framework for tackling environmental and social problems. A planning document for CRES stated that the multidisciplinary approach of the program would “provide students with a strong foundation in at least one of the relevant disciplines and will require appropriate familiarity with related disciplines...without diluting the traditionally important disciplines” (Untitled Planning Document, 1975, p.2). The EUS program moved away from this approach by creating an opportunity for students to be grounded in an entirely interdisciplinary foundation, which some will say has had significant drawbacks. These drawbacks will be addressed in the latter portion of this Chapter.

However, it is undeniable that the integration of these two programs moved closer toward collapsing the false dichotomy between nature/culture, a dichotomy which diminished the value of built environments and ignored the complex relationship between human beings and the physical environments they inhabit. An example of this at the classroom level has been the revision of the syllabus EUS 101 course. The EUS 101 syllabus was a collective effort and was designed to give a wide introduction to the important topics in EUS, allowing students to be exposed to different disciplines and make connections between them. Additionally, one faculty member explained that “by design we were all committed to integrating social justice issues into the syllabus,” and “a lot of that was in response to student requests, students really wanted the faculty to include more social justice work in the syllabus.”

EUS has been able to bring together a diverse array of faculty members from different divisions to offer an incredibly wide berth of courses, a particularly miraculous feat considering the fact that the program relies on these faculty members to offer courses that are cross-listed

with EUS. Since 2010, the program has offered an average of 36 total courses each semester (including EUS courses and cross-listed courses) from a total of 22 programs representing all four divisions of the college in addition to non-divisional programs. The program has been able to dramatically increase the number of EUS courses, which ranges each semester from 3 courses to 15 courses with an average of 7 EUS courses taught per semester. The programs that offer the highest number of courses cross-listed with EUS are Anthropology (avg. 4 courses per semester), Biology (avg. 4 courses per semester), Economics (avg. 4 courses per semester), History (avg. 4 courses per semester), Art History (avg. 3 courses per semester), Literature (avg. 2 courses per semester), and Sociology (avg. 2 courses per semester). Some programs that offered courses cross-listed with EUS less frequently were Studio Arts, Physics, Human Rights, Philosophy, and others.

The program's commitment to interdisciplinarity has been very successful in drawing students to the program. In my student survey, when asked why they chose to study EUS, students responded with a wide array of interests, from animal rights to climate change to social justice, which they found to be encapsulated within the Bard EUS program. Additionally, all three of the students I interviewed mentioned interdisciplinarity as one of their favorite aspects of the program. One student who is a senior in the program with a focus in environmental science explained,

EUS forced me to take economics and anthropology classes. And I'm so glad that I did. There are so many different lenses to look at these issues and they are so deeply interconnected. To ask a scientist to try to separate out the rest of it is to ignore part of the problem. [Social justice concerns] have to be a part of the conversation if you want to do science that is beyond just the realm of discovery, if you want your science to impact the way that we live our lives (Student Interview #1).

Many faculty members also described feeling drawn to the interdisciplinary nature of the program when applying for their positions. One faculty member explained how she saw many seniors producing interdisciplinary senior projects, and how she considers that to be a success of the program.

I love when interdisciplinarity works. What's very satisfying to me is when I see students really utilizing interdisciplinarity in a way that has explanatory power, that really helps us to understand the depth and nature of a problem in a way that allows us to tackle it more effectively.”

The EUS program has begun the difficult task of transitioning from a multidisciplinary program that incorporates different disciplinary perspectives into the curriculum to an interdisciplinary program that fully integrates different disciplinary perspectives to create an entirely new and holistic approach to environmental knowledge production. This has allowed the program to break down the nature/culture divide that dominated traditional environmental ideologies in order to expose students to the many complexities of the human relationship to the environment. The EUS program has much to be proud of, but it also has a long way to go when it comes to achieving interdisciplinarity, as highlighted in the recently conducted program review. The next section will describe the various institutional and social barriers that have prevented the EUS program from moving beyond a multidisciplinary approach to a more integrated interdisciplinary approach.

The Many Challenges of Implementing Interdisciplinarity

Most interdisciplinary programs, such as the Bard EUS program, exist within institutions of higher education that have traditionally privileged the separation of programs into disciplinary silos. The existing “dominant paradigm of disciplinary specialization” causes many problems for

interdisciplinary programs, and those seeking to apply interdisciplinarity must find a way for these new programs and courses to coexist within the dominant disciplinary structures, which often creates significant tension (Brewer, 1999, p. 332).

For example, all of the faculty members that I interviewed mentioned institutional barriers as major challenges for teaching in the program. The most frequently mentioned problems were the lack of faculty and staff lines dedicated to EUS in addition to the lack of funding. These problems were also mentioned in several of the documents I examined. The EUS program relies on faculty members from other programs to develop courses that can be cross-listed with EUS in any given semester. Faculty members from various programs sporadically contribute to the EUS course list, but they are required to meet their program's needs before the needs of the EUS program. One faculty member described "being pulled in different directions," and often finding it difficult to juggle the "time and demands from being in two different programs." Another faculty member described how the lack of faculty lines and courses dedicated specifically to EUS disrupted what she referred to as the "curricular coherence" of the program by reducing the program's ability to consistently and intentionally cultivate a rigorous interdisciplinary curriculum. She explains that the program "can't assume in a given semester that it's going to have the perfect mix of the courses it needs for its own integrity, given the fact it can only have what the program has been given."

Another problem stemming from the dominant paradigm of specialization, is that faculty members find it difficult to teach students with such a wide range of interests and backgrounds. Typically, students within a particular discipline would be trained in the same foundational knowledge, skills, and methodologies. Students in the Bard EUS program have a great deal of

autonomy when it comes to crafting their course loads, and this means that in EUS classes, faculty cannot assume that there is a common knowledge base. One faculty member who teaches in the social sciences explained that “sometimes in the classroom it’s extremely difficult to find the place to strike in terms of the knowledge you assume students have on a shared platform and the specificity of knowledge that they bring to the classroom.” Another faculty member who teaches in the physical sciences explained that laying a quantitative foundation in scientific literacy can be extremely difficult when students come from different knowledge backgrounds but also have varying degrees of interest in gaining certain technical knowledge. This professor tries to cope with this by varying the level of the material and offering alternative readings or videos that are more accessible, but she wishes she had more institutional support and resources to deal with this problem.

Students similarly felt that the interdisciplinary nature of the program left them feeling ungrounded and underprepared. I interviewed a senior in the program who explained how in her process of applying to graduate programs, she is finding that she is lacking the required prerequisites and that she will need to take those courses at a community college. She explained that “all of the programs I am interested in, I am unqualified for, because of the requirements that Bard [EUS] asked me to complete. I was never asked to do a year of General Chemistry or Calculus, and all of those things are things the grad schools want” (Student Interview #1). The junior and sophomore that I interviewed both expressed similar sentiments (Student Interviews #2 and #3). All three of my student interviewees wondered if this was an issue with the program, or a reflection of their personal qualities. The students described themselves as being “scattered” and “disorganized.” The one student that I spoke to who had not yet gone through moderation

described how she has been putting it off as she decides between focusing on the social sciences and the hard sciences.

Another barrier to interdisciplinarity related to the dominant paradigm of disciplinary specialization arises in how certain disciplines are often considered to be more valid than others for addressing particular problems. Lélé and Norgaard (2005) recognize that “the relative importance or validity of a direction of inquiry or approach is not determined simply by some objective recognition by academics of its ability to generate more valid knowledge than another approach,” but rather that societal forces determine the validity of one discipline over another in different cases (p. 968). This designation of validity manifests in the distribution of resources (such as funding) that different disciplines receive, and interdisciplinary programs must also compete for these resources by asserting their validity over the traditionally accepted disciplinary approaches. When an institution privileges divisional programs over non-divisional programs, then the non-divisional programs will ultimately receive fewer resources. The EUS program’s struggle for validity also manifests in faculty member’s struggles to establish the boundaries of their expertise.

EUS faculty members come from a wide range of disciplinary backgrounds and often teach interdisciplinary courses that incorporate disciplines that are outside of their areas of expertise. One faculty member described how determining the boundaries of one’s academic expertise has been a challenge for professors teaching in the EUS program. “I think the real challenges are dealing with the notion that professors should know everything...you don’t get a lot of practice not knowing this or negotiating areas where you feel you should know something but don’t.” Acknowledging where a professor’s expertise ends can feel like it diminishes the

professor's academic authority. He goes on to explain how for white professors, acknowledging the limits of your academic expertise can feel like a loss of privilege, which makes many feel uncomfortable. He suggests providing training and support might minimize the fear of being condemned or even fired.

Another example of this was described by another faculty member who felt it was important to engage in difficult conversations about race in the classroom, despite the fact that he did not always have the answer to these difficult questions. Several faculty members in interviews stated that they believed EUS was a great forum for addressing issues of social justice. One faculty member explained that, "putting environment and urban together was powerful, and it put us in this place to address race, because that was the whole point of EUS to think about these issues about where people live, and the tensions there about race, class, and gender, and you can't really get around it." As the program strives for interdisciplinarity, professors and students are increasingly forced to confront difficult and important issues of environmental justice in ways that may have been avoided in disciplinary settings. When looking at the full picture, environmental and social injustices are far more difficult to avoid. This can be challenging for faculty who are not experts on these topics, particularly at a predominantly white institution.

The challenges discussed above are all in some way related to the dominant paradigm of disciplinary specialization. Faculty members must negotiate the program's validity in order to compete for limited resources at the institutional level. However, the program is constrained by the limited resources to begin with, lacking the staffing and funding to navigate the challenges of implementing a robust interdisciplinary curriculum. Faculty members in the program have

different ideas about how to adjust the program so that it can establish its academic validity in order to compete for limited institutional resources. Some of those ideas will be outlined below.

Finding solutions

Despite these challenges, scholars believe that interdisciplinarity is still a worthwhile pursuit, and they offer potential solutions to overcome these challenges. Brewer (1999) suggests that interdisciplinary approaches may be more successful if they “take root in the interstices between existing programs, without threatening the dominant paradigm” (p. 332). There is a standing debate about the format of the program that questions whether EUS should be offered as a stand-alone major, a concentration, or both. These questions have come up repeatedly throughout the program’s history, and the format has changed a few times. As this project is being written, EUS offers a stand-alone major only. Many faculty members that I interviewed advocated for the creation of an EUS concentration, but they disagreed about whether it should be offered in addition to a stand alone major or in replacement of the stand alone major.

Two faculty members described the creation of an EUS concentration in addition to a stand alone major as a way to make the program more accessible to a wider range of students. On the other hand, two faculty members suggested that offering a concentration instead of a stand alone major would increase the focus of the program. These professors argued that this would allow students to major in a specific discipline and explore interdisciplinary concepts while enhancing the student’s expertise in both. “It would help with the curricular coherence

issue, and I think students coming into the senior project, if they came from a disciplinary major, might sometimes feel a little bit more confident that they've got a platform to build on.”

Brewer (2019) also emphasizes the importance of training the next generation of interdisciplinary researchers. Other scholars suggest that professors teaching interdisciplinary courses should encourage their students to think with flexibility and plurality. Scholars recognize the importance of critical thinking and self-reflection on the value judgements that underlie different disciplines, as well as a willingness to keep an open mind about different methods of knowledge production (Jones & Merritt, 1999; Lélé & Norgaard, 2005). One professor explained that she aimed to teach students to become environmental mediators, not to be biologists or physicists. She explained that the world needs interdisciplinarily trained experts to bridge the gaps between their work. I remember learning in her class that as an environmentalist, it is crucial to know where your expertise is limited and when to rely on others for knowledge and support.

Finally, both Brewer (1999) and Lélé and Norgaard (2005) recognize the need for incentives and motives at the institutional level. Although common concern for environmental issues can provide incentive for the creation of interdisciplinary courses, a more sustained approach will require institutional incentives that deconstruct traditional barriers to collaboration.

Conclusion

As the EUS program strives for interdisciplinarity, the program must struggle against the dominant paradigm of disciplinary specialization. Faculty members and students must redefine what it means to be an expert in order to establish the program's academic validity and compete

for limited resources. Faculty members and students in the EUS program can act as mediators between different disciplines, and acknowledging where one's expertise begins and ends is an important skill for navigating between the interstices of different disciplines.

Interdisciplinary research seeks to create knowledge that is both useful and effective for solving real world problems, which is necessary for engaging with issues of environmental justice. In order for students to leave the program feeling ready to tackle these important issues, they will need to feel confident in knowing the boundaries of their expertise. Faculty members in the EUS program can demonstrate this for students by being transparent about their own boundaries, and encouraging students to form relationships with other experts to collaborate with in their work. The program can then demonstrate its academic rigor in highlighting its ability to coordinate disciplinary information in ways that are useful and effective for solving real world problems. Another important strategy for establishing the EUS program's validity as an interdisciplinary program is by integrating opportunities for civic engagement, which will be the focus of the final chapter.

Chapter 5: The Benefits and Challenges of Civic Engagement

As institutions of higher education grapple with postmodernist critiques of objectivity, they have been forced to reassess the academic standards that traditionally privileged the classroom as a supposedly ‘objective’ and ‘apolitical’ space. This approach allows academics and students to step down from their ivory towers and engage with the communities that surround their institutions, which has allowed these institutions to support environmental justice struggles in important ways. Bard College’s slogan is “a private college for the public good,” and civic engagement, or the process of engaging with issues of public concern, is an important part of student culture at Bard. Civic engagement actions can be considered political and nonpolitical, and some of the more political actions could be labeled as ‘activism’⁸ as well. Despite the fact that ‘activism’ is considered to be a more controversial activity for colleges to engage in, both activism and civic engagement can bring about important social change.

Civic engagement is also built into the curriculum of many of Bard’s programs, and is particularly prominent in the Bard EUS program, which began with a commitment to serving the local community. However, a tension remains between maintaining academic integrity and legitimacy while participating in community affairs. This chapter will explore how the Bard EUS program integrates and stimulates civic engagement while preserving academic rigor, and how civic engagement in the classroom can be used as a tool to advance the environmental justice movement. I will argue that civic engagement bolsters the academic legitimacy of the EUS

⁸ The two terms, ‘civic engagement and activism,’ were used somewhat interchangeably during my interviews with faculty members.

program as an applied field by allowing students to develop important skills for solving real world environmental problems.

Stimulating Civic Engagement through Formal and Informal Means

Civic engagement has been a major part of the EUS program from the beginning. When CRES was developed, the faculty members prioritized interaction with the local community in several key ways that have endured over the years as crucial components in the EUS program. Some of these components were formalized into the curriculum, such as the internship requirement and specifically designated courses like the practicums. Some professors have incorporated aspects of civic engagement in the classroom through less formal structures as well.

Two important formal structures of civic engagement in the program are the internship requirement and the practicum requirement. The internship component of the curriculum has been a requirement since the program's formation as CRES. Until the requirement's recent suspension under the COVID-19 pandemic, the program has required students to gain hands-on experience with a group or organization doing environmentally related work at some point during their four years of study. The planning document for CRES describes the internship as "an exciting prospect for the student to combine the theory learned in the first two years of the program with practical problems encountered in planning or action agencies" (Untitled CRES Planning Document, 1975, p.3). Students have completed internships with a number of local environmental organizations such as the Bard Water Lab, Hudsonia, Hudson River Housing, the Cary Institute of Ecosystem Studies, and more.

Additionally, students are required to complete at least one practicum course which centers hands on learning. Practicums are described as courses “in which small numbers of students collaborate on projects for government and non-governmental organizations (NGOs), or contribute diverse perspectives while engaged in hands-on research of critical problems” (Mellon Grant Proposal, 2010, p.3). Examples of recent practicum courses have been Professor Peter Klein’s Hudson Valley Cities/Environmental (In)Justice, Professor Robyn Smyth’s Aquatic Ecosystem Restoration, Professor Mike Aziz’s Preservation, People, And Place: Rethinking The Bard Campus, among others. In these classes, students participate in a wide range of civic engagement activities. Some examples include engaging with local food producers to bring sustainable produce to campus, working with local organizations to find solutions to the housing crisis, and using different media platforms like the local radio station to tell environmental stories.

Many practicum courses are also designated as Engaged Liberal Arts and Sciences (ELAS) courses. ELAS courses were designed more recently by the Bard Center for Civic Engagement (Bard CCE) to “bring theory to practice by linking coursework, critical thinking, and engagement activities” (Bard CCE Website). The EUS 102 course, which focuses on environmental science, was also recently designated as an ELAS course, and several other EUS classes are designated as ELAS courses. This designation allows the courses access to funding and other resources through the CCE to strengthen the hands-on learning and civic engagement components of the class.

Apart from the formal incorporation of civic engagement through the internship, practicums, and ELAS courses, many faculty members in the program find ways to integrate

civic engagement into the EUS experience in less formal ways as well. Some faculty members spoke about how they try to encourage some aspect of civic engagement in all of their classes. One faculty member explains how “in all my classes, I try to get students involved in some way, even if it’s just in that initial observe and think and be in the community to understand what’s going on.” Some professors prefer a more hands-off approach, arguing that, “I don’t know if students need our encouragement, I think they can do it on their own...I try to encourage them to find their voice and be vocal about what they want...Whenever I have an activist student, I invite them to make announcements and invite other students. I don’t do it in a systematic way.” Despite the fact that professors had different approaches to incorporating or encouraging civic engagement in the classroom, most seemed to agree that civic engagement was beneficial to students.

Several faculty members described how they see their own work as educators as their own way of being civically engaged. One professor remarked, “I see my activism through my teaching and through my research...my goal is to train my students to be credible in the world and have the skills they need to be agents of transformation.” Another faculty member explained, “For me, [activism] has been academic. It’s been in the teaching and helping students develop their original approaches, their ideas, their projects.”

In a similar vein, students describe civic engagement as a crucial component of their experiences in the EUS program. Eleven out of the sixteen respondents to my student survey reported having taken at least one class with a civic engagement component, and six out of those eleven said that they had benefited from that experience (with the other five students reporting that they did not participate in the civic engagement component). All three of the students that I

interviewed expressed a variety of benefits that they derived from participating in civic engagement in the classroom, including increased motivation in the classroom, exposure to real-world complexities, and a feeling of connection to the local community (Student Interviews #1, #2, and #3).

Both faculty members and students agree that civic engagement is an important component of the EUS program. However, there remains a tension between maintaining academic integrity and legitimacy while participating in community affairs.

Releasing objectivity as a standard for academic legitimacy

As discussed in my literature review, postmodernist critiques of objectivity have made it clear that all research is grounded in the researcher's social context. However, in academic settings, programs and professors are still accused of pushing a certain agenda when students are asked to participate in civic engagement activities that are 'too political.' One faculty member described being dismissed as a "crackpot activist scientist." Another faculty member described how she risks her academic credibility, specifically as a female scientist, when she incorporates 'politics' into her work or her teaching. Several faculty members mentioned their tenure status as being an influential factor in how open or forward they could be about their politics.

One professor in the sciences described it as somewhat of a tradeoff between striving for objectivity and creating knowledge that is useful in real-world contexts.

If we're going to be doing science that matters for communities, we have to get over that...some of that is us lying to ourselves that we actually are objective ever, which is not possible. We're human, and pretending that we're not is the problem...It depends on how you look at it, but you are to a certain extent, sacrificing objectivity to actually answer questions that have to do with what communities need or interpreting data in the way that communities need.

This quote acknowledges how the pursuit of objectivity can be unproductive or even harmful for communities who are facing environmental inequities. As discussed in my literature review, objectivity has been used as a rhetorical tool to establish the validity and superiority of one type of environmental knowledge production over others, which marks other forms of knowledge production as unreliable. This has historically made it difficult for environmental justice communities, who often do not have access to the dominant forms of knowledge production, to produce the “evidence” necessary for their burdens to be recognized.

As the divide between objectivity and subjectivity blurs, researchers engage with the world more honestly and effectively by recognizing the influence of their personal biases and value systems on their research. This challenges the authority of Western processes of knowledge production, leaving room for other forms of knowledge production to enter the realm of environmental decision making as researchers recognize that all environmental knowledge is political to some extent. If institutions of higher education recognize that objectivity is an unattainable goal, they will need to find other ways to assess the academic rigor of their programs. This is particularly important for programs like EUS that are striving for an interdisciplinary curriculum which will train students to make change in the world.

Civic engagement can increase academic rigor

Many faculty members in the program see EUS as an applied major, and that students who choose to study EUS generally want to make a difference in the world. Giving students the opportunity to participate in civic engagement in a classroom setting can help them to think critically about the work that they are doing. Importantly, civic engagement can have many

benefits for students which ultimately increases the academic rigor of the program by giving students the skills and the opportunities to engage in real-world environmental problem solving.

Scholars suggest that exposing students to real-world examples of environmental organizing and political work can force students to think critically about their own assumptions and moral values, as they encounter diverse perspectives and value systems (Anzagasty-Rodríguez, 2006; De Chiro, 2006; Kahn & Humes, 2009). Since all research is grounded within the researcher's social reality, it is important for students to be able to understand the moral values and assumptions that underlie their work as environmentalists. One student noted that she preferred classes with civic engagement specifically because they challenged her belief systems. She explained, "I want to be challenged, and I want to learn stuff that will extend my beliefs. I want an experience that I've never had before and maybe I'm uncomfortable at first" (Student Interview #3).

One faculty member noted the importance of exposing students to different view points that directly challenged their own. "There's a component where I encourage students to understand where environmental activists are coming from, in terms of their own thinking, but also where the resistance is coming from, in terms of the logic of that way of thinking, and as you know, these are competing dialogues that are very hard to resolve." Helping students develop the skills needed to assess the different value systems that underlie different approaches to environmental problem solving can prevent them from being blindly committed to one particular belief system, and it can also help them to engage their opponents more thoughtfully when they are able to see where they are coming from. This is particularly important in an academic environment that tends to draw people from a particular political background. Students

at Bard find themselves in what has been described as the “Bard bubble,” where many of the people they interact with share similar belief systems. Civic engagement can expose them to alternative belief systems that they will likely need to grapple with in contexts outside of Bard’s campus.

Other professors also emphasized the importance of teaching students to engage more thoughtfully with the community. Allowing students the opportunity to practice civic engagement in a classroom setting will better prepare them to be able to engage the public in their environmental work in ways that are accessible, responsible, and equitable by forcing them to critically reflect on their work. Many faculty members recognized the importance of making civic engagement in the classroom into a symbiotic relationship between the college and the community. Engaging students in local work can provide free resources to the organization, such as the student’s passion, energy, and knowledge, but it can also place a burden on the organizations. One professor explained,

I don’t want to be a professor who asks students to ask for the time and energy of people who don’t have time and energy to give to some school project. So it’s about building relationships...finding ways for students to be involved without sapping resources but instead providing services or doing things that can be helpful.

This will ensure that students are considering the needs of the community members that they work with so that their research will not be a burden. Additionally, trust is an important factor, especially when working with historically marginalized communities. If institutions of higher education wish to support environmental justice communities, they will need to build trust over time by cultivating a mutually beneficial relationship with those communities. Professors can

provide continuity in their relationships by continuing to offer the same course regularly. This helps students to understand that trusting relationships must be built over time.

Some faculty members emphasized the importance of backing one's civic engagement with evidence grounded in science and policy. "I think it's really important for students to know the science, to know the economics, to know how policy works, in order to be responsible activists." Another faculty member in the sciences described how she sees science as a tool for creating justice when data is used to support claims of environmental injustice. This point is crucial for supporting environmental justice communities who rarely have access to the necessary resources to collect data about the environmental harms that they face. Creating opportunities for civic engagement in the classroom allows students the opportunity to practice using the technical skills that they have learned to aid communities who traditionally have lacked access to those skills.

Additionally, both faculty and students recognized that civic engagement can expose real-world complexities that may be difficult to envision when reading theoretical texts. One student noted that "having to do field work and go outside of the Bard community, you take into consideration things you may not have thought about before" (Student Interview #1). She explained how "as soon as you go out into the real world to implement a particular solution, there are suddenly "all of these roadblocks" (Student Interview #1). A faculty member explained that these moments help students "to know that [civic engagement] is really messy and sometimes you have to make hard choices." This will deepen the students' understanding of the knowledge they learn in their readings as they learn to think about problems in a more holistic way, better preparing them to anticipate complications in future problem solving situations.

Finally, civic engagement can inspire hope in students to help them believe they can actually make a difference in the world. Speaking from personal experience, studying the environment can be terrifying, and at times paralyzing. In the typical EUS classroom, we spend a significant portion of our time discussing the greatest problems facing society, and a comparably much smaller amount of time discussing how to fix those problems. Civic engagement can link students to the people and organizations who are actively working toward solutions to environmental problems. One student explained how he felt that civic engagement “can also make people feel more motivated in their classes, because in addition to just learning things, they feel like they are making a contribution to the greater community” (Student Interview #2). One professor explained that when students realize that “connecting the science that [they have learned] with community efforts can actually make a difference,” they often feel inspired to continue their engagement beyond the classroom.

Conclusion

The Bard EUS program’s commitment to integrating civic engagement components into the curriculum challenges dominant knowledge structures within systems of higher education. By acknowledging that all knowledge production is influenced by its social context, they challenge the dominant structures of western knowledge production and make space for alternative forms of knowledge production within the EUS curriculum. The inclusion of formal and informal civic engagement components bolsters the academic legitimacy of the EUS program as an applied field by allowing students to develop important skills for solving real world environmental problems. It does this by 1) exposing students to alternative belief systems which forces them to

interrogate the belief systems that underlie their own work, 2) allowing them the space to critically reflect on their civic engagement work which encourages students to engage with communities more responsibly and equitably, 3) revealing the complexities of real-world problem solving that may not be evident in theoretical readings, and 4) inspiring hope in the student that they can truly make change.

Conclusion

The Bard EUS program has taken important steps toward creating a curriculum that reflects the ideals of the EJ movement and prepares students to uphold these ideals in their work as environmentalists. They have worked toward implementing an interdisciplinary curriculum which breaks down the harmful nature/culture divide that permeated traditional environmental ideologies. This divide allowed humans to view themselves as separate from and superior to nature, which led them to believe that they were immune to ecological limits. The environmental degradation caused by this assumption has been relegated to marginalized communities and ignored by the mainstream environmental movement which has traditionally privileged the protection of pristine and untouched natural spaces. In academic settings, the nature/culture divide has been perpetuated by the separation between the social and physical sciences. An interdisciplinary curriculum illuminates the complex relationship between humans and the environments they inhabit. It embodies the EJ movement's definition of the environment as where we live, work, and play. Interdisciplinarity is crucial for endowing students with knowledge that is both useful and effective for solving real world environmental problems.

However, the program has faced significant institutional challenges to fully implementing an interdisciplinary curriculum. The Bard EUS program operates within an institution dominated by disciplinary specialization. In order to establish a fully interdisciplinary curriculum, the program will need to compete with other programs for limited resources at the institutional level that they will need to be able to hire more faculty members and expand their course offerings. The program will need to emphasize EUS as an applied field in order to establish the program's academic rigor.

Students who choose to major in EUS do so because they want to make real change in the world. Unlike disciplinary majors, EUS majors work as mediators between experts in different fields in order to produce knowledge that is useful and effective for finding solutions to real world environmental problems. In order for students to leave the program feeling ready to tackle these important issues, they will need to feel confident in knowing the boundaries of their expertise. Faculty members in the EUS program can demonstrate this for students by being transparent about their own boundaries, and encouraging students to form relationships with other experts to collaborate with in their work. Including opportunities for civic engagement also helps to establish the academic rigor of the EUS as an applied field.

The inclusion of formal and informal civic engagement components in the EUS curriculum bolsters the academic legitimacy of the EUS program as an applied field by allowing students to develop important skills for solving real world environmental problems. Allowing students to practice civic engagement in a classroom setting gives them the opportunity to critically reflect on their engagement which will help them engage more responsibly and equitably with communities in their future environmental work. The program has been incredibly successful in creating opportunities for students to become civically engaged and challenging the notion that the academic rigor of a program lies in its ability to produce “objective” knowledge. This challenges the authority of Western processes of knowledge production, leaving room for other forms of knowledge production that have been crucial to the EJ movement to enter the realm of environmental decision making as researchers recognize that all environmental knowledge is political to some extent.

Environmental studies programs are actively training the next generation of environmentalists to tackle the greatest environmental problems faced by society, which will necessitate a commitment to tackling the social inequities that both exacerbate and are exacerbated by environmental issues. As the environmental justice movement has made clear, environmental problems like climate change and toxic pollution cannot be solved if we fail to address the social inequities that these problems are built upon. In order to successfully train the next generation of environmentalists to uphold the ideals of the EJ movement, the Bard EUS program and other environmental studies programs will need to struggle against dominant academic structures toward a more holistic approach to knowledge production. When it becomes clear that the academic rigor of the program lies in its ability to train students to make real change in the world, then the program will be better able to secure funding and resources that will allow them to expand their interdisciplinary curriculum to better serve the ideals of the EJ movement.

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Appendix A: Student Survey Questions

Demographics:

1. Age
 - 18-20
 - 21-23
 - 24-25
 - 26+

2. Gender
 - Female
 - Male
 - Transgender female
 - Transgender male
 - Nonbinary
 - Other: please specify:
 - Rather not say

3. Racial Identity (select all that apply)
 - White
 - Hispanic or Latino
 - Black or African American
 - Native American or American Indian
 - Asian / Pacific Islander
 - Other: please specify:

4. Are you from an urban, rural, or suburban area?
 - Urban
 - Rural
 - Suburban
 - More than one of the above
 - Other: please specify:

Student Info:

1. What year are you?
 - First year
 - Sophomore
 - Junior
 - Senior

2. Have you moderated into EUS? (This survey is only for students who are interested in moderating into EUS or students who have already moderated into EUS.)
 - No, but I am considering moderating into EUS
 - No, but I am strongly considering moderating into EUS
 - Yes

Environmentalism:

1. Why did you choose to study EUS or why are you interested in studying EUS?
 - Open ended response
2. In your opinion, what are the three most important environmental issues faced by today's society? Please list them from most to least important.
 - Open ended response
3. Has your experience with the Bard EUS program influenced your response to the above question? If so, please describe how.
 - Open ended response
4. In your opinion, what themes are prioritized/emphasized by the Bard EUS program? Please limit your response to three themes.
 - Open ended response

Environmental Justice:

1. In the EUS classes you have taken, how many have mentioned environmental justice?
 - None
 - Some, but not many
 - Most of them
 - All of them
2. In the EUS classes you have taken, how many have had environmental justice as a central theme?
 - None
 - Some, but not many
 - Most of them
 - All of them

3. How do you define environmental justice?
 - Open ended response
4. How has your definition changed during your time at Bard?
 - Open ended response

Activism/Civic Engagement:

1. Before coming to Bard, did you participate in activism or other forms of civic engagement?
 - No
 - Yes, please describe:
2. Have you participated/do you participate in activism or other forms of civic engagement while attending Bard?
 - Not at all
 - I used to, but not currently, please describe:
 - I currently participate in activism, please describe:
3. How many classes have you taken that required or suggested that you participate in environmental and/or environmental justice activism or other forms of civic engagement (i.e. working with local environmental/social justice organizations, attending protests, organizing, etc)?
 - 0 classes
 - 1 class
 - 2 classes
 - 3 classes
 - 4 or more classes
4. How many Engaged Liberal Arts and Sciences courses have you taken?
 - 0 classes
 - 1 class
 - 2 classes
 - 3 classes
 - 4 or more classes

5. If you have participated in activism in the classroom, do you feel like it benefitted your overall educational experience?
 - Yes, please explain:
 - No, please explain:
 - I have not participated in activism in the classroom.

6. If you have participated in activism in the classroom, did you feel like it strengthened your understanding of environmentalism/environmental justice?
 - Yes, please explain:
 - No, please explain:
 - I have not participated in activism in the classroom.

Other:

1. Have you participated in any of the EUS Anti-Racism Working Group Meetings?
 - No, I haven't heard of these meetings.
 - No, I have heard about the meetings, but I did not attend any.
 - Yes, I attended one or more meetings.

2. Are there any parts of your identity that you feel have had an effect on your academic experience with the Bard Environmental and Urban Studies Program (i.e. race, religious affiliation, immigrant status, income level, etc)? If so, which parts of your identity and how have they influenced your experience?
 - Open ended response

3. What changes would you like to see in the EUS program?
 - Open ended response

Final:

Would you be interested in a follow up interview?

- 1) Yes: ask for name and email address
- 2) no

Appendix B: Sample Faculty Interview Questions

Academic Background:

- What led you to your current field of study [insert their field of study if known]?
- How do you perceive the connection between your specific field of study and the general study of the environment?
- Why did you come to Bard?

Activism:

- Throughout your life, have you been involved in any kind of activism/civic engagement or work?
 - If so, what kind of work was it, and how did you get involved with it?
 - Are you still involved with it today, or any other activism/civic engagement?
- Do you incorporate or encourage activism/civic engagement in the classroom? Why or why not?

Bard EUS:

- How did you become involved with the EUS program?
- Have your definitions of environmentalism and environmental justice changed during your time at Bard? If so, how?
- If you teach a core class (a required class for EUS majors), what changes did you make to the syllabus when you began teaching this class? How has your own syllabus evolved over time?
- Have you taught environmental justice in your classes? How do you include it?
- How is environmental justice being taught more broadly at Bard (beyond your own classes)?
- What are some challenges you have faced as a faculty member in the program? What successes have you had?
- Have there been any defining moments for you as a professor during your time at Bard?
- What changes would you suggest for the Bard EUS program?

Appendix C: Sample Student Interview Questions

Personal:

- Where are you from?

- Before coming to Bard, what kinds of activities/extracurriculars were you involved in?
- Why did you come to Bard?
- What sparked your interest in studying EUS? What did you expect to gain from the program?

Bard EUS:

- Beyond the core classes of EUS, what kinds of electives have you taken? What do you consider when choosing electives?
- Could you tell me the top three themes in the EUS program? Why did you choose these three? Compared with other topics, how important was the theme of environmental justice?
- If you have moderated into EUS, please describe your experience.
- If you have begun your senior project, please describe your experience so far.
- If you are a senior, why did you choose your senior project topic?
- In what ways has your time in the EUS program met your expectations? In what ways did it change or challenge them?
- Is there anything you would like to change about the program?

Future:

- After graduation, what are some career paths you might consider pursuing and why?
- Do you see yourself participating in environmental and/or social justice activism in the future? Why or why not?