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Critical Youth Participatory Action Research to Reimagine Environmental Education with Youth in Urban Environments

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CRITICAL YOUTH PARTICIPATORY ACTION RESEARCH TO REIMAGINE ENVIRONMENTAL EDUCATION WITH YOUTH IN URBAN ENVIRONMENTS

by

MARISSA E. BELLINO

A dissertation submitted to the Graduate Faculty in Urban Education in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

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by

Marissa E. Bellino

This manuscript has been read and accepted for the Graduate Faculty in Urban Education in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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THE CITY UNIVERSITY OF NEW YORK
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Advisor: Jennifer D. Adams

ABSTRACT

This work addresses ways to actively engage youth, particularly those growing up in urban contexts, in the rapidly expanding field of urban environmental education (EE). By inviting youth into the urban EE discourse, this study created opportunities to redefine what EE could look like when it is built on relevance to youth daily lives and is locally situated in urban settings. A critical urban environmental pedagogy, as conceptualized in this dissertation, brings together critical pedagogy and youth participatory action research to investigate the diversity of urban neighborhoods by youth who live there. These investigations reveal neoliberal urbanization processes and their resulting environmental injustices while creating space for youth to reimagine a more democratic process by which these socio-environmental conditions are made and (re)produced. This study explores how a critical urban environmental pedagogy was enacted and evolved in an urban environmental science classroom over the course of three
years. Student perceptions of their environments, their connection to learning, and their emergence as critically conscious citizens are explored.

In the first chapter of the dissertation, I introduce the overall context of the study including overarching theoretical and conceptual frameworks that organize the study. Chapters two and three introduce youth participatory action research (PAR) including the ways in which PAR methodologies, primarily photovoice and narratives, were enacted and evolved during the course of the study. The fourth chapter takes a macro view of the ways in which youth interact with their environments by looking closely at one year of photovoice data to describe youth’s experiences of growing up in their various urban environments. Chapter five zooms in on four students and follows their unique journey through the course. This chapter brings the voices of youth to the forefront, where each case study is deeply voiced by the youth, using multiple texts produced throughout the second year of the course. Chapter six discusses how incorporating a political ecology lens into a critical urban environmental pedagogy creates opportunities to problematize the impact of neoliberalism on urban EE and youth as well as reconceptualize nature for urban environments. This chapter highlights three pedagogical factors that emerged from working with youth in a critical classroom as well as the affordances, challenges, and tensions that arose. Chapter seven introduces a participatory analysis methodology, “the Data Carnival”, in which participants from all three years of the study collectively looked across multiple data sources from multiple years. This analysis allowed all participants to explore the ways the three years of data all hang together, as well as explore the epistemological, ontological, and axiological shifts that occurred in the classroom. The final chapter (Chapter eight) presents pedagogical reflections on the research as it pertains to both the larger conceptualization of a critical urban environmental pedagogy and the intersection of
neoliberalism and EE. This chapter reimagines an EE that challenges neoliberal ideologies through the enactment of pedagogy that utilizes participatory research methodologies in conjunction with critical and social theory with the explicit goal of facilitating opportunities for the emergence of critical consciousness. This final chapter also discusses the implications this study has for educators, particularly environmental and teacher educators who are responsible for either reproducing or transforming EE. In reimagining EE as a process of continued exploration and understanding of ones local and lived community, we can better understand how to engage youth in processes of defining and investigating their socio-environmental contexts.
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This dissertation is a product of years of thinking and writing, of conversations with my students, my advisors, my research group, my family. All of these people have helped develop my thinking and the ideas represented here and I am grateful to the support and guidance each provided.

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Finally, Chapters 3, 4, and 5 of this dissertation appeared in journals and texts. Chapter three has been published by Sense Publishers in the book *Doing Educational Research: A Handbook* (Second Edition) (Bellino, 2015) and appears in this dissertation with the publisher’s permission. Chapter four has been published in the journal, *Revista Brasileira de Pesquisa em Educação em Ciências*, and appears in this dissertation with the journal’s permission. Chapter five is in review for publication in *The Journal of Environmental Education* and appears in this dissertation with the journal’s permission.
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Chapter 1. Introduction to a Critical Urban Environmental Pedagogy

With the largest portion of the U.S. population located in cities, it is imperative to reimagine an environmental education (EE) with urban youth in mind. Natural and social environments are rooted in a historical-political system of inequality, and this is apparent when looking at the lives of young people in urban contexts. The neoliberalization of urban environments and the apolitical nature of EE in current formal institutions have continued to perpetuate a dearth of criticality in much EE curricula. This dissertation presents a critical urban environmental pedagogy drawing from multiple communities of practice including place-based critical pedagogies, political ecology, critical geography, critical youth participatory action research, and critical youth studies. This reimagined critical urban environmental pedagogy engages youth in the co-generation of a curriculum that privileges the experiences of young people living in urban environments. What emerges from a critical urban environmental pedagogy is an understanding that the relationships young people have with their local, urban environments are complex, ripe with contradictions and tensions, influenced by dominant discourses that are heavily influenced by neoliberal rhetoric, and played out in both the individual and social identities of youth. Consider this description of a neighborhood by Leyva, a high school senior in my environmental science course:

A neighborhood, in my opinion, represents a place in which an individual may discover or understand him/herself. It usually represents a place filled with comfort, joy, happiness (if that can even be attained), and unity. Without these concepts, this "neighborhood" becomes a place that an individual just so happens to live in. There would not be a connection between the individual and the neighborhood; furthermore, a sense of security would not be present because the individual may not want to associate him/herself with the area that they live in. Some people do not associate with the places they live in; and, this is due to the fact that they may not feel comfortable or accepted within the neighborhood that they live in. I never really tell people where I live because of the judgment I have received from others before and because I felt, and sometimes still feel, ashamed. Whenever I told someone where I lived, I would always add, "It's okay because
my father lives on Riverside Drive.” Riverside is an area that is usually associated with wealth and being "well off." I feel the need to include this because I do not want anyone feeling sorry for me because I live in a "bad" neighborhood or judging me for living in this type of neighborhood. When I would tell people where I lived, the comments I would always receive include, "But you aren’t ghetto like all of the people that live there," or, "Are you sure you live there? You don’t really dress or act like people from there." (Leyva, September 2013)

It is clear that Leyva is felling the contradictions of growing up in a city that is characterized by extreme inequality that she physically experiences as she moves between the neighborhoods she lives in. One neighborhood she is “ashamed” of and is “judged” for, and the other is associated with “wealth.” Leyva is living out an experience that is ripe with tensions; however, she questions how these two neighborhoods emerged or why they are characterized as they are both by her and more broadly by society. These contradictions of urban life are important and are yet not part of current EE. In most EE contexts, these issues go unexplored, leaving youth, like Leyva, to either figure out on their own how and why these situations exist or just accept these experiences as normal.

This dissertation seeks to disrupt this passive acceptance by actively engaging youth, particularly those growing up in urban contexts, in the rapidly expanding field of urban EE. By inviting youth into the urban EE discourse, this study creates opportunities to redefine what EE could look like when it is relevant and locally situated in urban settings. In reimagining EE as a process of continued exploration and understanding of one’s local and lived community, we can have a better understanding of how to engage youth in processes of defining and investigating their socio-environmental contexts and to enable them to see themselves in lasting ways, as active, competent citizens.
Problematizing Current Environment Education

Environmental education (EE), with its deep social and political action roots, sits in stark contrast to the uncritical and passive role of today’s schools. Collectively seeking to understand causes of environmental issues and the critique of the costs and benefits of solutions is at the heart of the goals of EE. The Tbilisi Declaration, the outcome of the world's first intergovernmental conference on environmental education\(^1\), even went so far as to emphasize that students should “be actively involved at all levels working toward resolution of environmental problems” (Tbilisi Declaration, 1978, p. 27). In order to involve students at this level of participation, learning spaces must be constructed that value the critical thinking and problem-solving skills needed to address current environmental problems. These outcomes, however, are often in violation of the current hegemonic purposes and practices of schooling, and as such, EE has been stripped of much of it’s revolutionary potential by disciplining it into formal school structures (Gruenewald, 2004).

Traditionally, schools have served to maintain social order by reproducing the values and norms of the dominant culture (Apple, 2004). Lipman (2011) argues that education today is at the frontline in class warfare “where education for those in power, plays a key role in the social reproduction of the labor force and in ideological legitimation of the social order” (p.2). This is done primarily in the form of controlled curriculum, standardized testing, and highly surveilled school environments. However, critical scholars of education see schools as sites of resistance and seek a radical pedagogy that incorporates a critique of the structural and material realities of schools combined with an understanding of how power, resistance, and human agency can become elements of critical thinking and learning (Giroux, 1983). Education today thus

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\(^{1}\) The convening at Tbilisi, Georgia (USSR), October 14-26, 1977, was organized by the United Nations Education, Scientific, and Cultural Organization (UNESCO) in cooperation with the U.N. Environment Programme (UNEP).
represents these two distinct purposes: education as a form of social reproduction and education as a means to strengthen critical thinking and democratic participation. The former represents our current education policy, and the latter is more aligned to the goals of EE. Stevenson (2007) sees the contradiction between these different purposes of schooling as an inherent contradiction for EE. Where does EE situate itself within these two extreme positions? Gruenewald (2004) notes that in formal institutions, it settled for the former, seeking legitimation through the development of its own set of standards (NAAEE Excellence in EE – Guidelines for Learning K-12, 1999) which adopted “language and concepts associated with conventional standards: grade-level performance, achievement, and effectiveness” (p. 80). This legitimizing process into formal institutions of learning has thus constrained EE but also left it vulnerable to strong critique. Strong critiques of current pedagogical enactments of EE come from multiple movements including ecopedagogy, critical pedagogies of place, and political ecology. Kahn (2010b) argues that an ecopedagogy must “take back our humanity by learning about the dehumanizing capitalist system; its history, how it operates, for whom, and what potential it holds” (p. 54). He goes on to state that an “environmental education of any kind that operates devoid of such a critical theory crosses a bridge to nowhere at the edge of the world” (p. 55). Kahn is advocating for a more systemic analysis of environmental issues within EE that incorporates current and evolving economic and political contexts. This is particularly true for urban environments that are in a continuous state of development, as globalizing processes are constantly reshaping urban spaces. Neoliberal urban policy agendas, while diverse across contexts, have the result of shaping material and social relations at the local levels. At the social level, there is an emphasis on individual entrepreneurship and meritocracy, as well as a lack of welfare services and individuals working more than one part-time job (Smith, 2002), while at the material and
economic level, the entire purpose of the city become a vehicle for promoting economic
development (Leitner, Peck, & Sheppard, 2007). The visible signs of neoliberal urbanization are
usually in the form of public-private partnerships (e.g. charter schools, parks, housing
developments). Gentrification as a neoliberal urbanizing force is similarly experienced
differentially and unevenly across urban spaces along with the associated increase in rents and
increase in big businesses and corporate presence.

Globalizing processes associated with capitalism are leading to uneven development
across urban spaces (Smith, 2008). This is happening in front of youth who live and go to school
in these rapidly changing urban environments, where this uneven development is impacting
young people at the level of local experience. This creates inextricable links between the
globalizing processes shaping the experiences of youth in place, the education youth are
receiving in schools, and the economic and political climate that is shaping both urban
environments and education. However, most urban EE fails to problematize these connections,
rather constructing youth as merely “hi-tech consumers rather than citizens” (Gruenewald &
Smith, 2008, p. xv). Gruenewald and Smith go on to argue this narrative of youth has been
reified in the media and by schools, perpetuating a sense of ‘placelessness’ as youth see their
value tied solely to consumption. This ‘placelessness’ is “associated with alienation from others
and a lack of participation in the social and political life of communities” (p. xvi). This
representation of youth as “placeless” “hi-tech consumers” speaks to a disconnect youth
experience in their local environments. While EE has the potential to connect youth to their local
communities, it is often taught as “an already established school subject that emphasizes the
relationship between men and the natural environment, in terms of how to preserve it and how to
appropriately manage its resources” (Gadotti, 2008, p. 25). Within this traditional paradigm, the
historical, social, political, and economic causes of local socio-environmental conditions, including segregation, gentrification, and access to public space, are obscured. Furthermore, research has found that environmental science curricula often address global issues (e.g. climate change, deforestation, food production) from a liberal (i.e. individual) perspective, leaving students feeling disempowered, cynical, and frustrated (Connell, Fien, Lee, Sykes & Yencken, 1999). One problem may be that in classrooms, students often encounter the environment as a place ‘out there’: apolitical, universal, natural, devoid of people, and something that needs to be protected. As a result, youth do not have the opportunity to unpack and critique their own experiences in place as social constructions that are connected to globalizing and neoliberal ideologies.

By expanding EE to include socio-environmental issues as experienced by young people and supporting them as they work to better understand how they are constructing ideas about place, the critical tools necessary to investigate these deeper and often hidden ideologies can be developed. Tzou, Scalone and Bell (2010) push educators to “connect environmental education with the places where youth live” (p. 105), and I argue this is most crucial for urban youth who already experience a disconnect from our traditional definition of environment as natural, by virtue of their physical location. Thus, a critical urban environmental pedagogy, as I conceptualize it throughout this dissertation, is intended to create space for youth to interrogate the meanings they make of their immediate surroundings and the historical, economic, and political contexts in which their local neighborhoods are embedded. The critical thinking and research tools privilege youth knowledge production and support youth’s development of a critical consciousness. Freire (2000) conceptualizes critical consciousness as collective inquiry, reflection, and action on the economic, political, and social contradictions shaping social life.
Thus a critical consciousness is necessary for young people to contribute to and transform society as educated and critical citizens. In order to create the conditions in which youth can develop a critical consciousness, a learning space must be imagined that challenges existing student/teacher relations and is “a site for relationships among teacher, student, and content, and between classroom life and the local communities” (Aikenhead, Calabrese Barton & Chinn, 2006, p. 412). This dissertation presents a reimagined, critical urban environmental pedagogy in which the physical classroom, the content, and the teacher/student relationships are all aimed at engaging youth in development of a critical consciousness. Drawing from the critiques of current EE made by ecopedagogy (Kahn, 2010a) and critical pedagogies of place (Gruenewald, 2003a, 2003b) and incorporating an explicit political ecology lens (Heynen, Kaika, & Swyngedouw, 2006) to understanding local socio-environmental conditions, these pedagogical and theoretical movements and practices all aim to make the underlying role of knowledge, power, history, geography, economics, and politics more explicit. In the following sections, I briefly describe these three movements, each taken up in more detail in subsequent chapters. Here, I introduce how each positions their relationship to conventional EE and their critiques of current neoliberal logic at work in both EE and education writ large.

**Ecopedagogy**

Richard Kahn’s work on ecopedagogy brings together environmental educators and critical pedagogues, as well as a vision for making changes to economic, social, and cultural structures that jeopardizes natural and social ecology. Kahn (2010a) argues that while much of the ecopedagogy work has been done in the global south, a “northern ecopedagogy must be concerned with the larger hidden curriculum of unsustainable life and look to how social movements and a democratic public sphere are proffering vital knowledge about and against it”
Kahn (2010b), in a bid against neoliberal environmental ideology, calls for a sustainability education that moves “beyond training people for membership in the green economy. Rather, it must relate critiques of consumption to production as part of a larger reconstructive political project concerned with radical democratization of the workplace and larger society” (p. 53).

**Critical Pedagogy of Place**

David Gruenewald (now Greenwood) (2003a) unites critical pedagogy and place-based education into an educational framework for research and practice referred to as a critical pedagogy of place. By fusing the theoretical roots of critical pedagogy and the ecological focus of place-based education, Gruenewald argues that a critical pedagogy of place “aims to (a) identify, recover, and create material spaces and places that teach us how to live well in our total environments (reinhabitation); and (b) identify and change ways of thinking that injure and exploit other people and places (decolonization) (Gruenewald, 2003a, p. 9). He further states what we really need are “structures and practices that help rethink classrooms as the fundamental site of teaching learning” (p. 10). A critical pedagogy of place highlights how “places are social constructions filled with ideologies, and the experience of places…shapes cultural identities” (p. 5). This relationship between place and youth identity is directly impacted by neoliberal policies as they are rapidly changing urban neighborhoods. Thus, a critical pedagogy of place encourages educators to advocate for a pedagogy that “relates directly to student experience of the world, and that improves the quality of life for people and communities” (p. 7).

**Political Ecology**

Heynen, Kaika and Swyngedouw (2006) present a theory of urban political ecology as an analysis that “foregrounds the urban condition as fundamentally a socio-environmental process”
Smith (2006) describes political ecology as rooted in social and political theory, grounded in ecology, international in scope, and combined with local environmental justice activism (p. xiv). This political ecology lens seeks to ask questions about the network of power relations through which unjust socio-environmental conditions are produced and maintained in our cities, while challenging neoliberal, capitalist urbanization processes and the resulting environmental injustices. Political ecology allows us to search for a more democratic process by which these socio-environmental conditions are made and reproduced.

These three movements all challenge existing ways EE is conventionally conceptualized and practiced in formal learning institutions and each speaks to a specific aspect of the way I am reimagining a critical urban environmental pedagogy. Ecopedagogy challenges current EE to incorporate a critique of capital and its impacts on local environments, arguing any EE that does not include this is telling an incomplete story of our environmental situation today. Ecopedagogy, like critical pedagogy of place, brings critical pedagogies as forwarded by Freire into conversation with EE. By combining critical pedagogy and place-based education, a critical pedagogy of place privileges the local experiences and construction of place by interrogating current understanding of how place and our thinking about place has been influenced and shaped by dominant forces that seek to maintain the status quo. Finally, political ecology provides a lens for youth to make connections between their experiences in place and larger structural forces that have shaped these experiences, including those of capitalism, neoliberalism, and dominant discourses forwarded in school. In the section that follows, the research design will be outlined, guided by these three pedagogical and theoretical orientations towards EE.
Research Design

This dissertation is a product of a multi-year study, investigating the reiterative, reflexive, and emergent implementation of a reimagined EE that I term critical urban environmental pedagogy. This critical urban environmental pedagogy, as I conceptualize it throughout this dissertation, makes the neoliberal context that youth are living in explicit and describes the ways economic and educational policies are impacting youth at differential scales, including the neighborhood, classroom, and individual. While this dissertation does not focus on neoliberal policies directly, it does investigate the ways that neoliberal policies and their associated ideologies reshape neighborhoods and the impact that has on young people. A critical urban environmental pedagogy thus creates educative opportunities and spaces for youth to make sense of and challenge the neoliberal policies that are impacting both neighborhoods and classrooms. This is achieved by centering the collective experiences of youth across contexts, including both their neighborhood environments and their formal school environments. The outcome of a critical urban environmental pedagogy is the emergence and development of youth critical consciousness. A critical urban environmental pedagogy is a transdisciplinary effort and as such, so is this dissertation. In subsequent sections and chapters, I draw upon the work of scholars in science and EE (See Calabrese Barton, 2001b; Bang, Warren, Rosebery, & Medin, 2012; Gruenewald, 2004; Stevenson, 2008), geography (See Ward & Fyson, 1973; Hart, 2002; Katz, 2011; Braun & Castree, 1998; Smith, 2008), critical pedagogy (See Freire, 2000; Giroux, 1983, 2011; Anyon, 2005; Darder, Baltodano, & Torres, 2009; Orlowski, 2011; Kincheloe, 1999), and critical youth studies (See Cammarota & Fine, 2008; Cahill, 2009; Torre, Fine, Stoudt, & Fox, 2012) to reimagine urban EE. What follows is an overview of the research
objectives and questions guiding this dissertation, a description of the research context and participants, and an overview of the methodologies utilized throughout this study.

**Broad objectives and research questions.** There were two overarching and interconnected objectives this research set out to achieve. The first was to design, document and critique an approach to a critical urban environmental pedagogy that could challenge traditional EE. Traditional EE tends to marginalize urban youth, especially youth from minoritized groups, while also ignoring the larger context of neoliberalism and its influence on both local environments and schooling experiences. This dissertation conceptualizes what a critical urban environmental pedagogy could look like as an epistemological, methodological, and pedagogical praxis in EE. From this, a syllabus was designed, evaluated and redesigned over a three-year period. Alongside this, I documented with the youth what the impacts of this syllabus were in developing their critical consciousness of the environment. By incorporating elements of ecopedagogy, critical pedagogy of place, and political ecology, a critical urban environmental pedagogy serves to build on the work of critical educators and researchers by bringing these multiple perspectives to life in classroom practice. The second objective was to utilize this approach to EE in order to document the complex lives of young people in urban environments, including the meanings they make of their local environments, the processes they see impacting these places, and how these processes are influencing their personal, social, and critical identities. These phenomena were captured through rich descriptions by youth in multiple co-created sources of data including photos, narratives, maps, interviews, blogs, and classroom dialogues. This study is guided by the following research questions:

1. **In what ways do participatory methodologies and critical pedagogies create spaces for youth to develop and demonstrate an emerging critical consciousness?**
2. **How do young people make sense of their local environments?**
   a. **What are the processes that most impact young people in their environments?**
b. How do young people's social positions intersect with the meanings they make of these places?

3. In what ways does a critical urban environmental pedagogy challenge traditional environmental education curricula by privileging the experiences of youth living in urban environments?

**Context and participants.** This study was conducted in collaboration with students at Environmental High (a pseudonym), an urban public high school. The school has over 1300 students who travel long distances from various parts of the city to attend the school (Figure 1). This creates a unique situation in which the community where the school is located is not the community where many of the students live. I was the teacher of the environmental science class where this research was conducted. The class offered college-credit by a large public university in the United States. Each student paid tuition for the class received 4 college credits upon successful completion. The class was taught for a full year, during a 90-minute period that met each day. This class was an elective and open to any junior or senior who had completed the high school graduation requirements in science (two State science examinations in Biology, Chemistry, Physics, and/or Earth Science). The students who took this course tended to self-identify as academically oriented. Over the years students enrolled have self-identified as American, Bengali, Dominican, Ecuadorian, Indian, Mexican, Mixed, Polish, and Puerto Rican.
Figure 1. Map showing 2012-2013 student neighborhoods in relation to location of school.
**Methodological Framework.** This work is a qualitative study informed by participatory action research (PAR) epistemology and methodologies. The theoretical roots of PAR and its contribution to EE will be further explored in chapter 2 and the specific methodologies utilized will be explored in chapters 3, 4, and 5. Here, I briefly introduce the specific data that was constructed throughout the study (Table 1), and the research cycle developed and utilized in the participatory analysis (Figure 2). Data for this study was collected over three years in three different year-long course offerings (2011-2014). One year after the last year of the study (2015), all student participants who took the course during the study period were invited back to participate in a participatory data analysis Data Carnival outlined in chapter 7.
Table 1. Description of data sources constructed in the course, years constructed, and products generated.

<table>
<thead>
<tr>
<th>Participatory Methodology</th>
<th>Description</th>
<th>Year(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photovoice/Photovoice Narratives</td>
<td>Students took pictures in their neighborhoods, shared images, and engaged in critical dialogues, research, and presentations. Narratives asked youth to use a selection of images to tell the story of their experience in and with their neighborhood. (See Chapters 3, 4, and 5 and Appendix 1 for description)</td>
<td>2011-2012, 2012-2013</td>
</tr>
<tr>
<td>Final Course Reflections</td>
<td>At the end of the year, participants were asked to reflect on the learning process and how it impacted them. These were shared with me in a letter type format. (See Chapter 5 and Appendix 2 for description)</td>
<td>2011-2012, 2012-2013, 2013-2014</td>
</tr>
<tr>
<td>Critical Advertising Investigation</td>
<td>Students photographed advertisements in their environments and conducted content and critical discourse analysis to collectively investigate the types of messages that they found in advertisements. (See Appendix 3 for description)</td>
<td>2012-2013, 2013-2014</td>
</tr>
<tr>
<td>Neighborhood Reflection</td>
<td>Participants were asked to record their favorite places, least favorite places, ideal places, and ways their communities could be improved. Emotions and behaviors were elicited. These were shared on our course blog. (See Chapters 3, 4, and 5 and Appendix 4 for description)</td>
<td>2012-2013, 2013-2014</td>
</tr>
<tr>
<td>Critical Educational Autobiographies</td>
<td>Students were asked to critically to analyze and carefully make judgments about their educational experience in order to develop a deeper understanding of how their schooling experiences have shaped the person they are today. (See Appendix 5 for description)</td>
<td>2013-2014, 2013-2014</td>
</tr>
<tr>
<td>Mental Mapping</td>
<td>Students were asked to create a map of their neighborhood focusing on places that had meaning to them (both positive and negative). Maps were shared in small groups and common themes were documented. (See Appendix 6 for description)</td>
<td>2013-2014</td>
</tr>
<tr>
<td>Data Carnival</td>
<td>An opportunity for youth to look across multiple years and a variety of artifacts made by their peers to see first what was in the data and second, how youth were interpreting what they saw. (See Chapter 7 and Appendix 7 for description)</td>
<td>2015</td>
</tr>
</tbody>
</table>

Through the research, learning spaces were created for youth to share their own stories about their experiences in local environments. Data generated was shared and analyzed at the individual, group, and whole class level allowing common themes, contradictions and new questions to continuously and reiteratively emerge. The experience of engaging with different participatory methodologies was also explored and documented to better understand how various methodologies were fully engaging student participation and learning. Methodologies were continuously adapted in order to better understand the changing urban context and what counts as relevant EE from the perspective of youth.
Figure 2. The participatory action research cycle that emerged from the study.
Dissertation Structure

This is a manuscript-style dissertation. It includes seven chapters in total and conveys to the reader the emergent nature of the work, exploring my own journey, as well as the journey of my students as we embarked together over these past four years to explore the above research questions. Chapter one outlines the overall lack of consideration for urban contexts in traditional EE, particularly how it has been conceptualized for formal schools. I briefly introduce three movements within EE (ecopedagogy, critical pedagogy of place, and political ecology) that call for transformational pedagogical approaches to more deeply investigate local environments from a dynamic and systems perspective. These three movements inform a critical urban environmental pedagogy, an approach utilized and forwarded in this dissertation, in which participatory methodologies and critical pedagogies are leveraged to illuminate and investigate youth experience in local urban environment. The research design for the study is introduced along with the data sources co-constructed and analyzed throughout the three-year study.

Chapter two explores the theoretical, methodological, and pedagogical frameworks that shape the dissertation. Focusing on participatory action research (PAR) and youth participatory action research (YPAR) more specifically, the historical roots of PAR and how I conceptualize it as a pedagogical approach are explored. The epistemological, methodological, and pedagogical theory and practice of YPAR and critical pedagogy are introduced as tools that challenge the existing neoliberal influence on education and EE by bringing to the forefront the voice and experiences of youth living in urban environments. A critical urban environmental pedagogy emerges that forwards a transdisciplinary approach to investigating and understanding urban environments.
Chapter three is a book chapter published in *Doing Educational Research* (Second Edition) (Tobin & Steinberg, 2015). The subject of this chapter is a reflection on how photovoice, as a participatory methodology, was utilized and modified to facilitate youth in the development of a critical consciousness. It follows the messy and unclear path that characterizes the implementation of photovoice while struggling to retain (and sometimes failing to retain) the epistemological assumptions inherent in YPAR. While paralleling the stories of myself alongside my students, this chapter explores how these methodologies changed and evolved over two years based on my own emerging critical consciousness and that of my students.

Chapter four was published in *Revista Brasileira de Pesquisa em Educação em Ciências* as part of a special issue, *Environmental Discourses In Science Education: Contributions To Democracy, Citizenship And Social Justice*. This chapter outlines more specifically how photovoice was introduced and utilized as a participatory methodology during the second year of the data collection (2012-2013). It introduces the diversity of field texts constructed by students including neighborhood reflections, images, narratives, and final presentations. A critical urban environmental pedagogy was further honed during this year of the course where student generated data was collectively analyzed in the classroom and documented on our course blog and in final class dialogues led by students. In this chapter, we begin to see common course themes emerge including gentrification, diversity, and inequality as most salient to student’s lived experiences. The analysis in this chapter is two fold. It begins with themes generated by students through collective analysis of urban environmental issues most relevant to them. Then I looked more deeply at the ways youth make sense of urban socio-environmental phenomena, identifying overarching themes including the ways the youth were critically reading local spaces,
the youth’s sense of place and how this intersects with their identities, and the ways that local issues reflect larger trends in globalization.

Chapter five presents four case studies of youth who participated in the second year of the course. Each case is presented using a combination of student text from photovoice narratives, research reflections, blog posts, and final course reflections. Through this close analysis we see a range of experiences for youth that are reflect the unique subjectivities of these specific youth as well as themes that emerged more broadly throughout the multiple years of the course. Struggles with cultural identity, gentrification, assimilation, and diversity in the Bronx, Queens, and Brooklyn are all presented as common realities for young people impacting their experiences in local environments.

Chapter six is an article that is currently in review for a special issue in *The Journal of Environmental Education*. The focus of the special issues is on political ecology and as such, this chapter further forwards an agenda for a critical urban environmental pedagogy illuminating the political ecology lens inherent in the pedagogical approach. This chapter begins by outlining the conceptual frameworks of both neoliberalism and constructions of nature and calls for a need to include both in a critical urban environmental pedagogy. It then introduces the potential of political ecology as an analytical lens with which to investigate environmental issues illuminated by youth. We elaborate on three pedagogical approaches to facilitate engagement in a critical urban environmental pedagogy, including the introduction of social theory and critical pedagogy, the use of participatory methodologies, and the creation of a safe physical and pedagogical space to engage in critical dialogues about the complicated socio-environmental issues impacting youth. This chapter ends with an exploration of the affordances and tensions that emerge when doing counterhegemonic pedagogy in a hegemonic institution.
Chapter seven presents a participatory data analysis called a “Data Carnival” in which all participants from the past three years of the course were invited to look across the multiple data sources constructed in the course. Students spent the day looking across the years of data and interpreting what they saw in small groups. As a larger group, we began to make connections across data sources to tell the larger story of youth experiences and understanding of how history, economics, and politics are structuring local environments, intersecting to create the socio-environmental conditions youth are struggling to make sense of.

Chapter eight concludes the dissertation, summarizing key findings from the implementation of a critical urban environmental pedagogy. This chapter begins to reimagine EE for youth, particularly for youth in urban environments, and provides new ways of thinking about teacher education rooted in critical pedagogies of place that utilize YPAR methodologies to engage youth in investigations of local environments.
Chapter 2. Theory and Methodology of Youth Participatory Action Research as Critical Pedagogy for a Critical Urban Environmental Pedagogy

Within the context of EE as outlined in chapter 1, I argue here that youth participatory methodologies and critical pedagogies, situated in local environments, can illuminate the influence of globalization and neoliberalism on local environments in urban contexts and support youth in developing a critically conscious environmental identity. This critically conscious environmental identity is conceptualized as an application of one's understanding of socio-environmental issues that incorporates critical reflection and action on the understanding of these conditions. I begin this chapter with an introduction to Participatory Action Research (PAR), more specifically Youth Participatory Action Research (YPAR), as a potential tool to address some of the tensions created by EE’s current placement within schools. I include some historical context for PAR more broadly, as well as the inherent assumptions embedded within PAR. Critical pedagogy is then conceptualized as a pedagogical orientation that embraces participatory methodologies, and I argue that when both are applied towards an urban EE, there is transformative potential for teaching as well as teacher and student consciousness.

Why YPAR as a pedagogical tool for a Critical Urban Environmental Pedagogy

YPAR methodologies can be enacted and adapted for multiple contexts, uncover the questions most important to youth, and privilege the knowledge they bring with them from their individual and collective experiences. Thus, a critical urban environmental pedagogy can benefit from using YPAR to organize investigations that engage youth in acts of critical consciousness that can support understanding of their socio-environmental contexts. Torre (2014) states, “participatory action research refers to an epistemology that engages research design, methods, analyses, and products through a lens of democratic participation and collective action,” and as such, it is more than a method, but rather “an epistemological stance that values knowledge
produced from lived experience as equal to that produced in the academy, and in so doing, expands traditional notions of ‘expertise’” (p. 1323). This is particularly true for communities excluded from the academy, like youth, as it creates opportunities to investigate lived experiences in local environments and creates counternarratives that speak back to dominant constructions of youth and place.

YPAR’s epistemological commitment is to better understand where and how knowledge is produced and how we can all be a part of the knowledge production process. As a pedagogical praxis and research methodology, YPAR embraces a Freirian vision of problem-posing education as it “provides young people with opportunities to study social problems affecting their lives and then determine actions to rectify these problems” (Cammarota & Fine, 2008, p. 2). YPAR is constantly wrestling with issues of power and privilege in knowledge production, and as such, YPAR as a form of praxis engages youth are co-researchers, together generating critical research themes that address issues of direct importance to their lived experiences. Embedded in YPAR are a series of assumptions about who has the right to research (Appadurai, 2006), most importantly, that people hold deep knowledge about their lives and experiences and should help shape the questions and frame the interpretation of the research (Torre & Fine, 2006). This commitment to participation at all levels of research creates multiple opportunities for youth to engage in the process of research, as well as the construction of knowledge that centers their voices and experiences.

Young people can be agents of change in their local communities as they are the producers and keepers of local knowledge and have the capacity to enact both an internal transformation in their ways of seeing the world as well as an external pursuit of social change through action. Cahill (2007) states that engaging young people in research helps challenge
social exclusion, democratize the research process, and build the capacity of young people to analyze and transform their own lives and communities (p. 298). Early proponents of action research (See Lewin, 1946) saw its purpose as a way to improve social formations by involving participants in a cyclical process of fact-finding, planning, exploratory action, and evaluation. PAR and YPAR as an extension of PAR with a focus on youth extends this commitment further by asserting a “democratization of who has the right to create knowledge, engage in participatory processes, research social conditions, and take action about issues that impact their lives” (Zeller-Berkman, 2014, p. 518). YPAR extends and challenges traditional research by inviting participants to be co-researchers. Co-researchers are typically the ‘insiders’, the stakeholders within a particular institution (e.g. students, teachers). Cammarota and Fine (2008) recognize that YPAR has educative potential and is aligned to popular education as it focuses on the development of knowledge and skills that allow youth to “speak back and organize for change” (p. 5). These commitments embedded in YPAR make it an ideal pedagogical tool for youth, as it is engaging, relevant, and empowering.

History of PAR

Action research has a long history that emerged out of multiple geographic locales and has been committed to the intersection of social science research, activism, and community engagement. In the United States, Kurt Lewin, W.E.B. Du Bois, and Miles Horton are three scholar/researchers often associated with early implementations of participatory research. They worked both within and outside the academy, used surveys and other research methods, in and with communities to argue “for structural analyses of race and class-based oppression, and in their own contexts, documented the policies, institutions, and social arrangements that helped form and deform and enrich and limit human development” (Torre, 2014, p. 1324). At the
Highlander Research and Educational Center, Horton used participatory education to organize communities around workers and civil rights and played a critical role in the U.S. Civil Rights movements. Lewin did his work mainly outside of the academy, to meet community needs head on, joining researchers with community groups to “study real-life situations and produce results that could be used to effect change” (Zeller-Berkman, 2014, p. 520). He implicated all members of society as responsible for changing the conditions that create so-called ‘minority’ problems. Utilizing collective inquiry to challenge and transform community and social institutions, Lewin’s version of PAR was based on a “spiral model of self-reflective cycles of planning a change, fact-finding, acting, observing and evaluating the process and consequences of change, reflecting on these processes and then replanning, acting, observing, and so forth” (Zeller-Berkman, 2014, p. 520).

In Latin America, a confluence of factors contributed to the emergence of participatory action research. Social scientists felt the positivist paradigm associated with most research was maintaining the status quo, and in response, there was a need for new approached to transform both oppressed people and oppressive structures. Rooted in an understanding that both the control of the means of production and the means of knowledge production were limiting and oppressive, the Latin American lineage of PAR, most often associated with Orlando Fals-Borda, was about the need and right of the working people to understand and interpret their lived realities (Rahman, 2013). Fals-Borda argued this through a “people’s science,” bringing together education, community organizing, and social science. He critiques the notion of science as objective and unbiased, stating:

They start with the thesis that science is not a fetish with a life of its own or something which has an absolute pure value, but is simply a valid and useful form of knowledge for specific purposes and based on relative truths. Any science as a cultural product has a specific human purpose and therefore implicitly carries
those class biases and values which scientists hold as a group. It therefore favors those who produce and control it, although its unbridled growth is currently more of a threat than a benefit to humanity. For this reason it is theoretically possible that people's science may exist as an informal endogenous process (or as a more formally constructed knowledge system on its own terms) (Fals-Borda & Rahman, 1991, p. 7)

Freire is also associated with the emergence of PAR in Latin America through the development of a pedagogical approach that supported the people’s participation in knowledge production and social transformation. Freire’s (2013) participatory approach to social change was through conscientization, or development of a critical consciousness, a process that “represents the development of the awakening of critical awareness” (p. 15). Rahman (2004) furthers states that conscientization is a “process of critical self-inquiry and self-learning and of thereby developing the confidence and capability to find answers to questions on one’s own” (p. 18). This understanding of critical consciousness is taken up as a major goal of a critical urban environmental pedagogy as youth are tasked with initially uncovering their own systems of self-inquiry and self-learning, and then, through the process of engaging in YPAR, these systems are continually challenged and rebuilt.

Critical PAR, a newer lineage that acknowledges the contributions of women, people of color, and indigenous scholars rejects the notions of “rationality, objectivity, and absolute truth” (Zeller-Berkman, 2014, p. 524). It moves away from the causal explanations for human behavior and promotes the capturing of the complexity of human experiences as well as the role the socio-historical context plays in the experiences of individuals. Du Bois’s Philadelphia Study (Du Bois, Anderson, & Eaton, 1996) was a rich sociological analysis of the social and economic conditions of African Americans in Philadelphia neighborhoods in which he worked with communities to uncover the social conditions of African Americans in the United States detailing structural racism in the late 1800’s and early 1900’s. A new lineage of critical PAR scholars
have emerged with much of this work coming from scholars at The Graduate Center, City University of New York’s Public Science Project. Critical PAR scholars have sought to bring the voices of marginalized communities into the research process and utilize the *process* of doing PAR work as well as the *products* of PAR, recognizing the importance of both for learning and social change. Scholars and activists in the Public Science Project have designed participatory projects to investigate perspectives of youth, prisoners, and members of the LGBTQ (See Stoudt, 2009, Cahill, Rios-Moore, & Threatts, 2008, Fox & Fine, 2013, Fine & Ruglis, 2009). They have investigated a range of issues including educational disinvestment in New York City schools, the controversial Stop and Frisk policing policy, and the epistemological and ethical assumptions that guide their critical PAR work (See Appendix 8). As a result of this diversity of scholarship, the contributions of critical PAR scholars have been epistemological, theoretical, and methodological. PAR work continues to encourage “collective critical reflection on everyday experiences as a means to generate theory, design research, and engage action” (Torre, 2014, p. 1325). Because PAR work happens on many levels and is iterative and reflexive, it is always asking questions of what worked, who the research is benefitting, and whose voice is missing, seeking to make transparent the political nature of knowledge production (Torre, 2014).

**YPAR as Pedagogy: The Intersection of YPAR and Critical Pedagogy**

The pedagogical philosophy on which YPAR is based is Freire’s notion of praxis – critical reflection and action. Kress (2015) describes praxis as “an inquisitive, humble, and listening disposition toward life in which we are always co-inquirers alongside others” (p. 177), and Cammarota & Fine (2008) argue “embedded in praxis is thus changes of consciousness that allow the young person to perceive him/herself as capable of struggling for and promoting social justice within his or her community” (p. 10). These conceptualization of praxis are the backbone
of a critical urban environmental pedagogy that is committed to creating pedagogical experiences that challenge youth to dig deeper, to open up their ways of seeing in order to reveal the hidden connections embedded in society, to work together in this process with the goal of seeking socio-environmental justice. Cammarota and Fine (2008) cite the possibility of YPAR for youth by claiming “for the first time, education is something students do – instead of something being done to them – to address the injustices that limit possibilities for them, their families, and communities” (p. 10). In her YPAR work, Tuck (2013) identifies forms of shallow participation that are associated with schools and more largely society. These include raising one’s hand to answer a teacher directed question in class, volunteering for a few hours, answering a survey, and shopping. In these cases, people provide answers to predefined questions but have no ability to contribute to the framing of questions leaving the possibilities for full engagement by participants nonexistent. She contrasts these forms of shallow participation with deep participation, which “invites people to help define the scope of discussion, the rules of engagement, and the structure of relationships. Deep participation yields opportunities for change that can be sustained, and impact everyday life” (p. 11). These examples in which YPAR intersects with education and schooling reveal its transformative potential to engage youth in the process of directing learning based on relevant pedagogy that forefronts youth lived experiences. YPAR further aims to reduce the epistemic violence that many people experience as a result of research that claims to be “objective”. Epistemological violence refers to the theoretical interpretations that accompany empirical findings, particularly ones that produce harm for the Other in a given community by constructing them as inferior or problematic (Teo, 2014). While theoretical interpretations themselves can potentially be a form of violence, the policy recommendations that are attributed to these interpretations are more damaging. These policies
are often masked in society, particularly policies that impact the lived experiences of youth both in their neighborhoods and schools. Education, economic, and environmental policies and their material and social impacts are a part of a critical urban environmental pedagogy and can reveal the epistemic violence experienced by youth as a result. Thus, the addition of critical pedagogy to a critical urban environmental pedagogy that draws upon YPAR methodologies to engage youth adds an additional tool aimed at interrogating the relationships between power and knowledge production and consumption across multiple contexts.

This study draws deeply on Paolo Friere’s concept of conscientization or critical consciousness. Freire’s *Pedagogy of the Oppressed* (2000) is rooted in the concerns and questions of participants, proposes a radical reassessment of education as the practice of freedom *with*, not for, the oppressed in their struggle to regain humanity, and engages an ongoing process of dialogue and critical reflection towards an awakening of a critical consciousness by reflecting on the conditions of one’s own life (Freire, 2000). Freire advocated for a problem-posing model of education stating that as “students are increasingly posed with problems relating to themselves in the world and with the world, [they] will feel increasingly challenged and obliged to respond to that challenge” (Freire, 2000, p. 81).

On critical consciousness, Freire (2013) states when men "apprehend a phenomenon or a problem, they also apprehend its causal links. The more accurately men grasp true causality, the more critical their understanding of reality will be" (p. 41). Freire then distinguishes between critical consciousness, one in which one is able to see things as they are in the moment and as a product of something that is mutable. He contrasts this with naive or magical consciousness in which "men fold their arms, resigned to the impossibility of resisting the power of facts" (p. 41). In line with Freire’s work, one of the explicit goals of this course was to offer students the means
to "supersede their magic or naive perception of reality by one that was predominantly critical, so they could assume positions appropriate to the dynamic climate of the transition" (p. 42). Freire offered the following three components in addressing how to achieve these goals: 1) in an active dialogue, critical and criticism-stimulating method, 2) in changing the program content of education, 3) in the use of techniques like thematic "breakdown" and "codification" where breakdown is the splitting of themes into their fundamental nuclei and codification is the representing of theme in the form is an existential situation (Freire, 2000, p. 106-107). In adapting these three components, I continued to draw upon dialogue as the main form of pedagogy in the classroom. Freire writes, "dialogue is a horizontal relationship between persons...it is nourished by love, humility, hope, faith, and trust" (p. 42-43) and can lead to the critical search for something. By approaching EE from a problem-posing perspective, “people develop their power to perceive critically the way they exist in the world with which and in which they find themselves; they come to see the world not as a static reality, but as a reality in process, in transformation” (Freire 2000, p. 83). Situating learning in a changing context allows both the environments and the processes shaping environments to be interrogated leading to a reflexive praxis of action and reflection as essential skills learned in a critical urban environmental pedagogy.

**YPAR as EE: The Intersection of YPAR and EE**

YPAR has intersected with EE in small pockets of work; however, there has not been a large movement towards the integration of YPAR in EE, especially here in the United States. Participatory methodologies have been used to engage youth with their local environment in places outside of the U.S., and this scholarship has laid the groundwork for youth engagement in locally relevant and critical EE. The works of Colin Ward in the UK in the 1960’s is one
example that embodies the intersection of youth participatory research and EE. Ward was committed to bringing youth out of school into their neighborhoods in order to study the conditions of urban environments from their perspective. His *Streetwork: The Exploding School* (Ward & Fyson, 1973) and *The Child in the City* (Ward, 1978) are two contributions that are offer revolutionary potential for EE. Burke (2014) writes, “Colin Ward was a classic autodidact who sought connections between fields of knowledge around which academic fences are too often constructed” (p. 435). This interdisciplinary description of Ward’s vision for EE is similar to the political ecology lens that a critical urban environmental pedagogy seeks to strengthen in youth.

Ward and Fyson’s *Streetwork* was a direct response to the absence of children observed in the streets of towns and cities in the UK. Even in the 1970s, Ward and Fyson acknowledged that teachers seldom took students out of the classroom for authentic learning experiences in local communities, a phenomenon that persists today. Both Ward and Fyson worked at the Town and Country Planning Association, an independent organization in the UK that “campaigns for the reform of the UK’s planning system to make it more responsive to people’s needs and aspirations and to promote sustainable development” (“About us · Town and Country Planning Association,” n.d.). Ward spent many years (1971-1980) working on the *Bulletin of Environmental Education (BEE)*, a publication in which he wrote articles designed for teachers in formal learning environments. These articles pushed the “possibilities of Streetwork” where the associated images and captions “were a powerful means of encouraging the educational imagination, literally placing pupils and their teachers within the context of an urban environment” (Burke, 2014, p. 436). He describes “techniques for involvement” as “devices for
developing the habit of observation, the habit of evaluating, and the habit of questioning

decisions in the environment” (Burke, 2014, p. 437). Burke (2014) goes on to describe that,

What Streetwork offers is something different. It offers a view of the natural
inclination of children and young people to not only have a view and a voice
when adults deem to consult them, but also to critique, re-imagine and reconstruct
their world for themselves with and for the communities to which, through so
acting, they would (it was believed) experience a greater sense of belonging and
therefore continued commitment. It also offers a dynamic view of place-based
education that encourages the questioning of place, recognizing it not so much as
a fixed abode but rather as always subject to negotiation and change (p. 437).

Based on the anarchist characteristic of freedom to roam and determine one’s learning path,
Burke (2014) notes that EE has “lost the urban edge realized fleetingly by Ward and Fyson
during the 1970s. Environmental education has become closely associated with nature and the
values associated with natural elements and forces” (p. 440), something I problematize in more
detail in Chapter 6.

In speaking about the benefits of learning in places, Ward writes, “I wanted readers to
grasp the importance of the child’s surroundings as a source of pleasure and of the skills needed
contends that investigation of the physical environment is ripe for participatory opportunities
with youth, specifically investigations of the local environments in which youth live, stating that
“only through direct participation can children develop a genuine appreciation of democracy and
a sense of their own competence and responsibility to participate” (p. 3). He further critiques the
current state of EE by describing it “as the task of educating the public about nature conservation
or how to protect the natural environment from damaging human actions” (p. 4). Hart (2002)
argues that the differing definitions about environment (natural vs. built) have led the
environmental movements to focus on one issue over the other based on experiences. Hart notes
that the more nature oriented members in the environmental movement tend to be more middle
and upper class and as such, fail to find significant to EE issues of housing, parks, and jobs. This marginalization of certain groups and their related socio-environmental issues led Hart to call for an educational approach that is deeper and included “more grounded involvement of citizens with the environment” (p.8). Hart’s call for an EE that is more rooted in the realities of all people creates the need for a critical urban environmental pedagogy that prepares youth to engage with the pressing socio-environmental conditions most impacting local communities.

While Hart’s work is mainly situated in informal settings spanning the North and South, his observation of the marginalization of communities from the EE conversation offers a framework for reimagining EE that is rooted in genuine and critical participation. In connecting to critical consciousness and identity, Hart states, “when children begin to observe their environment and to ask questions about why things are the way they are, they may be quickly elevated to a higher level of social and indeed political consciousness” (p. 25). Thus, his vision for an EE involves youth questioning surrounding socio-environmental conditions that are rooted in inequality and engaging in research and action in order to seek ways to challenge the hegemonic powers that are maintaining inequality in environments. Ward, Fyson, and Hart all speak to the ethic of a critical urban environmental pedagogy that similarly seeks to value the environments of all people and to actively engage youth in research through YPAR.
Chapter 3. Using Photovoice As A Critical Youth Participatory Method In Environmental Education Research

Manuscript Information Page

Marissa E. Bellino

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_____ Prepared for submission to a peer-reviewed journal
_____ Officially submitted to a peer-review journal
_____ Accepted by a peer-reviewed journal
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Using Photovoice as a Critical Youth Participatory Method in Environmental Education Research

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Abstract

Photovoice evolved in my environmental science classroom from a research method to a methodology. I discuss my emerging critical identity and share how it mapped onto the photovoice process during two years, addressing specifically my shifts in thinking about the nature of research. Included are some of the participatory methods utilized in conjunction with photovoice as a means of exploring young people's sense of place. Data from the second year of photovoice are explored with a focus on the multiple ways data were utilized by students to generate research topics, narratives, and critical presentations about their urban environment. I conclude by addressing the implications of using photovoice in reframing environmental education as more local and relevant to the lives of young people and the expansive ways we can think about research.

My Evolving Epistemology

Over the last three years I have shifted from teaching a more disciplined and traditional environmental science class to a more critical, local, participatory course focused on the lived experiences of youth. It is difficult to tease apart the methodology from my pedagogical practice since the two are so intertwined. Accordingly, I regard it as important to explore my personal shift as well as attempt to explicate the resulting methodological shifts, which played out in the classroom, and how the outcomes of the classroom informed my teaching. My reflexive praxis has evolved in response to my own growth as a critical educator and through this chapter I want to share how my own growth opened up spaces for my students’ growth. Within this space my
ideas about teaching and learning, research, and environmental education, three constructs I view as inextricably linked, evolved.

Photovoice was a teaching and research methodology I used to explore what it means to be a young person living in New York City. The evolution of the photovoice methodology over a two-year period shows how the process, products, and outcomes of research looked different as my thinking about research shifted. My experience in the classroom through the use of photovoice contributed to my developing a critical educator identity. Parallel to my transformation, my students developed their own criticality, and this combined phenomenon made the classroom more collective and critical in all aspects of learning and research. The new ways we began to think about research fostered deeper connections between experience and theory and a more dialogic learning space emerged.

My personal transformation is remarkable to me and caught me, every step of the way, by surprise. There were growing pains, like when Eric Bana turns into the Hulk. I could feel the shifts in my thinking and in my heart, and I could feel myself fighting with internal, conflicting ideas. Beliefs I always held about research were crashing against new ideas that I was exposed to in my doctoral program and continually challenged my thinking. I come from a background where positivistivism was the dominant paradigm for research and science education. I never thought about my epistemological stance as a decision I made. I was uncritical because I never knew that being critical existed. I was never given the opportunity to challenge these ideas having not been exposed to any critical or sociocultural theory in education. Research was only and always hypothesis driven, quantitative in nature, involved the writing of literature reviews, and knowledge was shared through scientific papers.
The first exposure I had to critical and social theory was in my early doctoral courses. The readings, Freire, hooks, Giroux, McLaren, Harvey, Lipman, Fine, challenged my whole way of thinking about education and research. The classes were dialogic, discussing assumptions about young people and education, and we together tried to uncover some semblance of truth in the messiness of ideas, experiences, power, hegemony, and ideology. I was frightened. I sat in my classes and didn’t speak the entire semester. But I listened and felt myself, my thinking, my beliefs, changing. During this time my ways of thinking about education were most challenged by reading *Pedagogy of the Oppressed* (Freire, 2000), and connecting Freire’s ideas on the banking model of education to my own experiences in the classroom. Reading about neoliberalism and its agenda for public schooling helped me to see our current education system as a vehicle for socializing and reproducing our capitalist society. The hidden messages young people were internalizing by constantly being measured and sorted were working to create an uncritical citizenry. I imaged a classroom that challenged this dominant ideology, a place that empowered young people by drawing on their realities and experiences and connecting these to larger systems of power.

The learning environment, as I reimagined it, was a classroom where individual and collective life experiences were privileged and valued. I conceptualized an environmental science class that was not dictated by the chapters of a textbook or a test but encompassed the places that young people spend their time. These places would be investigated and phenomena observed would be interpreted and connected to social and environmental theory. By moving away from the traditional ways environmental education is presented, this new course could open up a more inclusive definition of environment that encompassed the natural, social and built spaces that surround youth. I believed this could be accomplished by creating a space in school
for young people to explore their identities in relation to the places and people that they were interacting with and by reflecting on how their experiences connected to research and theory. I felt that classes like this were lacking; learning in science was not connected to the lived experiences of students but driven by the memorization of information. I imagined a more dynamic experience where learning and knowledge emerged from students, challenged their views of school, and fostered a more local environmental and critical consciousness.

I was exposed to the research methodology of photovoice in the first semester of my doctoral program and was drawn to its participatory and visual nature, as well as its adaptability. Photovoice is a form of action research in community development and education, where marginalized social groups capture images and voice their concerns in the hopes of creating awareness for themselves and others to spark change (Wang & Burris, 1997). I thought that young people would be drawn in by photovoice’s use of technology and storytelling. Photovoice has been incorporated into community and educational research with youth and has been modified in many ways to meet the goals of individuals and projects (Strack et al., 2004). I latched onto photovoice and saw it as the perfect vehicle to support my reimagined environmental science class.

In preparation for using photovoice I filled a notebook with ideas about how students would investigate their local environments. Before the class knew about photovoice, I had determined the project goals, the questions students were going to discuss and write about, and the overall purpose of our project. This first year I reduced photovoice to a method, a series of steps that were to be followed in order to reach a specific outcome. The limitations I placed on the class through my thorough planning undermined the participatory nature embedded in photovoice. Through reflection on the first year I came to a deeper understanding of photovoice
as a methodology, a means of allowing many voices to come together to tell the experiences of youth in New York City. In the second year of photovoice I allowed the project to be more unstructured and students were better able to analyze their worlds as they saw and experienced them. While the project goal was always to encourage critical thinking about local environments, the second year of photovoice allowed for a more emergent and participatory experience.

**Photovoice Year 1**

In the spring semester of 2012, I introduced photovoice to a group of 24 students in my college-credit, environmental science course. The students were a mix of high school juniors and seniors who were historically the more academically oriented students at my school. As the course was an elective, the students self-selected into the class after completing their state required science courses and passed the requisite exams. This created a community of students who were more academically driven, college bound, and on the surface had benefited from the traditional model of public schooling.

There were two major tasks planned for the semester, photovoice and an original research project. The photovoice project attempted to discover how young people make meaning from their observations of and interactions with the local environment. Students gathered images from their environments, discussed them in small groups, wrote individual narratives based on a small selection of their pictures, and in groups created a collective presentation about shared themes.

This experience was used as a vehicle for students to develop a research question that they investigated, write a research proposal, and collect data to answer their question. The end product, defined by me from the start, was to write a scientific style research paper of their study.
The photovoice project began with students gathering relevant images. During the winter break each student was asked to take approximately 100 pictures and organize them into four folders. The folders included (1) Definition of environment (2) Interactions with your environment (3) Strengths of your environment (4) Areas in need of improvement in your environment. Students returned with mixed results, some had many pictures while others had only a few. Students described a sense of confusion about the different categories of pictures, as they had trouble conceptualizing what was meant by each category and where certain pictures belonged. There was also technical difficulty with uploading pictures and many poor quality photos. Overall, the students seemed more concerned about the photograph as an artistic expression than as a representation of their way of seeing.

Students shared their photos in randomly assigned groups of four using the SHOWED method (Wang & Burris, 1999). This method is aimed at generating conversation around the images and includes the following questions:

1. What do you see in this image?
2. Why did you take this picture?
3. What is really happening here?
4. How does this relate to our lives?
5. Why does this condition exist?
6. What can we do about it?
7. How could this image educate others?

It is important to allocate time and space for dialogue, but most of the research on photovoice does not address the challenges of implementing this in a classroom environment where students are rarely asked to be so open with their thinking. These questions challenged the students and they found it difficult to maintain conversations about their photos without my presence prompting them to go further. Not surprisingly they lacked the language and skills that are developed through dialogue and explored in critical and social theory.
I filled this gap by introducing some of the critical theory that photovoice draws from and by sharing example photovoice projects. But my knowledge was limited and I constantly felt inadequate and ill prepared. As much as I tried to support the goals of the project by building in the time and space for collaborative work, the students could sense my inexperience and the tasks seemed repetitive. Many students had difficulty engaging their peers in conversation and often, all four group members shared their images in one 90-minute class period. This was an indication that students were not having the critical conversations that are inherent in the photovoice methodology and that I had not implemented the structures to allow them to do so. These types of critical conversations are not experienced much in schools (especially in science) where so much of the learning is disembodied from the lived realities of learners.

Through the process of sharing photos, students selected a set of images to write a personal narrative. In the narratives students explained why they selected each image, the context of the image, and how they connected the images to larger themes in their lives and to ideas discussed in class. Student themes included the replacement of natural places with new development, the abandonment of buildings, and the obvious disparity between places like Manhattan and the Bronx. Students shared their narratives with me, not in their groups or with the class, and many saw these as a waste of time.

Groups combined ideas and images into one final presentation for the class. Students told the story of their images and included two discussion questions. Presentation themes included the clash of nature and the city, the possibility of a utopian New York City, the changes of space in the city, community tolerance and diversity, and stereotypes of boroughs. The presentations were one-sided, not dialogic, and the discussion questions were used as writing prompts that were not shared with the class. While many of the issues that students raised in their presentations and
through their questions were deeply critical, “What stereotypes exist in your neighborhood and how do you break them?”, “What is one change in your community that has affected you either negatively or positively?”, and “Throughout the city, why do we see differing access to green space?”, these questions were never explored as a collective. Each group posed questions that reflected their concerns as young people. Potentially these questions could have generated ideas about the lived experiences of youth, informing how young people see themselves in relation to their neighborhoods and the greater city. But the class as I had structured it, did not open up the space for these conversations, reinforcing the ideology that we, in schools, in research, work and think alone.

The photovoice process this first year moved students from their images, to personal narratives, to group presentations, and then to research projects. I was fixated on the students conducting a research project the way I had always thought about research. While I had given them opportunities to explore their perspectives using photovoice, I quickly pulled them right back into a positivist model of research where they had to go through the “steps of research”. Reading the literature, developing a proposal and obtaining approval, writing consent forms, collecting data, analyzing data, and writing a final scientific paper.

The final research papers varied in their criticality. Some emerged directly from the photovoice images and discussed issues of power, race, gender and class, (e.g. Youth Perceptions of New York City Boroughs). Other final papers were closely tied to positivistic, causal models of research utilizing more quantitative data collection methods (e.g. Preferences for Nature Based or Recreational Activities in Central Park). All of the final papers were uploaded to a course website in an online journal format which I believed represented the epitome of authentic research. The variation in the projects reflected my own tensions with research, especially
questions about who research is for and how it should be disseminated. Many students struggled with the quantitative/qualitative divide, themselves the product of years of schooling that privileged the scientific method and quantifiable data.

There were many moments for critical reflection during the photovoice phase of the research, particularly the student narratives and group presentations. The students asked many critical questions but few were ever discussed collaboratively or used as springboards for further collective research. I was so focused on using photovoice to get to what I believed was “real” research that I did not allow the time for the narratives to be shared with the class or for lengthy discussions of the presentation themes. As a class we did not capitalize on the concerns and observations raised and as a result I moved us back into the positivistic paradigm of “real” research. All of the critical issues that emerged, diversity, comfort, abandoned space, lack of care for neighborhoods in different parts of the city -- all were lost. I take the blame for this. I was unable to see photovoice as an inherently critical research methodology in and of itself and I was afraid of engaging young people in discussions about their identities and how these inform their ideas about race, equity, and power. I was scared of the discomfort that I believed would be generated when conversations moved into difficult territory. I was unprepared to allow the class to go where they wanted to go or to allow for more collective and participatory research to emerge from the photovoice project. I felt pressured by my students and myself to complete a research project because that was the “final product” I had envisioned and they continually questioned how photovoice helped achieve this. One student wrote a critique of photovoice highlighting many of the assumptions held about research.

*Photovoice might be a technique to add your voice, but it does not mean we should devote time to such a technique in class. The process is not natural to my classmates and I. The project is in reality so sincere and artistic that it seems wrong. It would almost be like asking students to rap…Students in the class have already been taken away from the*
purpose (of photovoice) by having to do it on demand. What are we trying to convince the public of if we did not wish to tell them anything in the first place? What we appear to be doing is making up possible answers based on our opinions. This is not good enough for me and what my fellow classmates will say, will quite frankly not educate me. I personally will not influence people in power through this process. I do not believe I could even influence my peers or neighbors. I feel like my photovoice has no purpose and I do not know how to stress that enough. (Candice, Final Course Reflection, Spring 2012)

My role as the teacher during this first year of photovoice felt fixed as I maintained my authority in the classroom. I framed the project, selected the research groups, facilitated the discussions, dictated the research process, and demanded the final product be a traditional research paper. This goes against the tenets of participatory action research where the research questions are meant to be a product of the participants, coming out of their needs and experiences (Reason, 2006). I was scared to give up the power and comfort in the classroom for fear of difficult conversations and uncomfortability. I knew critical conversations were lacking in schools and believed that schools needed to create space for them, but my fear of having these conversations in the classroom was very real and prevented them. I was doing a disservice to my students by not allowing them to engage in critical dialogue but I felt like I was doing it for the greater good of teaching research skills. In my teaching journal I wrote, “I must create the space for students to express themselves without fear” and “Have students direct the conversation, not be so involved in asking the questions” (Spring 2012). It was clear that as much as I wanted to create a critical space for students, I did not know how and I was not ready.

I ended the first year of photovoice with mixed feelings. Many students outright rejected the process while in it, but came to see it as something that helped develop their research question. Other students were turned off to research the way I presented it, finding it inaccessible and rigid. Reflecting on the year I see how the entire structure of the photovoice project resisted collaboration, participation, a deepening of critical lenses, a critique of traditional research
methods, the development of new data collection methods, or an awareness of who has the right to do research. I tried to address many of these issues the following year.

**Photovoice Year 2**

Throughout the first year of photovoice, I was constantly learning, reflecting on the process, my practice, and what I was reading in my doctoral courses. I was developing my own critical educator identity and was determined to improve the photovoice project for the next year. I strongly believed that photovoice was a way for me to guide my students in their own critical awakening. I introduced critical, social, and environmental theory throughout the year and used photovoice as a critical research method, with no additional research and no scientific paper requirement. I knew my own criticality evolved through exposure to readings and conducting research and so I created similar opportunities for my students.

The goals of the course and the photovoice project had not changed. I was still determined to create a space for learning that was relevant to young people and I was still interested in reimaging environmental education as more local places that hold meaning. The investigation into local environments began with students completing a community reflection. Participants described their communities in terms of behaviors, environments, strengths, improvements, and ideal communities. Each student completed his or her community reflections on the course website. The first year the website was a space to share the final research paper, but the second year, the website and blog became a shared place for documenting the research process. Community reflection data was collected, shared, and analyzed on the blog and students spent time reading each response, writing about their overall impressions, and collectively generating cross cutting themes. I describe the process in detail below, with sample material from the students individual research and group research process
Identifying the themes. The themes that the students identified were community identity, community access, high school community and diversity, segregated communities, integrated communities, dominant cultures and identity, nature, safety, crowding, housing and alternative spaces. Many days were spent conceptualizing each theme in large and small group discussions and the collective ideas were continually documented on big chart paper (Figure 3).
Figure 3. Student generated ideas about safe and unsafe places, a common theme which emerged from the community reflections. Photos by author.
Individual student research using photovoice. Each student chose a theme based on their interest, formed a research group, and designed a photovoice project through the lens of their research theme. Over a two-week period students photographed their various communities and brought photos to class each day to share with their group. Images were discussed using the SHOWED method and for each image students explained how it was connected to their research topic. When students wrestled with ideas or experienced tensions in what they thought about their neighborhoods and what they saw through their pictures, I supported thinking with films and reading. We read, learned, and shared about critical pedagogy, inequality and diversity in New York City, social class, participatory action research, stop and frisk, right to the city, critical media literacy, social norms, stereotypes, race, and gentrification. The infusion of theory helped build a new, common vocabulary to explain and make sense of what students saw in their images. Connections between experience, language, and theory, allowed critical conversations to emerge during the photovoice discussions.

Students used a subset of their images to write a photovoice narrative through the lens of their research theme. Some students wrote from the perspective of diversity and how they experienced it in their own lives. Some wrote through the lens of community identity and explored how their connection to their community influenced their sense of belonging or not belonging. Each student was given a page on our research website to share their narrative and images. Unlike the first year, I allowed time for the students to read and learn from one another. As a class we looked across the photovoice narratives for big ideas, which we documented on the course blog. The collective analysis of the narratives revealed that young people critically interpret the physical and social spaces in their local environments and their interpretations of place is tied to their developing personal and social identities. Many students highlighted the
impacts of globalization on local communities and discussed the tension experienced from the benefits of globalization and the reality that these forces are changing communities in ways that are homogenizing and displacing populations (Figure 4 & 5).
The image shows a wall that divides the park from the elevated street to the right. The wall is often scattered with graffiti consisting of vulgar language and names of graffiti writers. This graffiti is then covered up with black paint, which is equally heinous against the red wall. There are some communities where walls such as this one would have been painted over with a lovely mural. Graffiti artists will appreciate the art on the wall and children would enjoy the drawings as they play. Unfortunately, there are no individuals willing to take on this task in my community. There are little to no situations in which people come together to better the community. This is what the wall looks like with the black paint covering up the graffiti. The wall displays a hopeless cycle of repainting and graffitising.

Source: Chloe, April 2013

Figure 4. Chloe, describing the wall in a park in her neighborhood. Her research topic was community identity. Photo by student Chloe.
Starbucks is one of the main sites of gentrification in my neighborhood. This and Whole Foods, which also came into my community recently. The Starbucks brought in new types of people, the business class. Right above the Starbucks is a daycare. There is already a daycare right across the street, but this new one seems different. It doesn't seem open to the public and looks more exclusive. On this one block alone there is Starbucks, Verizon, Petco, Duane Reade, Crumbs Cupcakes, and a Chase Bank. That very same block used to have a park that neighborhood kids used to go to after school and more affordable housing for the community, a C-TOWN (grocery store), and local businesses. Where have those people gone?

Source: Amber, April 2013

Figure 5. Amber, describing the changes she has seen in her community. Her research topic was community access. Photo by student Amber.
Integration of the individual projects into group presentations. For the final research product each group created a presentation of their images and thinking for the class. These presentations highlighted the ways students connected experiences to social and environmental theory we had read and discussed. During presentations the entire class built on the research themes and added interpretations around issues of gentrification, diversity, homelessness, privatization, loss of funding for parks, and housing. These dialogic presentations allowed students to make connections to their own research and for me to see how theory had assimilated into their thinking. Each group presented to the class for 90-minutes, facilitated the class discussion and shared their new knowledge (Figure 6). After each presentation, a short blog post was created to continue discussions and allow for further reflection.
Figure 6. Final student presentations structured to allow an ongoing dialogic process of the research topics. Photos by author.
Students critical reflection on the research process. After all groups presented, each student reflected on the entire photovoice process on the course blog. Reflections highlighted the cumulative impact of the photovoice research and demonstrated connections between all of the research topics. Four larger themes emerged for students at the end of the photovoice process. Community identity was a concept that many students struggled with, specifically in how communities are defined and bounded. The ways students define their community varied and there seemed to be a shift from thinking about community as a physical geographic space to a more socially constructed and dynamic space.

I never gave much thought to community before this class; I saw community as where I live, but I've realized that you can take your community with you. Community includes the people you hang out with and where you feel most comfortable. (Aurora, Final Reflection on Research Themes, June 2013).

The relationship between community identity and the emerging personal and social identities of students were constantly being negotiated. Many students expressed shifts in their own identity in relation to youth, race, and culture and struggled with the influence community had on personal identity or personal identity had on how they perceived their community.

I’ve noticed many of us struggle with race identification…I found myself questioning who I was and how that shaped my view of community? Or was it my community that shaped me? (Samara, Final Reflection on Research Themes, June 2013).

Almost all students observed changes in their neighborhoods, specifically related to gentrification. Changes included the increased presence of new buildings catering to a different social class than currently is living in the community and an increase in chain stores. Students observed how this paired phenomenon homogenize communities, displace local people and places, and remove a sense of community identity.

And that these big chain stores like Chipotle, Starbucks, and Pinkberry are being put into neighborhoods that did not have them, it’s changing the whole ambiance of that
community. I don't know if that is a good thing because if every neighborhood becomes gentrified and looks like every other neighborhood then everything is going to look the same and have the same feel and that in itself takes away from our communities. (Melissa, Final Reflection on Research Themes, June 2013)

Safety, comfort, transportation, quality housing, and parks were all cited by students as aspects (physical, social and psychological) that all communities deserve equal access to but, as was represented by student photos and experience, was not the case. A general observation was that places deemed more “desirable” had greater access to these resources than other “less desirable”.

We deserve to have access to parks, stores that one might find in financially sound neighborhoods, hospitals and even green spaces for the nature lovers in the city. We may not find these things in every neighborhood because that place may be classified as “unsafe” or because they are not in a prime real estate location...But even so, that should not justify the lack of accessibility to these necessities in neighborhoods. (Gene, Final Reflection on Research Themes, June 2013)

Throughout the second year of using photovoice I constantly questioned, “what was happening?”. If my students’ knowledge and ways of seeing the world were being constructed in the moments of dialogue and reflection, how could I find out what they were taking away from the research as a learning experience? I asked students to write a critical reflection discussing their learning and growth throughout the year. Student reflections demonstrate an emerging critical identity,

The way I think has changed because I’ve realized so many things about myself ... The way I used to think was the generalized story of what the news media says. I learned that there is more to that. I think more in depth and critically. (Rose, Final Course Reflection, June 2013)

I am more vocal, I question why I think, or someone else thinks something and I now see how our experiences shape our thinking. (Rachel, Final Course Reflection, Spring 2013)

I look at the world through new eyes. Nothing is what it used to be and this couldn’t be better. (Lourdes, Final Course Reflection, Spring 2013)

Student reflections also express a desire to share knowledge with others and a deeper consciousness about the world they inhabit.
I believe that even spreading knowledge through conversation can make a difference. Having as many individuals know about the issue as possible is a great start. That is my start. (Lourdes, Final Course Reflection, Spring 2013)

I want to use what I have learned to help educate people around me so that they too can educate people, a domino effect. I do not want what I learned to stop in the classroom, but want it to continue to blossom. (Marionette, Final Course Reflection, Spring 2013).

Many students also expressed how different this learning experience was compared to previous classes. They highlighted the classroom community and relationships as well as the relevance of the class to their own lives, as key points in their experience.

Listening to what others had to say and having others listen to what I had to say made me feel comfortable with sharing my ideas. This class created a sense of community with class discussions, blogs, and group work. (Ariel, Final Course Reflection, June 2013)

I had many self-realizations in this class and I think many people did as well. I realized how biased I am to my own community and how I have separated myself because of my grades (or priorities) and the stereotypes I have. This class was a good place for having realizations and working things out in my mind. (Chloe, Final Course Reflection, June 2013)

I think my biggest change was the way I think of my environment and the places around me. We once had a discussion about an increase in pawnshops in the Bronx and how an increase in pawnshops can show how that industry is taking advantage of the economic situations that the people in the Bronx are going through. This way of thinking has helped me see the underlying problems that affect my neighborhood. (Damien, Final Course Reflection, June 2013)

**Reflections of the Use of Photovoice as a Classroom Tool to (Re)Conceptualize Research**

There are three interrelated themes about research that emerged out of these two years of working with and modifying photovoice. These insights are related to the evolution of photovoice in the classroom from a purely research method to a research methodology. Firstly, when the end product of research is a scientific paper something stagnant is created that does not allow research to live on. During the first year, we built a website to share the final research papers, and I thought this represented a truly intellectual endeavor, but the papers and the site were inert. The scientific paper is the symbol of a dominant idea of research and its prescriptive
nature turned many students off and shut down their ability to be critical. The end product of the first year photovoice research was cloaked in a positivist representation of research, and embodies all of the dominant ideas about what “good” and “scientific” research should look like. This formulaic nature of sharing new knowledge turned off many students to research as it represented the tools of science and research students did not connect with. When we introduce these tools to our students by saying research looks this way we are indoctrinating them into a particular way of thinking about research that negates all other ways of doing research. While our second year end product may not look like “traditional” research, it allowed everyone to be a part of the knowledge production and connect and discuss themes young people wrestle with in a globalized city. Papers can’t evolve after they are finished but conversations, thinking, websites, and blogs can.

Secondly, during the first year of photovoice my role as teacher in the classroom created a divide between me—the keeper of research knowledge, and my students—the beneficiaries of my knowledge. The burden was on me to push them into critical spaces of thinking, to help them build their topics, to help them unearth what they were interested in. Their critical lens was restricted to my interactions with them, not them pushing one another to go deeper and be more. The dialogue was between me and one or two students, not between all of us. What I learned from the second year of photovoice is that youth leading youth in the research process decenters the research enterprise from me by putting them in a position where they are learning from themselves and learning from one another. In dialogue we all pushed each other, moved our thinking together, and I was able to step back from my role as keeper of knowledge and we opened up a space for new roles of teacher as student and students as teachers (Freire, 2000). This allowed me to be a part of the students’ emerging knowledge as much as they were a part of
mine. In this way, the entire class was able to learn and, while messy, the photovoice images, narratives, and presentations were expansive. For example, in the first year gentrification came up for some individuals, but not everyone was able to learn from or connect gentrification to their own experiences. In the second year, when looking collectively, students could see how the forces of gentrification were playing out across neighborhoods in New York City, and the concept became more complex and relevant.

Finally, in the first year the class touched criticality during photovoice and then shied away from it during the research. The research moved from the collective to the individual and I believe this was a step backward. On the verge of touching upon difficult knowledge, I defaulted to my comfort areas and went back into my assumptions about research. In contrast to the first year, the second year began with students thinking about community at an individual level and then building more critical understandings, from theory and collective experiences. The class website has since become a storehouse of thinking about social theory, environment, and identity containing photographs, narratives, data analysis, and critical reflections. The site has evolved into a space that has documented the process of research as opposed to the product.

Photovoice as a youth participatory action research (YPAR) method has given me a new perspective on research. I have come to view YPAR as a powerful tool for teaching an interdisciplinary curriculum, incorporating multiple literacies, and connecting to the lived experiences of youth. YPAR democratizes the skills of research allowing youth to learn their own truths, to challenge what they have been told are truths, and to challenge the dominant assumptions about them as youth, minorities, and students (Cammarota & Fine, 2008). Once students have the skills to conduct research they can contribute to the discourse, no longer being controlled by those who have power or privilege in education or universities. YPAR privileges
the perspectives of youth and allows for polyphonia (multiple voices) and polysemia (multiple meanings) of their lived experiences and their stories. This kind of research by and with young people moves past a single view of what research looks like, allowing it to be truly a participatory and emancipatory tool for young people to investigate their own lives.

**Photovoice as a Tool to (Re)Conceptualize Environmental Education**

Our classroom photovoice research created an opportunity to reimagine an environmental science class. I used to think that environmental education was all about global issues that happened very far from home like deforestation, the hole in the ozone layer, climate change, and food production. These topics dominate the chapters of every environmental science textbook. With these assumptions so deeply embedded in my thinking, I taught environmental science as content, lectures of information, the science of what was happening. This way of thinking about “the environment” is irrelevant for many urban students and ignores the economic and political causes of environmental problems as well as the social implications of these problems.

Throughout the photovoice experience my students and I created an environmental science class that does not use a textbook or follow a structured curriculum. Our class was guided by principles of social justice and ecological justice and was rooted in the lived experiences of the students in the classroom. As a class, we re-conceptualize environment as dynamic and changing, as immediate and constant, as impacted by and impacting on individuals and communities. Environmental science was no longer about issues faced in some far away place but issues young people face locally, and experience in their neighborhoods. Photovoice as a tool allowed us to investigate local communities in a classroom context, and led to a deeper consciousness for the well being of people, communities, and ecosystems.
An environmental science class can become the class of everything. The disciplines are not siloed the way we teach them in schools and by adopting a disciplinary focus we mask the deeper connections between, for example, science, history, and economics. We are doing a disservice in schools by not allowing students to make interdisciplinary connections, and especially in relation to their own lived experiences. What happened in the critical classroom was a filling in of many of the gaps in education and students made new connections between local environmental phenomena and larger economic and social processes.

Incorporating Research into Teaching and Learning Practices

I had held ideas about what traditionally research was and throughout the two years of developing photovoice, I started to have ideas about what research could be. Wrestling through the messiness of photovoice over the past two years I have found ways to introduce students to discourses about what counts as research, lenses through which to look at the world in different ways, and methods to collect data about what young people see in their local environments. By reflecting on the different ways I thought about research through conversations, and alternative research products, I was able to step back, tweak methods, and create new research opportunities that made research relevant and fresh.

The overall purpose of the photovoice work has been to use, modify and develop participatory methods for young people to explore their experiences and relationships in and with place. I believe that through thinking about these experiences and relationships, young people can critically investigate their local environments as places that embody many global and local environmental issues, issues that imprint on their personal and social identities. Utilizing these methods in our environmental science classroom has allowed students to develop research skills including developing research questions, collecting data, analyzing data, and sharing new
knowledge. This challenges assumptions about who has the right to research and where knowledge is situated.

**References**


Chapter 4. Reimagining Environmental Education: Urban Youths' Perceptions And Investigations Of Their Communities

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Reimagining Environmental Education: Urban Youths' Perceptions and Investigations of Their Communities

Abstract

In this study we investigate ways that students in an environmental science course connect learning in their communities using photovoice. As a participatory methodology, photovoice provides a means for young people to critically explore issues that impact their everyday environments. Students utilized photovoice and narratives to uncover common themes experienced by young people in their rapidly changing urban neighborhoods. We found that through a photovoice project that incorporated a critical pedagogy of place framework, students were able to critically evaluate the physical spaces that construct their identities while documenting larger global issues that are happening on a local scale including segregation, gentrification, and differential access to spaces and resources. A critical place based pedagogy can challenge dominant ideologies about environmental education by highlighting social justice issues that are happening close to home and most salient to student’s lives.

Keywords: Environmental Education, Participatory Methodology, Photovoice, Place-based Environmental Education

Introduction

Entrenched in an era of education reform that continually espouses a dominant set of values, schools have become detached from both the communities in which they are situated and the lived experiences of their students (GRUENEWALD, 2003). In this context, science education continues to privilege a Western notion of scientific literacy, emphasizing scientific content for global economic purposes rather than a locally relevant science education (MUELLER, 2011). This impedes the opportunity for science classrooms to create citizens with a critical understanding of both their local and global social and environmental contexts. While
environmental education has the potential to connect youth to their local communities it is often taught as “an already established school subject that emphasizes the relationship between men and the natural environment, in terms of how to preserve it and how to appropriately manage its resources” (GADOTTI, 2008, p. 25). Within this traditional paradigm, the historical, social, political, and economic causes of local environmental injustice, including segregation, gentrification, and access to public space, are obscured.

Environmental science curricula often address global issues (e.g. Climate change, deforestation, food production) from a liberal (i.e. individual) perspective, leaving students feeling disempowered, cynical, and frustrated (CONNELL; FIEN; LEE; SYKES; YENCKEN, 1999). In classrooms students often encounter the environment as a place out there, devoid of people that needs to be protected. Instead, as educators, we need to “connect environmental education with the places where youth live” (TZOU; SCALONE; BELL, 2010, p. 105). We can do this with a critical place-based science education that provides an alternative where the classroom is “a site for relationships among teacher, student, and content, and between classroom life and the local communities” (AIKENHEAD; CALABRESE; CHINN, 2006, p. 412). This article describes the implementation of a critical pedagogy of place framework in an environmental science class and the use of youth-centered methodologies for students to document their lived experiences in various communities, share their stories, and problematize the complex environmental situations they encounter. By expanding environmental education to include social justice issues as experienced by young people, they are able to develop the critical tools necessary to investigate deeper connections between their immediate surroundings and the historical, economic, and political contexts in which their neighborhood are embedded. These
tools provide a basic functional literacy that is needed for all young people to contribute to society as educated and critical citizens.

**Theoretical Framework**

A critical pedagogy of place encourages educators to advocate for teaching and learning practice that “relates directly to student experience of the world, and that improves the quality of life for people and communities” (GRUENEWALD, 2003, p. 7). The conditions our young people experience do not happen in isolation, but are part of “dense networks of interwoven socio-spatial processes that are simultaneously local and global, human and physical, cultural and organic” (HEYNEN; KAIKA; SWYNGEDOUW, 2006, p. 2). By making environmental curricula more local and providing youth with tools to investigate their environment, young people can develop a critical lens that can make visible the power relations that create oppressive socio-ecological situations that have come to define our cities (e.g. privatization of public space, displacement of minority communities).

Youth Participatory Action Research (YPAR) as a pedagogical praxis and research methodology “provides young people with opportunities to study social problems affecting their lives and then determine actions to rectify these problems” (CAMMAROTA; FINE, 2008, p. 2). In this praxis, students are co-researchers and together generate critical research themes that address an issue of direct importance to their lived experiences. An environmental science class that embodies an ethic of democratic education for an informed and literate citizenry challenges the gatekeepers of the one size fits all ways of thinking about science education (MUELLER, 2011). Today, it is necessary to contest the status quo of environmental science classrooms by expanding and problematizing our ways of thinking about the environment and environmental education.
Local environments can be examined and documented through photovoice, a participatory methodology by which people identify, represent, and enhance their community through images (WANG; BURRIS, 1997). Photovoice as a methodology functions as a participatory needs assessment with three main goals: (1) to enable people to record and reflect their community’s strengths and concerns, (2) to promote critical dialogue and knowledge about important community issues through large and small group discussion of photographs, and (3) to communicate concerns with policymakers (WANG; BURRIS, 1997, p. 370). Participants address the underlying complexities of the situations they experience through the sharing of photos and having critical discussions about the potential ways these situations can be investigated more deeply.

This study addresses the larger conversation about the purposes of environmental education and reimagining this discipline to address issues relevant to young people in their local environments (e.g. cultural identity, diversity, gentrification, and safety). The purpose is to explore how enacting a critical pedagogy of place and using photovoice as a participatory methodology, in an urban science classroom can reveal the ways young people define, identify, and relate with their communities. The driving questions for our collective research in the class was, “what kinds of communities do all young people feel they deserve?,” and “how do students experience their access to resources within and across communities?”

Methodology

Context and participants. This study was conducted in collaboration with students at an urban public high school. The school has over 1300 students and students travel long distances from various parts of the city to attend the school. This creates a unique situation in which the community where the school is located is not the community where many of the students live.
The environmental science class, in which this research was conducted, is a college-credit class offered by a large public university in the United States. Each student pays for the class and those who successfully complete the class earn 4 college credits. The class is taught for a full year during a 90-minute period that meets each day. During the 2013 spring semester, students were introduced to critical theory and participatory research methods, including photovoice, to conduct a class research project.

This paper utilizes data collected from the 2013 school year. There were 24 students enrolled in the class; 8 juniors (grade 11, age 16-17) and 16 seniors (grade 12, age 17-18). This class is an elective and is open to any student who has completed the high school graduation requirements in science (two State science examinations in Biology, Chemistry, Physics, and/or Earth Science). Students enrolled self-identified as American, Bengali, Dominican, Ecuadorian, Indian, Mexican, Mixed, Polish, and Puerto Rican. Fifty eight percent of students were eligible for free-reduced lunch; 17% were male and 83% were female; 2 students have an Individual Educational Plan (an official document describing specific learning objectives for students with disabilities), and all of their High School English and Math Performance Levels met or exceeded proficiency standards (as determined by State assessments in English and Math). Overall this was a class of students who all self-identify as academically oriented.

**Photovoice process.** The purpose of using photovoice was twofold. First the participatory nature of photovoice gave students the opportunity to explore their environments as defined by the social, physical, and built spaces that they interact with and critically examine these spaces in relation to their own identity and experiences. Secondly, the introduction of photovoice as a tool for teaching and learning in an environmental science classroom created an
engaging classroom where students participated in the process of research and the sharing of their own knowledge and experiences in place.

Photovoice as a participatory methodology was introduced to the students through readings of previous studies and viewing of online photovoice projects. To begin, students formed research groups based on a theme that most interested them from class community reflection data (Table 2). This data, generated through student reflections on environmental factors and characteristics of favorite and least favorite places in their community, was collected on the class blog and analyzed for major themes by students.

Table 2. Research topics for photovoice project selected by students from individual community reflections

<table>
<thead>
<tr>
<th>Research Topic</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Access</td>
<td>5</td>
</tr>
<tr>
<td>Community Identity</td>
<td>4</td>
</tr>
<tr>
<td>Segregated Communities</td>
<td>3</td>
</tr>
<tr>
<td>Dominant Cultures and Identity</td>
<td>3</td>
</tr>
<tr>
<td>Nature, Safety, Crowding</td>
<td>3</td>
</tr>
<tr>
<td>High School Community and Diversity</td>
<td>2</td>
</tr>
<tr>
<td>Integrated Communities</td>
<td>2</td>
</tr>
<tr>
<td>Housing</td>
<td>1</td>
</tr>
<tr>
<td>Alternative Spaces</td>
<td>1</td>
</tr>
</tbody>
</table>

Over the course of two weeks, students took photographs in their communities and shared their images within their research groups. Most students went out alone in their community but a few groups went together to one another’s community. Google applications were used to inventory and share photos within the small groups and the whole class. During group discussions the students were asked to address questions adapted from Wang and Burris (1997) (Table 3).
Table 3. Questions used for discussion of photographs as part of the photovoice methodology.

Youth examine photographs through the discussion of these 10 questions:

- What do you see here?
- Why did you take this picture?
- What is really happening here?
- How does this relate to your research topic?
- How do you relate to this picture? How do other people in the group relate to this picture?
- Why does this condition (problem, strength, concern, situation) exist?
- Is there any action that this generates? What can we do about it?
- How could this image educate the community/policy makers?
- What do some of our pictures have in common?
- Are there any images or issues that are really different that stand out?

Students were asked to individually narrow down their pictures into 5-10 images in order to generate a personal narrative that helped them connect experiences in their community to their research topic. The individual narratives were shared with the class through our class website. All students read each other’s narratives and commented on our class blog about the patterned and contradictory experiences they saw among the narratives.

The final product of the photovoice project, as determined by the students, was that each group would create a presentation using their collective images that summarized the issues raised in their research. Students synthesized their final thoughts on our class research questions and the photovoice experience in a blog post after the completion of all the group presentations.

Data collection and analysis. Throughout the spring semester (February-June) a variety of field texts and data were co-constructed by the first author as the teacher/researcher, and the students in the class. These included a community reflection, photographs, personal narratives, focus groups, final presentations, final reflections, blog posts and comments, and participant journals. For this article, we focus on the photovoice images and narratives.

Analysis of photovoice images and narratives involved participants reflecting on common themes throughout the semester. All participant analysis was documented on our class blog and the final photovoice reflections provided a space for students to assess learning and ontological
changes as a result of their participation. The first author as the researcher used the multiple data generated by the students to find emergent themes. Themes were selected based on their presence in multiple data sources and as repeated by multiple students. First students-selected photos and narratives were coded with general low inference codes indicating the subject of the image and the purpose of the image as indicated by the student. Because students set out looking with a specific idea in mind for their research, these codes were then combined into more general codes that encompassed broader common themes.

**What was Learned**

Analysis of the photovoice images, narratives, presentations, and final reflections by the first author revealed three overarching themes. These themes were 1) photovoice helped students wrestle with the idea that their environments are social spaces that can and must be critically interpreted, 2) photovoice revealed a connection between students sense of place and their shifting identities including how their neighborhoods are different from or fit into the larger discourse on urban communities and urban youth, and 3) photovoice highlighted local issues that are systematic of larger impacts of globalization. These are discussed in more detail below.

**Critical reading of space.** We are constantly surrounded by spaces that, through their physical makeup, send us messages about who we are, who and what is valued, and what we should or should not care about. Our class photovoice project allowed students to critically investigate the hidden messages in the physical places that make up their environment.
The image shows a wall that divides the park from the elevated street to the right. The wall is often scattered graffiti consisting of vulgar language, and names of graffiti writers. This graffiti is then covered up with black paint, which is equally heinous against the red wall. There are some communities where walls such as this one would have been painted over with a lovely mural. Graffiti artists will appreciate the art on the wall and children would enjoy the drawings as they play. Unfortunately there are no individuals willing to take on this task in my community. There are little to no situations in which people come together to better the community. This is what the wall looks like when people graffiti over the black paint intended to cover graffiti. The wall displays a hopeless cycle of repainting and graffitiling.

Source: Chloe, April 2013

Figure 7. A student describing the physical neglect of a neighborhood park. Photo by student Chloe.
This image and description by Chloe (for purposes of anonymity, pseudonyms are used), a young Dominican woman, reveals her struggle to understand why the wall in her neighborhood is not like the walls in other neighborhoods (Figure 7). She raises the issue of equity of access to spaces that are clean and cared for and wonders why this situation of neglect may exist in her community but not in another community. She has obviously experienced other parts of the city where graffiti would be handled differently and she identifies a lack of willingness in her community to address this situation or even knowing who is responsible for addressing the situation. Breitbart states,

Young people who live in declining parts of the city are profoundly aware of the influence that their local environments exert. They can literally see and feel the constraints that dangerous and/or inadequately provisioned neighborhoods place upon them, and they can appreciate the opportunities that safe places, with ample resource provide...These spaces send messages to young people about how an external world values or fails to value the quality of their lives (1998, p. 308).

This also raises the issue that in environmental education we often define solutions to problems based on individual actions and not on political or collective actions. Table 4 highlights additional data from student narratives focused on hidden messages in physical space. Students identified issues of inequality to food choices (fresh foods, restaurants), transportation, clean parks, and clean streets as well as the neglect they see for public housing in the same places they see new condominiums rising.

Table 4. Critical reading of space examples from the photovoice narratives and the number of students who raised each issue.

<table>
<thead>
<tr>
<th>Examples from Photovoice Narratives</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neglected parks and other neighborhood spaces</td>
<td>4</td>
</tr>
<tr>
<td>Inequality of access to transportation</td>
<td>3</td>
</tr>
<tr>
<td>Disparity between public housing and new development</td>
<td>3</td>
</tr>
<tr>
<td>Inequality of access to food</td>
<td>2</td>
</tr>
</tbody>
</table>
**Sense of place and identity.** Many students throughout the photovoice process struggled with issues around identity and the places they live in. In narratives and final reflections students discussed the connections they were making between how they see themselves and how this is reflected in and reflective of their experience in place. A sense of place reflects this relationship between a person and a place and how through exploring this relationship one learns about identity, culture, one’s role in a community and the larger contexts that influence one’s lived experiences (Figure 8). Adams (2013) finds that developing a sense of place for children living, interacting, and growing up in transnational communities is complex and involves the ongoing negotiation of identity and resources. Adolescents are seldom asked or given opportunity to critically reflect on how they connect to places and what influence this relationship has on their lives. When given this opportunity to explore these relationships students expressed enthusiasm and excitement about being able to share more of themselves in school.
I was born and raised in my neighborhood all my life. For 17 years I've seen the changes my neighborhood has gone through including my parents when they first emigrated from Mexico to here. I am Mexican American and from living in a predominately white neighborhood that has shaped who I am because I am trying to keep my cultural identity where it is excluded. My neighborhood has been for many years a white and polish community and neighborhood. I am part of the minority in my community which are the: Hispanics, Asians, and African Americans. Being Hispanic or any other race in my neighborhood is tough and isolating because sometimes you have to face racism, the discomfort of not being the same ethnicity of the predominant group because you are "different", and are judged by typical stereotypes of ethnicities in general.

Source: Rose, April 2013

Figure 8. A female student, Mexican American, describing her experience as a minority in her community. Photo by student Rose.
The image from Rose’s photovoice project and her narrative description captures the sense of isolation she feels in a community that she does not see herself a part of. As spaces are culturally produced they are imbued with practices and values that reflect a prevailing discourse, which can create a sense of comfort when we fit in, but a sense of marginalization when we do not. We can see from Rose’s narrative that she is wrestling with the implicit message of not fitting in and expresses feeling a challenge to her developing cultural identity as she recognizes her minority status in her neighborhood. Table 5 shows additional examples from student narratives that highlight issues related to place and cultural identity and indicates that a portion of students feel a disconnect between their community and their cultural identity. Many students raised questions about the history of their community and how it came to be, as they know it today. This understanding that places are social productions and can be transformed was a common learning experience.

**Table 5.** Sense of place and identity examples from the photovoice narratives and the number of students who raised the issue.

<table>
<thead>
<tr>
<th>Examples from Photovoice Narratives</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconnect between community and cultural identity</td>
<td>8</td>
</tr>
<tr>
<td>Neighborhood says something negative</td>
<td>7</td>
</tr>
<tr>
<td>Safe/unsafe spaces impact engagement with place</td>
<td>6</td>
</tr>
<tr>
<td>Neighborhood lacks diversity</td>
<td>5</td>
</tr>
<tr>
<td>Neighborhood has diversity but is segregated</td>
<td>3</td>
</tr>
<tr>
<td>Neighborhood is diverse</td>
<td>3</td>
</tr>
<tr>
<td>Connection between community and cultural identity</td>
<td>3</td>
</tr>
</tbody>
</table>

Local situations reflect the larger trends in globalization. Local patterns that students identified are tied to issues that are emerging in the current era of globalization. The patterns of geographic segregation, social inequality, marginalizing racial minorities (through gentrification), homogenization of culture (with influx of big chain stores and the loss of local shops), social reproduction, and overconsumption while being played out in the local neighborhoods of young people are tied to trends in globalization, and these trends impact and
complicate the relationship that young people have with their neighborhoods and communities. A recurring observation made by students was how they were constantly experiencing a tension between wanting better access to resources they find in more middle-income communities but also sensing that having these things comes at a cost to diversity and equity.
Starbucks is one of the main sites of gentrification in my neighborhood. This and Whole Foods, which also came into my community. The Starbucks brought in new types of people, the business class. Right above the Starbucks is a daycare. There is already a daycare right across the street, but this one seems different. It doesn't seem open to the public and more excluded. One this one block alone there is Starbucks, Verizon, Petteo, Duane Reade, Crumbs cupcakes, and Chase Bank. That very same block used to be a park that neighborhood kids after schools used to go to and affordable housing for the community. Across the street were a C-TOWN, small businesses and more housing. Where do those people go?

Source: Amber, April 2013

Figure 9. A mixed-race student describing the changes she has experienced in her community. Photo by student Amber.
In this example, Amber observes the changes in her community and asks the question about where the people who were once here have gone (Figure 9). While raised here as a rhetorical question, she and many students expressed an interest in how the changes in the city are pushing displaced populations further away from the city center. Students observed changes in relationship to space (e.g. a small business replaced by a chain store) as well as changes in demographics (e.g. the movement of middle-income people into neighborhoods) (Table 6).

Table 6. Local situations reflect larger trends in globalization examples from the photovoice narratives and the number of students who raised the issue.

<table>
<thead>
<tr>
<th>Examples from Photovoice Narratives</th>
<th>Number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveillance</td>
<td>1</td>
</tr>
<tr>
<td>Commercialization of spaces</td>
<td>3</td>
</tr>
<tr>
<td>Gentrification</td>
<td>4</td>
</tr>
<tr>
<td>Displacement of marginalized people</td>
<td>4</td>
</tr>
<tr>
<td>Homogenization of culture</td>
<td>3</td>
</tr>
</tbody>
</table>

**Conclusion**

While photovoice is one of many tools to connect young people to their local environments, what we learn from this project is that the process of learning in a place (the classroom and community), learning about a place, and learning about the experiences and choices that impact a place are deeply personal and linked to student identity and life history. The experience of learning in place as described in this article shows how young people can participate in the construction of new knowledge about the communities that they come from and how this knowledge becomes incorporated into how place gets constructed and reconstructed by youth.

A critical pedagogy of place is a local learning experience. Environmental education that focuses only on issues at the global scale minimizes the contribution of urban environments to these global problems as well as the concentrated impact of global issues in urban environments (HEYNEN; KAIKA; SWYNGEDOUW, 2006, p. 2). The historical, social, political, and
economic causes for environmental justice issues like segregation, displacement, safety, and access to public spaces and other resources are obscured and left invisible when we focus on such a macro scale. When we don’t engage young people in critically investigating their own community, we are teaching them to ignore local environmental problems that connect to larger global issues. Through dialogues about the lived experiences of urban youth in communities that are being shaped by processes of globalization and gentrification, it is possible to engage in critical thinking that encourages a multiplicity of perspectives around the notion of environment and the purposes of environmental education.

References

Chapter 5: Case Studies of Student Engagement, Learning and Critical Reflection on the Course of Study

Rationale for Chapter and Participant Selection

The structure of the dissertation as a manuscript style limited the voices of youth. In this chapter I seek to correct that by presenting four case studies of my analysis of the student’s journeys through the program. I have selected all four of the case studies from the second year of the course because this year had significant improvements upon the first year of the program; the third year of the program focused on additional ideas and was not as complete as a second year. Each of the case studies includes an introduction to the student, in their own words whenever possible, as well as their responses to a variety of field texts generated throughout the course. Student responses are organized and interpreted around themes most salient to their own development of a critical environmental consciousness.

The particular participant cases were selected based on their geographic location, within distinct communities, as well as on the way they exemplified some themes that were common to many of the youth in the program. This allows for an analysis of how the themes intersects with distinct neighborhood qualities as the youth describe their personal identities, social relations, and relationship to place. These cases focus on the material and social spaces of youth and the meaning young people are making of specific places and processes. While each of these cases is unique, together they represent some of the common concerns and tensions experienced by youth growing up in NYC today.

Field Texts Utilized

A variety of field texts were utilized to construct these case studies. Below I will briefly outline the ways texts were generated and utilized throughout the course.
**Photovoice narratives.** Primarily, the photovoice narratives that youth generated were the basis for analysis. In the narratives, participants address the underlying complexities of the situations they photographed and discussed. Narratives of images add an additional layer by allowing space for students to ‘voice’ their images after engaging in critical discussions with their group. The combination of the images, discussion, and narratives, opens up the potential for local urban environments to be investigated more deeply. Participants wrote narratives to accompany images of their communities based on research topics they were interested in investigating. These narratives were produced as written pieces on a class website. They were written knowing that other students in the class would read them and so in some ways they had to write in order to try to tell a cohesive story and one in which they felt safe to tell. (See Appendix 1 for a detailed description of the photovoice process as introduced in Year 2)

**Blog posts.** Throughout the course students generated original blog posts as well as responded to prompts asking students to reflect on text generated by peers. The blog posts utilized in these case studies are specifically related to the photovoice process. Student were asked to reflect on their own images as well as those generated by the group to discuss what their images collectively were expressing in a post entitled *Photovoice Photos Reflection*. A post, *Photovoice Narrative Reflections*, asked youth to read the narratives of other students and respond. This post provided a space for youth to recognize patterns and contradictions across narratives. A Neighborhood Reflection post allowed students to discuss the emotions and behaviors of their favorite and least favorite places. Additionally students responded to the final photovoice presentations as well as some generated original posts about issues relevant to their lives.
**Final course reflections.** Final Course Reflections were used to provide insights into the growth of students throughout the course and give them the opportunity to reflect on the experience as a whole. Final Course Reflections asked participants to document both the process and product of their journey through the class and speak directly to new ways of thinking that emerged. Appendix 2 includes the specific questions and prompts in the Final Course Reflections.

**Other texts.** Throughout the year students kept notebooks to document their thinking and respond to prompts. These notebooks contain raw thoughts and drafts of future responses on blog posts. These were used in some cases to capture in the moment thinking as well as concerns, frustrations, and new questions youth were generating throughout the year. Emails between the students and myself are also sources of insight into the growth of participants throughout the years and I have included some of these where appropriate. Another researcher, interested in imagination and education, conducted an interview with Lourdes and myself and this interview transcript is also drawn from in developing her case study.

**Identity and Narrative Analysis**

As part of the photovoice process students construct narratives of their neighborhoods utilizing their images as springboards for meaning making. Narratives create opportunities for exploration of identity. Mishler states that identity development is located within the social and cultural matrix, the local neighborhood and how individuals are influenced by larger historical and sociocultural contexts. (2004, p. 16). Identities are defined and expressed through the ways we position ourselves vis-à-vis others along the several dimensions that constitute our network of relationships (Mishler, 2004, p. 16). Lived experiences change how narrators shift, disrupt, and unsettle identities leading to the notion that identity development is a non-unitary subjectivity.
with subidentities or multiple selves or shifting social identities. Narrative analysis looks both at how speakers position themselves in the words they are saying as well as the larger scale and local categories they invoke through the narrative.

Adolescence is a period of identity development in which youth are actively shaping their personal identity while being challenged to begin the process of forming their social identity (Strack, Magill, & McDonagh, 2004). Social identity requires the building of social competency, where an individual has a sense of belonging, feels that they are valued, and is eager to contribute as a member of society (Gullotta, Adams, & Markstrom, 1990). Adolescent social identities are expressed in the ways the young people position themselves in relation to their neighborhoods. The understanding of ones’ social identity is prominent in the photovoice narratives as all seems to wrestle with feelings will that they have fixed social positions within constantly shifting physical and material spaces.

**Lourdes: A Narrative of Cultural and Geographic Tensions**

Lourdes is a female of Puerto Rican decent growing up in the Bronx. Her journey throughout the class was focused mainly on her connections between place and her cultural identity and gender. Lourdes focused her research on diversity, but specifically from the perspective of a youth feeling isolated living in a diverse community. She begins her photovoice narrative with the following introduction.

*I have always felt like I’ve had a disconnect with my Puerto Rican culture and I’m not 100% sure, but this might be somewhat due to the fact that I’ve always lived in segregated areas of the Bronx (never having been predominantly Puerto Rican). I have, however, had relations with individuals in my community that are some form of Hispanic, Jamaican, and African-American. Living in the Bronx my whole life, I’ve grown used to people assuming that I am of a lower class and that I am financially unstable. As I grew up witnessing this prejudice I began to associate negative connotations with people of Latin-American, and African-American descent which made me not want to associate myself with my Puerto Rican heritage. (Lourdes, Photovoice Narrative, May 2013).*
Lourdes opens her narrative by describing the disconnect she experiences with her Puerto Rican culture. She tries to make sense of it as a product of her geographic location, “I’ve always lived in segregated areas of the Bronx” and accepts that her geographic status stereotypes her to others, “people assume I am of a lower class and that I am financially unstable”. Over time, this repeated exposure to negative stereotypes makes her “not want to associate with her Puerto Rican heritage”. She is fully aware of the ways she has internalized these stereotypes of minorities in her community and this has resulted in an outright rejection of her geographic and cultural community.

Symbols of social class. A symbol of the lower class status she has internalized comes from the image of a bus stop (Figure 10).
Figure 10. Lourde’s photo captioned, “The bus stop”. Photo by student Lourdes.
Here she describes her association with the bus and the people who take the bus.

*This picture, taken in Kingsbridge Road, Bronx, is the reason why I developed so many negative connotations of the people that I am surrounded by in my neighborhood. In this picture you see two presumably African-American individuals getting on a local public bus. Everyone knows that taking a bus is less expensive than owning a car so if one takes the bus/train to their destination than it is assumed that they have less money than someone who doesn’t. It has occurred to me that areas that are suburban in states like New Jersey or Connecticut have less opportunities to public transit in certain areas therefore anyone who lives there must own a car to get around. With things being the way they are in those types of states you will find individuals of the upper class which includes whites. (Lourdes, Photovoice Narrative, May 2013)*

Lourdes makes the comparison between people who live in her Bronx community and those who live in suburban areas. She distinguishes the two based on race and class citing the people who take the bus are “presumably African-American” and those living in the suburbs “individuals of the upper class which includes whites”. There is a presumed common knowledge to her that taking the bus implies a lesser status, whereas a car represents a higher-class status. Cultural and geographic stereotypes are a common theme for Lourdes early on in the course and were something she continually wrestled with. In her neighborhood reflection she writes about her favorite and least favorite places and it is clear that her favorite places are not within her geographic neighborhood but rather found in a much more affluent part of the city.

*My favorite outdoor place is 86th St. 86th Street is a part of Manhattan that's not too busy. One of the entrances to Central Park is there and is very close to the volleyball courts. I go there often with my friends to play volleyball until dark, which gets pretty isolated at night (the courts) and then we leave and choose from a variety of places to eat. The streets are not ever isolated which makes me feel safe and there are many places to choose to eat from in a small distance. This is my favorite place because it allows me to play my favorite sport and then eat whatever I want afterward all the while being with my friends until dark because it is not known for high crime rate.*
I wouldn't know how to specify my least favorite place, but I don't like to hang out with friends in my neighborhood unless they live near me and I am going to their house because there is not much to do in the Bronx and my mom knows that it is not the safest place to be after dark so even if there were many activities to do here she would probably not even let me stay out till very long. (Lourdes, Neighborhood Reflection, February 2013)

In comparing these two neighborhoods, there are many indicators that Lourdes uses to explain why these are her favorite and least favorite places. They are positioned in opposition to one another as the 86th Street neighborhood has “a variety of places to eat”, “makes her feel safe”, and is a place she is comfortable “being with her friends until dark”. In contrast, the Bronx, “there is not much to do”, “it is not the safest place to be after dark” and in general is not a place she “likes to hang out with friends”. A place for youth to feel safe being with friends and having options of things to do is not something that Lourdes has in the Bronx. She seeks this out in other neighborhoods, particularly those in Manhattan, where she plays volleyball in Central Park. This is a common experience for youth who grow up in the outer boroughs and commute to Manhattan for high school. Exposure to new spaces that are different from their home community seems to have created a disconnect in youth between their own neighborhoods and those near the school. All of the things that Lourdes loves about her favorite place are absent from her home neighborhood furthering her disconnect with the Bronx.

**Assimilation and cultural identity.** Throughout the photovoice research that Lourdes engaged in, these cultural and geographic tensions seem to come to a head and she begins to attempt a resolution that is meaningful to her. In multiple blog comments that she wrote at the end of the research she tries to summarize some of the larger connections that she has with other youth in the class while trying to makes sense of her own new insights.
A big issue involving all of our projects is that we lack a connection with our communities be it through disconnect of culture or fear of an area. Young people will often not identify with their communities. (Lourdes, Blog Post, May 2013)

Before I was introduced with this topic I dreaded my community, but wasn't exactly sure why. I never realized that I lived in a diverse, but segregated area. But with the proper education, just expressing as much knowledge as one has on the topic, I have new insight and a new state of mind. (Lourdes, Blog Post, May 2013)

I feel like we have all come to a realization about the world we live in. Before being introduced to topics in this class I was very narrow-minded and believed that because we're living in America and benefiting from this country that we should have the decency to speak to the language of its people: English. I came to a rude awakening that we weren't benefiting the way I thought we were. It was, in fact, the exact opposite. I was always told as a child to follow my dreams and that with a lot of hard work I could be whatever I wanted to be. The only unrealistic dream my mother ever told me I had was of being a singer, but she and I didn't realize that this wasn't the only dream that I had that the odds were against. I feel like the most prevalent issues that we discussed throughout the course of the presentations were that of racism, stereotypes associated with races, social class in a society, and lack of culture due to forced assimilation. Racism was an obvious thing to me, I didn't deny its existence, but I didn't realize how seriously this effected individuals (like myself even) in real world situations. (Lourdes, Blog Post, May 2013)

In the three blog posts above, we can see Lourdes making connections between her own cultural and geographic disconnect and that of other youth in the class. She continues to reflect on her own initial thinking about “dreading her community” and her struggle with really understanding where that comes from. In the third post, she is even more aware of her own shift in consciousness stating that she “came to a rude awakening that we weren’t benefiting the way I thought we were.” She invokes the myth of meritocracy as her and her mother both believed “that with a lot of hard work she could be whatever she wanted to be” and assimilating to American culture and speaking English was part of that hard work. In this post there is a realization that issues like racism, stereotypes, and social class have much deeper impacts than she initially realized and that these are shaping both her and the realities that surround her.
In her final reflection on the research themes Lourdes and I engaged in the following exchange on the blog where she again reiterates some of the group findings around comfort and belonging in different neighborhoods and her own internalized stereotypes of her own neighborhood.

_Lourdes: From looking at my groups’ pictures I’ve noticed the obvious: that we all have issues that root from our neighborhoods. We’re all unhappy with the neighborhoods we live in. My whole group is generally uncomfortable with their areas but the reasons why are different. I personally have developed negative connotations with races that are in my community because growing up I thought that because everything in my community was seen as "ghetto" or "poor" I considered the people in this community "ghetto" and "poor" which made me resent being who I am and living where I do. This, fortunately, is no longer an issue in my case._

_Marissa: Lourdes, when you claim, "this is no longer an issue in my case", what are you referring to and how did you move past this?_

_Lourdes: I have moved passed the negative connotations because of knowledge that I have gained in this class. People of my kind are the oppressed and instead of assimilating to this "American" culture I have decided that I should stand up for their rights because their rights are my rights. I'm never going to be a white man in an elite social class with the white privilege, but hopefully with time these things won't exist. With the spread of awareness of the current issue and a stand being taken against it. (Final Reflection on Research Themes, Lourdes and Marissa, June 2013)_

In this exchange, I ask Lourdes to reflect on how she was able to move past the negative stereotypes she had of herself, her culture, and her community. She cites knowledge acquired in the course as a way in which she has gained an awareness of who she is and who she is not. Her reference to white, male privilege is a recognition of her own personal and cultural identities and the start of accepting what this means to her. The biggest areas of growth throughout the year for Lourdes were in her sense of pride around her cultural identity and her strong desire to learn more in order to continue to raise both her own awareness of issues of inequality and oppression as well as the awareness of others close to her. The resolution she came to with her cultural identity was in large part a result of her group photovoice research. Additionally, she found a
slam poetry performance that helped her make better sense of how she can be both Puerto Rican and American. She posted the poem and her reaction to it on the course blog.

As a child we are often raised to be able to assimilate to a certain culture, whether it is that of your own or of the one that is dominant in the area you are being raised. But then there are certain cases where a child is merely left to be exposed to what is occurring around them: this is my case. As a child I wasn’t raised speaking Spanish as a first language, or any language at that, although all of the adults in my family speak fluent English and Spanish. I asked my mother why she didn’t raise me to speak the language of my culture and she replies, “I don’t know, I made a mistake. It was just instinct to speak English first.” And then I wondered exactly why it would be instinct for a woman who was raised speaking Spanish first by a mother who only speaks Spanish, to speak English and only English to her child. It’s because we live in the United States. Here there is not a mix of cultures from all over the world but rather a new “culture” that requires assimilation to what society thinks is proper and “American”. In the video Maya Del Valle says that at the end of the day the color of her skin still marks her as an alien in the country of her birth: America. How is it that someone with culture can’t be accepted into a country that claims to be the land of the free and the home of the brave? And then I question myself. Why is it that I’ve allowed this? I know that at one point in my life I’d resented being Puerto Rican because I personally could never connect to either culture. I’m Puerto Rican but I can’t speak Spanish the way my people do, I’m American and I can try to assimilate as much as possible, but to this American society I am a Puerto Rican and no matter what I do to look or act like a white person I will never have their privileges. So where do I go from here? In High School I met a lot of individuals who embraced their cultures righteously and I came to terms with the fact that I am Puerto Rican. Why not embrace my culture? My people have gone through so much and still do in the country that I call my home and I had the audacity to try and act like the individuals who were in reality causing oppression to my people, and me. I may not speak the physical language of my people but I feel the burden that’s been placed on them, we share emotional language. I know that as a Puerto Rican I will have to fight for the rights of my people and not just the rights written on paper and passed as laws, but the respect and the dignity. I will embrace my own people that as Maya Del Valle says do not deny the darker shades of skin in me. And not because I am capable of wonderful things and just so happen to be Puerto Rican, but because I am Puerto Rican therefore I am capable of wonderful things. (Lourdes, Blog Post, May 2013)

This blog post was the most powerful piece of writing that Lourdes completed in the course and it was completely unprompted. Here she is reflecting on the ways she was raised by her mother, questioning the motives of her mother to not teach her Spanish, and acknowledging the ways she is both Puerto Rican and American. She expresses anger at herself for having “the audacity to try and act like the individuals who were in reality causing oppression to my people, and me.” This
statement is a strong recognition of the ways oppression and power operates in society as well as the tendency for oppressed peoples to want to be like the oppressor (Freire, 2000).

**Reflections on research and learning from Lourdes.** In her final course reflection her shift in thinking about her cultural identity and a sense of empowerment that knowledge can give are both identified as new ways of thinking.

*On a more personal level, I feel like I have grown so much as a person in just this short period of time. I have literally brought topics from class discussions into conversations with my friends. Often times they don’t understand where I’m coming from with these ideas and I try my best with the knowledge from class to explain to them that there is so much that we just don’t know or are completely ignorant to. I came into this class being somewhat aware of the issues we discuss in class and not caring either way because as I would say “We can’t do anything about it so might as well embrace it”. I now end this class realizing just how serious these issues are and knowing that something needs to be done. I try everyday to spread whatever knowledge I have gained from the class to my friends and family and I even look at the world through different eyes. Nothing is what it used to be and this couldn’t be better. It couldn’t be better that I realized these things in this point in my life. I still have my youth and I am on my way to bigger things and bigger opportunities to spread my knowledge.* (Lourdes, Final Course Reflection, June 2013)

Here we can see that Lourdes herself speaks to a newness the world has a result of her time in the class. She describes her “different eyes” that have given her the strength, confidence, and desire to share the knowledge gained in the class with others. She describes her own shift in thinking from a position of hopelessness to one of hope and opportunity to “spread knowledge”. She goes on to further discuss the impact the course had on her cultural acceptance of self and the ways that she shifted in her thinking. There is a sense of pride in her writing reflection here about being able to both move between both cultures and not be what anyone expects her to be based on her Puerto Rican ethnicity.

*Lack of culture is a big issue for me because I can say that I've had personal experience with this. I cannot express how much I dreaded being a Hispanic in America and how much I wanted to be part of the white, middle-upper class society. I didn't know how to be Puerto Rican because I didn't know how to speak Spanish and everything called me a "fake Puerto Rican" so I went with the only other option and that was assimilating to the American culture which was really easy because they make it really easy. They make it*
easy in order for an individual to let go of their original culture and completely become victim to the hidden oppression. In a poem called "Descendency" by Maya Del Valle, she says that she can't check herself into a box and that's exactly how I feel at this point where I have decided that I can embrace my culture but I don't have to do it the way people expect me to. I don't have to be what anyone expects me to be. I will talk "white" and still be a Puerto Rican; I will speak "slang" and still know how to complete a 1000 word reflection for my environmental science class. (Lourdes, Final Course Reflection, June 2013)

One year later I had the opportunity to do an interview with Lourdes and another student and it was exciting to hear some of the ways the course has continued to impact her as well as areas she continues to seek growth and knowledge. She reflected on the experience in class as giving her a space to work through her cultural identity and we spoke at length about the ways she tries to share this knowledge with others. One example she gives is a recent conversation with her family and friends.

Marissa: Right, so I'm wondering what your experience has been around talking to people about things we have talked about in class and how you do that.

Lourdes: It's like really hard for me to...I've had these conversations, like with a lot of people, umm, my uncle – he's sexist, he has like sexist beliefs, umm, and just the other day I was having a conversation with a friend about white privilege, and it's...I feel like what I need personally is more knowledge, I just need to just absorb as much as I can. It's also really hard to articulate some of these things, like I – like you mentioned before because a lot of this is really personal. How do, how do you tell someone how you're feeling inside when they're just completely against what you...and it's not, it's not like they want to be against your morals, they just don't know and think that they do know. Not that everyone's like just wrong about everything that they think, you know, it's just there are things that people aren't aware of and it's really hard to have a conversation like that with someone who thinks that everything that they've been taught is what is and should be that way. I think it's also...oh, yeah....I think it's also like think that's the bigger issue that these things are now underlying. It's not as obvious as it was before – like racism, sexism, everything. Umm, which makes it even harder because they're...people are trying to push it like under the rug, and it could seem like this is not what it is anymore, when it still is what it is, it's just hidden. And that's what makes it even harder to articulate.

Marissa: Subversive...I feel like I heard you say that one of the biggest things that maybe you learned is just to question what when people say some things like what they use to support that. And what would you perceive as normal, right? Like, what is normal? And
if you...it sounds like you're, you're, what you learned is to push people on being more explicit about what they think.

Lourdes: Yeah, ’cause I was taught these ideas by you, and you have taught us to question ourselves and it's not...I also still find it kind of hard to...’cause, umm, I just can't ask why, why, why, why. There's...there's more to it, and I think I'm still learning how to get individuals to question their motives because...and I still find it hard sometimes for me to question some of my motives. Like, I, I, I catch myself doing things and I'm like “wait, this is...this isn't right why did I, why did I just do this”? You know, these things that I have been told, like have in my...turned into like human qualities, like, to say sexist things like it's just like normal for us; I think that that's when it should be and sometimes we do it and then we question why we just did that. (Interview with Lourdes and Marissa, January 2014)

Difficulty finding spaces to share the knowledge gained in the course is a common experience expressed by youth who have taken the class. This is something that I personally struggle with and it is only with practice that I have found myself more confident in engaging in conversations about critical social justice issues. Here, Lourdes speaks to the challenges of speaking about ideas that are very deeply personal. She further tries to explain the ways that we all have different realities based on our personal experiences and it is difficult to tell someone that yours is right and theirs is wrong. We continue here to discuss the ways that internalizing ideas of normal has been so subversive, creating many issues that are hidden and the comfort people have in keeping things unspoken. Lourdes continues to be a person who I know and admire. She continues to push herself in learning more and more in order to better understand herself and others. Her journey through the course has clearly shifted her own ways of thinking about herself, her neighborhood and her knowledge.

Angel: A Narrative of Belonging in Astoria, Queens

Angel is a male of mixed ethnicities growing up in Astoria, Queens. In contrast to many of his peers in the class, he has a strong connection to his community and has always expressed comfort in his neighborhood. The neighborhood holds a lot of meaning to him connected to his
historical roots. As a result of the strong connection Angel had to Astoria, his research topic was on community identity. However, interestingly, he worked with a group of students who were all living in the Bronx and so his experience of comfort was a minority experience, not shared by his group members. In this case study, I will focus primarily on the ways in which Angel describes his neighborhood of Astoria and the signs and symbols of comfort that he identifies. I will also include the changes that Astoria is experiencing in terms of gentrification and how Angel perceives the impact of this on his neighborhood.

The ethnic diversity of Angel and Astoria. Angel writes in his photovoice narrative at length about specific people and places that were a part of his growing up in Astoria. At multiple points throughout the narrative he speaks about his mixed ethnicity and how it was embraced in his neighborhood as well as the ways it positions him differently from peers whom only identity as a single ethnicity. Angel opens by talking about “The Block” (Figure 11) and all the people and places that make The Block meaningful.

The photo of “The Block” in Astoria, Queens is something that I find extremely significant to me. This was a block that was located towards Astoria Park, and most of the children within the community either lived on or near this block. I was the person who lived the furthest away which was only three blocks. “The Block” was nicknamed this by the children in the community because this was the block where we would hangout on and play street games such as handball, manhunt, “you’re it”, and “catch one, catch all”. There was one house with a woman who had three children, Jeffrey, James, and Joe. The house had a stoop which was where all of us would congregate and meetup. The children who would hang out on the block represented the cultural diversity of the neighborhood. There was me of course, my friend Stephanie who was Peruvian-American, my friend Kariope who like me was Puerto Rican and Greek-American, a Russian/Italian-American boy named Mark, and a boy whose family was from Montenegro named Adil. There were also Jackie and Vincent who were Irish/Italian American, and another boy named Sisileen who was Egyptian-American. The block was where everything went on during my childhood. You would chit chat here, gossip, have picnics on the stoop, play in the street, and when people would argue with one another that would happen here too. (Angel, Photovoice Narrative, May 2013)
Figure 11. Angel’s photo captioned, “The Block”. Photo by student Angel.
It is clear from Angel’s introduction to his neighborhood that he grew up in a place that is full of diversity and this has provided him with a sense of connection and comfort in his community. He was a part of this neighborhood, hanging out on “The Block”, playing games, gossiping, and picnicking. The deep memories he has of the games and the people make clear that this was an impressionable place for him and the details of ethnicities given for each person indicate his connection to his mixed-race identity. Throughout his photovoice narrative, Angel goes into more detail about the diversity of Astoria and how it allowed him to embrace all of the parts of his ethnic identity.

*I find diversity important because living in a place like New York City where people today have the ideology that the “melting pot” is a blending of different cultures, it was different for my family because of the intermixing that makes me who I am today. When my grandmother was growing up in Manhattan, most of the people around her were either Puerto Rican, monotonous White, or African American, therefore, no one around her could really relate to her situation of being ethnically Greek, and Filipina although she did have many close friends within that community. Growing up on places like “The Block”, and attending church in my neighborhood connects with this cultural exchange because my grandmother was able to advance in this country because she and the people around her had this commonplace area that even though she was different she would not be judged for this.*

*I feel that in this neighborhood I am allowed to have a mixed cultural identity because I am allowed to have my Hispanic identity which I feel is strong because of the many other types of Hispanics within the area including many of my friends who are Honduran, Ecuadorian, and Dominican. I am allowed to have my Italian identity because there are a few Italian kids still left in the area, and the older residents in the area many of whom my mom works for keep my cultural identity strong. I go to Italian church and hear stories of the older residents and the tight knit family values they cherish as well as how much respect I have to present to represent my family. I’m allowed to have my Greek identity including the food because of the various restaurants and churches within the area, as well as the large diaspora that lives there. I do not personally care to have my filipino side because even though there are other filipinos within the area they are not mixed. They are more recent immigrants. I do not consider this part of me strong at all, compared to the other ethnicities that make up me because I was not really taught too much of this culture.* 

(Angel, Photovoice Narrative, May 2013)

Angel speaks about his grandmother, the history of his family, and the struggles she experienced.

He identifies and empathizes with her experience. She was unable to initially move to a
neighborhood that represented her own ethnic diversity and so Angel sees his ability to be raised in a diverse place as way of strengthening the multiple parts of his identity in a place where he will not be judged. This lack of judgment is important to youth as we previously learned from Lourdes experience with negative stereotypes. His use of the word “allowed” when discussing his mixed cultural identity is an interesting contrast to Lourdes; as Angel describes both people and places that embrace his diverse ethnicities. Angel describes some frustration he feels when trying to fit in at school where most people make assumptions about his ethnicity.

*Sometimes at school I feel as if I am being judged upon how I look because students in this school sometimes judge one another based on their appearance. Some students simply call me ‘’white’’ or they look at me a certain way because most people in this school are one race/ethnicity. I feel when explaining my situation to certain people in this school to people who have grown up in ethnic enclaves such as Washington Heights, especially where they conform to the dominant culture because they are that race (Dominican). They cannot understand my situation, they cannot understand my cultural values, they cannot understand the values of the various groups I am, and therefore they do not understand me. Therefore, I feel till this day most comfortable when I’m in my area of Queens. (Angel, Photovoice Narrative, May 2013)*

Angel explicitly states that he is misidentified and therefore misunderstood by other youth in the high school. He distances himself from others who are only one race/ethnicity and strongly identify with a single culture, expressing adamantly that these people “cannot understand my situation”. The judgment Angel experiences at school is in contrast to the judgment Lourdes experiences in her neighborhood for not being Puerto Rican enough. Angel concludes that this makes him feel most comfortable in his Astoria, Queens neighborhood, again, a distinction from many other youth in the class.

**History, signs, and symbols of community identity.** Angel’s narrative is filled with the names of people and their associated ethnicities, as well as places that embrace the diversity of Astoria’s people including churches, murals, and shops (Figures 12 & 13). He has deep knowledge of his neighborhood from his family having lived there for so long and his presence
in the community spaces, like “The Block” and church is an important part of his personal and social identity.

*This church is important to me because when I was younger each Sunday I would be shuffled off to Sunday school, which was taught by a range of people who represented the community. This church is where I was baptized, as well as where my first communion, and confirmation were held. My parents were also married here so the church is significant to them as well. When larger religious masses are held they are said in three languages simultaneously, which is a really interesting thing to see. Mass is offered in three languages English, Spanish, and Italian. This church is important to me because I usually attend Italian mass every Sunday. When I think of my community this is one of the first things that I think of. This church goes out of its way to reach out to the community. They've helped my mother find almost every job she has ever had, and we always collect for the poor. The priests represent the community as one is Italian, another is Italian/Irish, another is South Indian, another Colombian, and another Filipino. One can see the diversity of the community in the English mass. This church has been present in the community for a number of years. Astoria is a religiously diverse place, in a ten block radius one can find a Roman Catholic church, a Baptist church, a Bengali mosque, another mixed Egyptian/Tunisian mosque, a Ukrainian Orthodox Church, Several Greek Orthodox churches, a Korean-American church, and several synagogues. This church is one of the oldest religious houses of worship within the area. (Angel, Photovoice Narrative, May 2013)*

Angel again describes the diversity of Astoria with positivity and acceptance. Here he describes the linguistic and religious diversity that are represented in his neighborhood. He speaks about the role of the church in his personal life, his baptism, communion, his parents marriage, and helping his mother get jobs, as well as the role of the church in the larger community, a place that helps the poor and the way it can bring many different people together in a shared space through the trilingual mass.
Figure 12. Angel’s photo captioned, “The Immaculate Conception” Photo by student Angel.
Figure 13. Angel’s photo captioned, “This mural was painted just before the 2004 Olympics in Athens. A symbol of pride in the area, there was actually a documentary about the man who lived beside the mural.” Photo by student Angel.
The encroachment of gentrification. The Astoria community is shifting now and this is of major concern to Angel who is very defensive of his neighborhood and does not want to see the cultural fabric shredded by gentrification. He writes about the ways he is seeing the neighborhood change, specifically the material relations of the rental costs, the park, and the new people occupying these spaces.

What is significant about places like “The Block”, “Immaculate Conception”, “The Murals”, and the restaurants/bakeries I’m familiar with? I believe that Astoria is being cashed in on due to it’s close access to the city because of the N/W trains as well as how “ethnic” people may pass it off to be. The neighborhood did not just spring up from the ground and attract all these artists and young urban professionals. I feel that due to my own personal connections with the neighborhood I can recognize what the neighborhood is, and what it is sold to be. If you look on these real estate websites like modern spaces the average rent says $1,400 for a one-bedroom apartment. I know for a fact that no one I know or grew up with pays/paid this much for any of the apartments they lived in.

The park did not use to look like a tourist area with green ways, joggers in $100 outfits, and coach strollers. The park was an area where kids, teens, adults, and the elderly would all have their own lively scenes. The kids would scream and play baseball (My friends Kally, Mark, Stephanie, and I) you would see teens hanging out with their cars on shore, and elderly jamming to oldies played by a bandstand in the meadow (people from my grandmothers generation, as well as their kids). These things would go on simultaneously to create the park’s atmosphere. If you were to walk down the park you’ll see people sipping Starbucks or snapping photos on new iPhones. (Angel, Photovoice Narrative, May 2013)

Again we hear Angel speaking with deep local knowledge about the Astoria community. He knows the cost of living of a one-bedroom apartment and the ways the park and its uses have changed since the past. He indicates the signs of gentrification through the comparison of the park to a tourist area, the joggers wearing $100 outfits, and people walking in the park carrying Starbucks and iPhones. In a blog post response to the final research presentations, Angel reflects further on the process of gentrification and how it is impacting Astoria.

I feel that the same is also happening within my community. The strange thing about it is that gentrification usually occurs in areas that are plagued with poverty and urban blight. The section of Astoria I live in which is located between Astoria Park, and
surrounded by the Ditmars area is a middle class area with homes that were well tended to by European, Various Arabic (Egyptian, Lebanese) and more recently Latin American immigrants who inhabited them. The community continues to have many storefronts that cater to the needs of people within the community. From the Egyptian bakeries of Steinway which serve primarily Middle Eastern and Greek clients, to the Italian/Hispanic bakeries that serve the needs of the entire community. The gentrification around here is less noticeable. Many single family homes are simply rented out by YUPPIES or their newer companions the Hipsters but, one in the community can usually tell where these individuals live due to the way the house they live in looks. It usually looks like minimal effort has been put into it, and that it has become a uniform rental. Recently within the past 10-11 years many single or two family houses have been torn down, and replaced with 10+ story condominiums on the same lots. Also noticeable are the circulars that are promoted in the neighborhood. If you are to board the N/Q train at its Ditmars terminal you will be handed a colorful and trendy 30 page magazine jammed with advertisements of trendy and upscale restaurants. You would read the top of the magazine and be bombarded with names like "The Queens Kickshaw, or Zagat rated Sushi restaurants, or the new Studio lounge on 36th avenue.” One would ask after seeing this magazine. “Is this really Queens, or is this the East/West Villages?” In contrast there is another community magazine which is styled like a Newspaper and has events written within it that concern the community. The events can range from “community member Peter Vallone is working with city officials to remove a toxic building in LIC” to “VIVA PAPA FRANCIS” with articles on the new pope translated in English, Italian, and Spanish. This paper has ads too, but the restaurants are more locally known, less upscale and do not promote the bourgeoisie attitude of the newcomers. (Angel, Blog Post, May 2013)

In this blog post from Angel, we hear him trying to make sense of the why gentrification is happening in Astoria and in what ways he is seeing it through his own experiences as a resident. His initial question about gentrification is interesting and relevant as many other youth live in communities that have been stereotyped as blighted neighborhoods and in need of the new development that gentrification brings. Angel understands that his neighborhood has value with its close proximity to Manhattan but questions how a community with a middle class demographic can be subjected to the same processes as ones “plagued with poverty and urban blight”. He again recognizes the diversity that he values in the form of stores and “bakeries that serve the needs of the entire community”. He describes the material signs of gentrification in Astoria and how they are changing the look and feel of the neighborhood. He seems to acknowledge that there is a subversive way this is starting, as “single family homes are simply
rented out by YUPPIES or their newer companions the Hipsters” but he feels like he can tell where the yuppies live because of the “minimal effort” and “uniform rental” look of these apartments. However, he does acknowledge that there are more serious signs of gentrification occurring as “many single or two family houses have been torn down, and replaced with 10+ story condominiums on the same lots”. These are the more overt signs of gentrification and have an impact on the physical look of neighborhoods like Astoria. Angel discusses another sign of gentrification in his community that can come off as innocuous, however his love of Astoria makes him hyperaware of even small changes, like the types of circulars being handed out at the train stations. This insight is one that demonstrates Angel’s deep connection to his community as he obviously spent time comparing these two circulars on multiple levels. He notices and describes in detail the differences between the basic look and feel of both as well as the differing content in each. One he describes as “a colorful and trendy 30 page magazine jammed with advertisements of trendy and upscale restaurants” while the other “is styled like a Newspaper and has events written within it that concern the community”. This comparison highlights another way that gentrification is shaping communities as the dueling between the local circulars symbolizes the consumer culture valued by one and the community concerns valued by the other. The new glossy magazine represented by 30 pages of advertisements for restaurants and bars is a symbol of the commodification of the Astoria neighborhood, while the other newspaper represents the people of the community through relevant stories that actually impact residents. Angel’s reflection on this experience leads him to ask the question “Is this really Queens, or is this the East/West Villages?” and in this question there is a sense of concern that Angel’s Astoria community is slipping away, changing beyond recognition.
Reflections on research and learning from Angel. In Angel’s reflection on his research he expresses its value from his perspective. He also explicitly articulates new terms and ideas that he was able to apply to processes happening in Astoria. The two examples below show the ways that his experience in the course has been shaped by the fusion of his personal knowledge with social and environmental theory.

I learned about a tactic called marginality and warehousing. There used to be a community center that was a community center called Bohemian Hall for Slovak, Czech, and various other Europeans. The hall had a recreational facility. They moved the seniors from the building that was in a central location in Astoria, to a new senior center and residence hall on Astoria Boulevard, right next to the exit of the Triborough Bridge. The homes these old people live in are solid and cashed in upon by younger, more affluent relatives in the suburbs and real estate agents in the city. Younger, trendier residents move into the center of the community, and the older residents who are undesirable to real estate agents, are warehoused in the new building. The old community center is only used for trendy events now and beer fests frequented by yuppies and Manhattanites. The older residents are pushed out during a vulnerable stage. (Angel, Journal Reflection, April 2013).

Through the community identity project, I realized that I was fortunate to have grown up in a tight knit community in Astoria, Queens. This community identity project brought me back to a community that was gentrification free, before condominiums clogged through the street from 36th Avenue to 20th Avenue, before trendy cafes lined 30th Avenue and before the businesses that have thrives since my grandmother’s generation were labeled as “ethnic”. The community identity project led me to realize that my life as a child was truly entwined with the people and places within my community. (Angel, Reflection on Research Themes, June 2013)

In the two examples above, Angel is describing the social processes that are shaping his local environment. He connects warehousing and gentrification to very specific examples that he is seeing in his Astoria neighborhood, and his perspective is clearly one of disdain for the changes. Unlike many other students who struggled with the ways gentrification is bringing new commercial spaces to neighborhoods, Angel does not speak to any of that tension. Throughout all of his research texts, he shares a comfort and love for Astoria, for the historical roots of his family and his childhood, and the diversity that is represented that has allowed him to always be
comfortable as an ethnically mixed youth. As Astoria becomes homogenized with “yuppies”, the ethnic and generational diversity is being threatened, both of which have been significant components of his experiences with his neighborhood.

In Angel’s final reflection for the class he writes a lot about the processes of the class and his learning about gentrification. But this excerpt speaks to another shift in consciousness that Angel acquired.

*This class definitely led me to think in an alternative manner. I remember during the beginning of the course when you asked us how do you feel about getting jobs, and other opportunities? I remember saying that people need to go out on their own and find jobs, classes, etc. I was willing to inform others about opportunities but, how would I know they wanted them if they hadn’t asked? I felt that people needed to go out on their own to find it, if they really wanted. I felt like a lack of collective good was something that we are subconsciously taught through the hidden curriculum, where we are taught to be pinned against one another. Also, I always heard other students complaining “well my parents do not speak English, the whole sob story etc.” At first I was apathetic because I had relatives from older generations with the same problems, but they on their own advanced. Then I was led on an eye opening experience through this class to look out for others, to share whatever information you have, to not let rating systems get to you, to not let preconceived notions stand in your way, and that historical circumstances have placed barriers where people cannot advance in the modern day.* (Angel, Final Course Reflection, June 2013)

Here we see Angel reflecting on his thinking from earlier in the year. He recognizes this thinking as a deficit in which he only used his own history and experiences to make sense of youth access to opportunities. Angel reflects on his own way of thinking that was one of victim blaming and is able to recognize how this way of thinking emerged for him, both in school, “the hidden curriculum” and through the immigration experience of his own family. However, he recognizes the journey he took in the class as “eye opening” and now is able to recognize the ways that “historical circumstances have placed barriers” for many people, making it more difficult to make it on your own in today’s society. Angel’s reflection on this larger experience of learning to think more collectively is something other students have identified as well.
While preparing for the Data Carnival (see Chapter 7) I reached out to all of my former students. Angel was able to attend the Data Carnival but he also sent me a three-page email response of his own analysis looking back through all of the data. It had been two years since Angel took the course and in response to the question, “How has the class influenced you?” Angel responded with this:

The class continues to influence me on a day-to-day basis. I continue to think critically about issues affecting our city and, try not to focus from my personal view alone. I was ahead of the game in college when professors spoke about Gentrification, Food Deserts, Urban Gardens, Wealth Inequality, and so on, really ahead actually. The class was such a well rounded course and, I hope that future students will have exposure to a course such as this because these are prime issues that affect city residents everyday of their lives, urban students are wondering why in their communities new buildings are going up, or consuming fast food without knowing it. I feel these young students need these things pointed out to them and the policies being enacted so they can make a proper political decision on what they need in their communities and, how to interpret these changes. (Angel, Email, July 2015)

In this response, Angel speaks to the continued influence the experience of the class has had on his life, both personally and academically. While he names specific topics that have influenced him, gentrification, wealth inequality, and food deserts, he also expresses a form of political consciousness that was raised for him as a result of the course. In recognizing that consciousness shift in himself, he believes other youth would also benefit from a course like this as it has continued to helped him interpret the kinds of processes he is seeing shape his local environment.

Aurora and Rose: Two Narratives of Gentrification in Greenpoint, Brooklyn

In this case study, I analyze the photovoice narratives constructed by two female students both living in Greenpoint, Brooklyn. I juxtapose the narratives of two students, Aurora and Rose, who chose diversity as their theme for a focused analysis of their neighborhood of Greenpoint. However, these students are situated differently in relation to the Greenpoint community. Aurora is Polish and is part of the dominant ethnicity in Greenpoint while Rose identifies as Mexican-
American and considers herself a minority in her neighborhood. Both students observe the changes that Greenpoint has experienced as a result of gentrification. Specifically, each narrative provides a glimpse of their views and experiences related to diversity, inclusion/exclusion, and gentrification by “hipsters”. The neighborhood of Greenpoint, Brooklyn provides the social and cultural milieu in which both young women have grown up and learned about who they are. This analysis focuses on the unique subjectivities each student expresses and how these subjectivities mediate their views on diversity and gentrification in Greenpoint. Final reflections and blog posts will also be analyzed to highlight the journey each student felt they took throughout the course.

**Beginnings.** The beginning of any narrative is a choice on the part of the narrator. In the narratives analyzed here, both Aurora and Rose choose to begin their narratives by introducing themselves as belonging to a particular ethnic group, how that ethnic group is viewed in the Greenpoint community they both live in, and their own connection to this community in which they have been raised.

**Meet Aurora.** Aurora seems to have a complex and often contradictory relationship between the Polish community that she belongs to in Greenpoint, Brooklyn and the new “hipsters” moving into the neighborhood. As we can see in the opening of her narrative she positions herself in the Greenpoint, Brooklyn community as someone who is part of the dominant Polish culture but quickly introduces the idea that the community is changing as a result of gentrification.

*Born and raised in Greenpoint, Brooklyn, I have been able to see the changes within my neighborhood over the last 18 years. Growing up, the dominant culture in my neighborhood has been Polish. The streets are cluttered with Polish food stands, Polish restaurants, stores selling Polish goods, and the people in my neighborhood have always been predominantly of Polish descent; however, in the coming years, there has been a growing number of Americans flooding into my neighborhood. Greenpoint’s current Americanization is attributed to stores like Peter Pan, Brooklyn Mac, Brooklyn Industries, and Cookie Road which are causing different ethnicities to pour in. I feel as*
though my community is fighting back against this Americanization, striving to retain the cultural identity it has possessed for the last 18 years. (Aurora, Photovoice Narrative, May 2013)

In the introduction to Aurora’s narrative we learn that she was born and raised in Greenpoint, Brooklyn, a community that she describes as having a “dominant” Polish culture. In the first line she introduces the idea of neighborhood change, a theme that is woven throughout her narrative. She describes the dominance of the Polish culture in terms of food stands, restaurants, goods, and people. This notion of Polish dominance as represented by foods and stores is also a common idea in Rose’s narrative. These symbols of culture (Figure 14) are “cluttered” in Greenpoint and create a strong ethnic identity for the community. In the third sentence, she introduces the shift she alluded to earlier and describes the “flooding” in of “Americans” to the neighborhood. She does not use the term gentrification at all throughout her narrative but rather this term “Americanization” and attributes it specifically to food and retail establishments. This idea that establishments bring the neighborhood change comes up again later in her narrative. As the “different ethnicities” pour in, she feels a sense that her “community is fighting back against this Americanization” as it tries to hold on to the Polish cultural identity that she has known her whole life.
Figure 14. Aurora’s photo captioned: “In this picture you see polish soap with the label ‘mydło’ and a company named ‘Sanel’, that sells callus removers (which in polish are called ‘pumex’). Photo by student Aurora.”
Meet Rose. Rose’s relationship with her neighborhood of Greenpoint, Brooklyn is also complex and contradictory, however the complexity of her relationship is rooted in her Mexican-American identity which she positions in contrast to both the Polish community and the incoming “hipsters”. Her opening reveals right away the tensions she experiences living in a community that is dominated by people of a different race and ethnicity from her. While Rose also introduces the notion of changes to the neighborhood right away, she does not get into more detail about how the neighborhood has changed until later in her narrative.

Born and raised in Greenpoint, Brooklyn all my life for 17 years I’ve seen the changes my neighborhood has gone through including my parents when they first emigrated from Mexico to Greenpoint. I am Mexican American and from living in a predominately white neighborhood that has shaped who I am because I am trying to keep my cultural identity where it is excluded. Greenpoint has been for many years a white and Polish community and neighborhood over the past years. I am part of the minority in Greenpoint which are the: Hispanics, Asians, and African Americans. Being Hispanic or any other race in my neighborhood is tough and isolating because sometimes you have to face racism, the discomfort of not being the same ethnicity of the predominant group because you are “different”, and are judged by typical stereotypes of ethnicities in general. (Rose, Photovoice Narrative, May 2013)

Rose’s introduction also tells us how Rose voices herself as someone who is a Mexican American whose family “emigrated from Mexico to Greenpoint” and has “seen the changes” in her neighborhood over the past 17 years (Figure 15). Right away we see the tension that Rose experiences living in Greenpoint, a “predominately white neighborhood” which she says has “shaped” her as she tried to “keep her cultural identity where it is excluded”. It is interesting how Rose uses both “white” and “Polish” to describe the people in her community. She continues this juxtaposition between white and Polish throughout her narrative, using both terms when talking about the predominant race and ethnicity in the neighborhood. These two ways of describing her community are not fully explicated in her narrative however and it leaves open the interpretation that white and Polish are two different groups of people. Rose voices being
Mexican American and positions herself as someone who is “part of the minority” in her community along with “Hispanics, Asians, and African Americans”. She describes this position as “tough and isolating” and one in which she may “face racism”, “discomfort”, a sense of being “different”, and potentially “judged by typical stereotypes of ethnicity”.
Figure 15. Rose’s photo captioned, “The street of Manhattan Avenue”. Photo by student Rose.
Speaking on Diversity. Diversity was the common theme that united both of these narratives at the start of the project. Each was interested in the experiences of young people who are either part of or not part of the dominant ethnic group in a neighborhood. While Rose’s narrative explicitly addresses diversity in Greenpoint, Aurora’s narrative speaks less directly to issues of diversity. Rose’s identity as a Mexican American may allow her to have a more critical eye to the lack of diversity in Greenpoint. It seems that this subjectivity provides a lens through which she has positioned herself and her experiences as different in relation to the dominant group. Aurora speaks from a position of dominance and in turn privilege, as she is part of the Polish community. This affords her a different way of seeing diversity, one that is not about “minorities” as described by Rose, but diversity created from the hipster population that is moving into Greenpoint.

Rose on diversity and isolation. Rose continues to discuss the issue of diversity in her narrative and speaks a lot about feelings of isolation and marginalization. She speaks about her experience going to school in this neighborhood and the difficulty of not fitting in due to her ethnicity and her language ability. These early experiences created feelings of discomfort and isolation in her and set her apart from the Polish community in Greenpoint. She shares her own ways of seeing segregation, specifically for minorities in the neighborhood, and shares how her own living situation is unique for a Mexican American living in Greenpoint.

From living in Greenpoint for 17 years I’ve witnessed how my neighborhood isn’t diverse and is segregated. When I was younger it was very obvious to me. When I was five years old I went on vacation to Mexico for six months and during those six months I went to elementary school there, which meant I only knew Spanish. Then I came back to Greenpoint to start kindergarten and it was a life changing experience because I was only five and I didn’t know how to speak English. P.S. 34 was an elementary school that was predominantly white and Polish so it was hard for me to communicate with other students. But by going to this elementary school it portrayed how my neighborhood was exactly. If you weren’t Polish or white it was very tough to fit into the community and
neighborhood. The high discomfort of not fitting in with the predominant group comes with the fact that I stand out in the sea of white children in my school. I think I’d feel more comfortable if I could relate with other students that have the same culture as me. In school it was different because everyone had to be friends but if I didn’t go to P.S. 34 I would feel more isolated than I already was. (Rose, Photovoice Narrative, May 2013)

Isolation was common as I was growing up in my neighborhood. I grew accustomed to feeling of being isolated in my neighborhood because I wasn’t part of the predominant group. Isolation in my case means to me that I can’t culturally communicate with the rest of my community, not be able to speak the native language which the populace speaks which is Polish, and how the community is mapped out. I am part of the minority in Greenpoint and that usually means that the minorities are located North of Greenpoint which is close to abandoned factories and near the East River. On the other hand the white and Polish populace lives on Manhattan Avenue, which is a commercial street where stores and restaurants are located. Even though I am a minority I live on Manhattan Avenue because of my father. Since he works on the avenue in a pizzeria, the man in charge, also is my landlord, gave my father the opportunity to rent an apartment on the avenue. If my father didn’t have the connection most likely my family and I would be living near North of Greenpoint. Even by housing one can see the segregation between the predominant and minority group in Greenpoint. (Rose, Photovoice Narrative, May 2013)

Two themes emerge from Rose’s discussion of her experience growing up in Greenpoint. The first is the ways in which she voices her experiences as a minority in the Greenpoint community, both in school and in the neighborhood (Figures 16 & 17). The second is how she describes the ways isolation in Greenpoint is both a social and geographic phenomena. Rose begins this section of her narrative by describing Greenpoint as not diverse and segregated and how this was “obvious” to her when she was younger. She uses that to go into a story about living in Mexico for a short period of time and moving back to Greenpoint only knowing how to speak Spanish, making it hard to communicate with her peers in elementary school who were “predominantly white and Polish” and all spoke English. She describes the school as a microcosm of the neighborhood and claims that “if you weren’t Polish or white it was very tough to fit into the community and neighborhood”. These experiences left Rose with “high discomfort” around trying to fit in and a sense of knowing that she would always “stand out in the sea of white
children” in school. She goes on to imagine a different way, a more comfortable experience, if she “could relate with other students” that had the same culture as her. Rose’s sense of isolation was “common” for her growing up and she ultimately says that she became “accustomed to the feeling of being isolated”. She then describes what isolation means to her and uses the idea of “cultural communication” as something that is lacking and preventing her from being understood, and she defines this lack based on her inability to speak Polish. It is interesting that in this statement, she is seeking to be a part of the dominant group as opposed to having the dominant group try to “culturally communicate” with her. She also describes isolation in terms of geography when she says in reference to isolation, “how the community is mapped out”. She continues to explain how she sees this geographic segregation with minorities like her, living North of Greenpoint “close to abandoned factories and near the East River”. This description is interesting to think about in relation to gentrification and development, specifically how waterfront property is prime real estate in New York City and one can imagine that these minority communities near the river will soon be displaced in new development waves. Rose ends this section by explaining her own living situation as a result of social capital. Her father works for the pizza place and the landlord has given her family “the opportunity to rent an apartment on the avenue”. She describes this as something out of the ordinary and that if it weren’t for this connection, they too “would be living near North of Greenpoint” with the other minorities.
Figure 16. Rose’s photo captioned, “People walking up Manhattan Avenue near the B43”. Photo by student Rose.
Figure 17. Rose’s photo captioned, “North of Greenpoint - Polish ladies in their group and talking in their native tongue. (Polish)”. Photo by student Rose.
Aurora on diversity, kinship, and exclusion. Aurora’s narrative only uses the term diversity twice but she frequently invokes the idea of diversity in referring to the dominant Polish community as in the following quotation on the lack of diversity and how this lack of diversity may lead other people in the community who are not part of the dominant group to feel excluded:

*The picture depicts the lack of diversity in my neighborhood as the Asian woman is surrounded by several Polish women. Since I frequently shop at this vegetable stand, I took this picture while waiting online to pay for lemons. While patiently waiting for the line to shrink, the Polish lady behind me asked in our native tongue if I could please hold her spot in line. I feel as though this experience is emblematic of the dominant culture within my community - because we are all of Polish descent, we feel a sort of kinship towards one another, inadvertently excluding anyone who is not Polish. (Aurora, Photovoice Narrative, May 2013)*

Aurora uses the image of an “Asian woman surrounded by several Polish women” to represent the “lack of diversity” in Greenpoint (Figure 18). She connects this image to a story of waiting to pay for lemons and being asked by a “Polish lady” in “our native tongue” to hold her spot in line. She uses this story to demonstrate both the kinship and exclusion that can be felt by different individuals. She and the lady experience a kinship, both being Polish and able to communicate in Polish, while anyone else who is not Polish would feel excluded. It is interesting in this account how Aurora says, “We are all of Polish descent, we feel a sort of kinship towards one another”, including herself in this feeling of kinship. We will see later in Aurora’s narrative how this notion of being connected based on ethnicity seems to be a point of tension for her, something she both expects and accepts while at the same time critiques and tries to reject.
Aurora's photo captioned, “The picture depicts the lack of diversity in my neighborhood as the Asian woman is surrounded by several Polish woman." Photo by student Aurora.
Greenpoint’s neighborhood identity. The Greenpoint neighborhood is comprised of a
dominant Polish community and as such this community is reflected in the physical and social
spaces that also dominate. Both Aurora and Rose use images of food, stores, products, and
signage to highlight the ways the Polish culture is represented in the identity of the Greenpoint
neighborhood and each describes how this impacts their access to resources.

Aurora on Polish signs. Aurora, as a member of the dominant group of Polish people
living in the Greenpoint community for 18 years speaks about the neighborhood identity through
retail and food. She is aware of the level of access she has to goods of her own ethnicity and
speaks specifically about products that are imported from Poland.

Over the last 18 years I have been able to notice the influence of the dominant culture on
my neighborhood. There are a variety of stores in my neighborhood, many of them cater
to the needs of the Polish people in my neighborhood by selling products that are Polish
or have Polish labels. Most of my shopping is done directly in my neighborhood for this
reason. The stores in my neighborhood, particularly this 99cent store on Manhattan
Avenue, make Polish goods accessible and readily available to Polish people like me.
There are several 99cent stores in my neighborhood, but this one in particular sells many
Polish goods ranging from soaps and creams to foods like jarred pickles and assorted
Polish chocolates. The irony of this store, however, lies in the fact that the owners are not
Polish, but are Asian. Rather than marketing Asian products, this 99cent store markets
goods that it knows will sell to the public - goods with Polish labels or jarred products by
companies like Lowell, which have a specific line of goods imported from
Poland. (Aurora, Photovoice Narrative, May 2013)

Aurora begins this section of her narrative by acknowledging that the dominant Polish culture
has influenced her neighborhood. She speaks of a “variety of stores” that “cater to the needs of
the Polish people” because they “sell products that are Polish”. She states that this allows her to
do most of her shopping “directly” in the neighborhood but doesn’t seem to recognize this as a
privilege, only a fact. She mentions the 99cent store and says how this store makes “Polish goods
accessible and readily available to Polish people like me”. Here again she is aligning herself with
the Polish culture and recognizing that this is something that she has access to without evaluating
what that level of access might mean for others. In these moments, it appears that Aurora is unable to recognize the privilege she has as a result of being part of the dominant community. Aurora describes the Polish products in detail here in her narrative as “ranging from soaps and creams to food and jarred pickles and assorted Polish chocolates” and uses her images to show the Polish signs that dominate the stores. In the last part, Aurora evaluates the irony that comes from the fact that the 99cent store that caters to the Polish community is actually owned by Asians. In this evaluation she claims how the Asians are essentially catering to the Polish market at the expense of “marketing Asian products”. She seems to understand this is a business practice based on the dominant culture in the community but she doesn’t seem to make the connection between the Asians owning the store and that adding to diversity in the community or how the fact that there are no Asian products speaks to a lack of diversity in the community.

The dominant culture within my neighborhood has a big influence on the stores within my community. The cuisine available is greatly impacted by Polish people because there are many restaurants that serve Polish food. Within a two block radius of my neighborhood’s public library there are several Polish eateries including the Polish “Antek Restaurant” and a popular restaurant across from the Dunkin Donuts on Nassau Avenue called “Polonia”. While passing by the restaurant during Spring break I noticed a Polish woman walking into it so I decided to take a picture of it because I felt like it encompassed the culture of my neighborhood. Inside of the restaurant there is a sort of buffet with a person who serves typical Polish cuisine like potatoes, salads, and cabbage. On the windows of the restaurant there are pictures of the foods that it serves, as well as the words “Polskie Obiady” which translates to “Polish Dinners”. (Aurora, Photovoice Narrative, May 2013)

Aurora also sees the Polish cuisine as part of the Polish identity of Greenpoint (Figure 19). She describes “many restaurants that serve Polish food” within a “two block radius” and how the image of a Polish person walking into the “Polonia” restaurant encompasses “the culture” of her “neighborhood”. Here, like earlier with the 99cent store, she describes in detail the kinds of foods and words that represent the Polish community including “potatoes, salads, and cabbages” as well as “pictures of the foods” and signs in Polish.
Figure 19. Aurora’s photo captioned, “While passing by the restaurant during Spring break I noticed a polish woman walking into this restaurant so I decided to take a picture of it because I felt like it encompassed the culture of my neighborhood.” Photo by student Aurora.
**Rose on Polish signs.** Much of Rose’s narrative focuses on her feelings about being Mexican American and living in the Polish community of Greenpoint. Here she begins by talking about some of the ways that the community caters to the dominant Polish group but she then moves into how the lack of resources, described here in terms of access to products, makes her feel like she does not belong and the disadvantages this creates for her and her family (Figure 20).

*My neighborhood seems as it was made for the predominant group and no one else, the Polish people. The reason I feel this way is even though most of the populace in Greenpoint is Polish; they also influence the way the neighborhood is mapped out. Meaning most stores are Polish to satisfy the needs of the predominant group and not the minorities. Even the American chain stores have Polish products and nothing else like Associated and various 99cent stores that are owned by Asians. For example: These pictures were taken in Associated the week before Easter. In these two pictures it shows how even Associated, an American chain store is segregated by the products it sells and is in the language of the predominant group in my neighborhood. It meets the need of the predominant group in Greenpoint. It's a disadvantage, especially since I'm Hispanic and part of the minority group. I don't eat or buy the same products as Polish people do. It's such a hassle always having to go farther away to get produce from my culture. I personally do not do the shopping in my household, my mother does. She’s always fussing about how she can’t buy any products of her choice in our neighborhood. I know that she would go to BJ’s to get products in quantity because it’s cheaper. But if she specifically wanted Mexican products she’d have to go deep into Queens near Roosevelt or to Graham which is close to Greenpoint by bus or the M train. (Rose, Photovoice Narrative, May 2013)*
Figure 20. Rose’s photo captioned, “Polish pastries for Easter”. Photo by student Rose.
In this section Rose describes the neighborhood as being “made for the predominant group and no one else, the Polish people.” This is a powerful statement that Rose makes as she strongly positions herself in opposition to the predominant group. In saying this, she is essentially saying that the neighborhood was not made for minorities like her and later on she elaborates on this idea in more detail. She seems to see the dominance of the Polish community as pervasive, in the “way the neighborhood is mapped out”. For Rose there is a sense of frustration as “even the American chain stores” seemed to cater to the Polish and “nothing else”, even though these stores were owned by Asians (Figure 21). Her use of the term segregation is also powerful as it evokes many ideas about segregation. Here Rose uses segregation to describe the products and their availability, but also segregation in terms of “the language of the predominant group”. This brings up earlier images of segregation in Greenpoint, specifically related to who lives and shops in what parts of the neighborhood. Rose evaluates what this means for the dominant group who has their needs met but how this is a “disadvantage” for her because she is “Hispanic and part of the minority group”. She struggles with the limitations of the products in the neighborhood as she doesn’t “eat or buy the same products as Polish people do” and describes the “hassle of always having to go farther away to get produce” from her own “culture”. Even though Rose does not do the food shopping, she voices the struggles of her mother who is “always fussing about how she can’t buy any products of her choice” in the neighborhood and that in order to get “Mexican products” she has to go “deep into Queens” by bus or train. This segment speaks to the ways that Rose feels like she is not included in her neighborhood, a theme that is heard throughout her entire narrative.
Figure 21. Rose’s photo captioned, “Polish writing advertising cookies”. Photo by student Rose.
On being and belonging. Aurora and Rose come from different positions based on their ethnicity and this influences how they see the diversity and changes in Greenpoint. At various times in their narratives they speak about how they feel specifically about being either Polish or Mexican American. They each voice themselves differently, and it is through these voicings we can learn how they see themselves as either belonging, not belonging, or somewhere in between to the Greenpoint community.

Aurora on being Polish. In these two segments Aurora is reflecting on how she feels about her own Polish identity and how living among a community of Polish people makes her feel uncomfortable at times.

Similar to how the 99cent stores in my neighborhood cater to my needs, there is a vegetable stand called “Poland Farm Fruit and Vegetable” where Polish people flock to. Whenever I go in or pass by this vegetable store, I see Polish people interacting with the cashier, who too is Polish. If she sees that you are visibly of her race, she will speak to you in Polish and count your change in Polish. Because I am not fluent in my language, it irritates me when cashiers in stores like Associated and this Polish fruit stand talk to me in my native tongue. It’s as though being Polish forms a kinship between the cashier and I; however, I get uncomfortable when I’m put in situations where I have to speak my own language because I know my manner of speaking differs from the way in which those in my neighborhood speak my language. The Polish people in my neighborhood are all fluent in the language and they speak with great rapidity. (Aurora, Photovoice Narrative, May 2013)

Aurora introduces another place in Greenpoint where “Polish people flock to”, a Polish vegetable store. She describes the atmosphere here as very social where Polish people are interacting with the cashier “who too is Polish”. The ways that the Polish cashier differentially treats people is observed by Aurora and she this “irritates” her when it is assumed that she is fluent in Polish, just because she is Polish. She recognizes the “kinship” between her and the cashier, but it makes her “uncomfortable” when she is forced to speak her “own language” because her “manner of speaking differs” from the other Polish people in the neighborhood who are “fluent in the language” and “speak with great rapidity.” This section speaks to both an understanding of how
being Polish in this community has allowed her to have her needs catered to and have sense of kinship with other Polish people, but she also expresses a sense of discomfort with her lack of language skills and the assumption that this kinship exists based solely on language.

*I commonly do not eat at Polish restaurants because I don’t like the ambiance within the restaurants. “Antek Restaurant” in particular is an uncomfortable place to dine in because the others who dine there are usually loud and rude Polish people that I don’t identify myself with. They are the type of Polish people who will wait for their food to be served to their table, though the restaurant itself is known for calling its orders out loud and having them picked up at the front of the restaurant. They also leave a mess at their table rather than going to the front of the restaurant and putting their used dishes in a place where the employees can quickly clean them. Their impolite and haughty behavior makes me dislike Polish people because it gives me the impression that they are all the same and I would not want to identify with people who are loud and obnoxious. Overall, I avoid these types of restaurants so that I do not come into close contact or confrontation with such Polish people.* (Aurora, Photovoice Narrative, May 2013)

Aurora continues to distance herself from the Polish community as she finds the Antek Restaurant “an uncomfortable place to dine in because the others who dine there are usually loud and rude Polish people that I don’t identify myself with”. It seems like this restaurant, as a very Polish restaurant, is in stark contrast the customs and behaviors associated with American restaurants. Aurora, in her efforts to fit into American culture, seems to want to assimilate into the rules of etiquette associated with dining in restaurants in America and the Antek Restaurant is a complete refusal of American assimilation. She associates Polish behaviors as “loud and rude”, “leaving a mess”, “impolite and haughty” “all the same” and “loud and obnoxious”. All of these negative indicators imply a homogenous type of community, characterized by behaviors that Aurora does not associate with herself and therefore does not want to be a part of.

**Rose on being Mexican American.** Rose’s Mexican American identity impacts the way she experiences living in Greenpoint. She describes this experience as hard, marginalizing, and isolating. She speaks of discomfort and of various experiences where she feels like an outsider.
(Figure 22). Here she evaluates the ways that the Greenpoint community is an exclusive community in which outsiders are not always welcome.

Being a Mexican American is hard enough in my neighborhood because you're looked at funny or even because you aren't Polish. Even at the train station I could be sitting down and everyone sitting besides me are Polish and talking in their native language. The people even make it seem like just because you aren't Polish they will not accept you. I believe it's true from what I have witnessed and from personal experiences. The predominant group doesn’t welcome diversity because they want to keep the kinship between their own kind of people. There is a reason why Greenpoint is sometimes referred to “Little Poland” because of how the populace (the Polish people) stays within their own ethnicity and exclude anyone else. (Rose, Photovoice Narrative, May 2013)

Rose considers herself an outsider in the Polish community and from her own personal experiences believes the community will not ever accept her. She makes sense of the lack of acceptance of diversity as a way “to keep the kinship between their own kind of people” at the exclusion of all others. She cites the train as a specific place where she feels this exclusion and overall describes the experience of being Mexican American in “Little Poland” as hard, where she is looked at “funny”.
Figure 22. Rose’s photo captioned “Cashier from Polish grocery store”. Photo by student Rose.
Greenpoint as a community in flux. Aurora and Rose both see Greenpoint as a community that is in the process of intense and obvious changes. They similarly describe the changes as having an impact on the dominant Polish community and neighborhood diversity as a result of the influx of “hipsters” who they both describe as younger, mostly white peoples spilling over from Williamsburg. They describe both the social and physical changes these people are having on Greenpoint and both evaluate these changes from their unique and different positions based on their own race and ethnicity.

Aurora on changing Greenpoint. Aurora seems to have conflicted feelings about the changes that she sees in Greenpoint. She sees the changes in the food and retail establishments that have emerged in the neighborhood as well as the new types of people, hipsters, that she sees there. Interestingly she sees the hipsters as creating a new kind of diversity in Greenpoint that has been lacking, and that this process of gentrification is happening in real time in ways that she can see.

Through the presence of Polish people has a great impact on the culture of my community, there has been a growing Americanization of my neighborhood. In recent years, I have watched Bedford’s bustling atmosphere bleed into my neighboring community with the emergence of new cafes and restaurants catering to mixed ethnicities and providing a “hipster” ambiance. These types of establishments have brought in increasing numbers of “hipsters” into my neighborhood - individuals that are easily identifiable by their appearance and attitudes. The diversity within my neighborhood comes from these sorts of people because many are racially ambiguous or clearly not of Polish descent; however, many are still visibly Caucasian. This picture clearly depicts the prevalence of hipsters within my community on a typical Saturday afternoon. At around noon one Saturday I went out with my mother to do thrifting in Bedford and we had to pass by this congested street on the block of Nassau Avenue’s Dunkin Donuts. The entire cafe was filled and people were crowding outside smoking, talking, and rushing to place orders at the cafe’s quaint “Coffee-to-Go” window. I can see my neighborhood transitioning into a new version of Bedford and it begs the question, will Polish people become displaced as people from Bedford continue encroaching into Greenpoint? (Aurora, Photovoice Narrative, May 2013)
This piece of Aurora’s narrative highlights the intersection between race, ethnicity, symbols of
gentrification, and hipster identity. She begins by stating the large impact Polish people have had on the culture of the community but highlights how that is shifting due to the “growing Americanization” of the neighborhood. She indexes “new cafes” and “restaurants catering to mixed ethnicities” as signs of the “bleeding” of neighborhoods as they continually creep into her neighborhood. Her use of “mixed ethnicities” sits in contrast to her earlier observations about Polish restaurants that cater strictly to Polish people. These establishments, unlike Polish ones, create a “hipster ambiance” which while she doesn’t describe, it is clearly in contrast to the existing establishments (Figure 23). She claims that the establishment brought the “hipsters” lending itself to the causation question in gentrification, did the establishments bring the hipsters or the hipsters bring the establishments? She describes hipsters as first and foremost identifiable by “appearance and attitudes” but again does not expand her understanding of those appearance and attitudes here. Later she refers to a picture that she took that indexes hipsters and describes them as “crowding outside smoking, talking, and rushing to place orders” at a local coffee shop. It is interesting how she includes the Dunkin’ Donuts perhaps as a way of contrasting the hipster from the more local resident. The hipster wouldn’t go to Dunkin’ Donuts, but only to a local coffee shop with a “quaint “Coffee-to-Go” window”. When describing the diversity of Greenpoint, earlier in her narrative, Aurora uses the terms “lack of diversity” but here she begins to explain how she sees diversity in Greenpoint shifting and how new establishments are “causing different ethnicities to pour in” as there is an influx of “racially ambiguous” hipsters. This raises questions around diversity and the ways that Aurora is understanding diversity to mean.
Figure 23. Aurora’s photo captioned “This picture clearly depicts the prevalence of hipsters within my community on a typical Saturday afternoon”. Photo by student Aurora.
Bedford, Williamsburg is known for its artsy and creative atmosphere, full of thrift stores, unique restaurants, trendy boutiques, and various bookstores. The culture is completely different in Bedford and the atmosphere is much more alive, whereas in Greenpoint it is relatively calm. Just by making a left on Nassau Avenue, you are exposed to a world much different than that of Greenpoint, Brooklyn. (Aurora, Photovoice Narrative, May 2013)

The last part of her narrative seems to highlight the tensions Aurora feels about gentrification and hipsters. As she contrasts neighboring Williamsburg she describes it as “artsy” and “creative”, full of “unique” and “trendy” places with a lot of variety. She describe the Williamsburg atmosphere as “alive” while Greenpoint is “calm” and in these comparisons she seems to be aligning herself with the culture of Williamsburg as opposed to the culture of Greenpoint (Figure 24).

Overall, from her narrative one cannot tell whether Aurora sees the hipsters in the neighborhood as good or bad, only that they are changing things. There are certain linguistic indicators she utilizes when talking about the changes, “American flooding into my neighborhood” and “my community is fighting back against this Americanization” and again this highlights a tension that she feels as Greenpoint changes. The rhetorical question she asks in the narrative about displacement of Polish people also does not include a moral right or wrong to gentrification. In asking the question in light of her earlier statements about Greenpoint being too Polish and her attraction to Williamsburg, it almost seems like this is a welcomed impact from her perspective.
Figure 24. Aurora's photo captioned, "The restaurant is closed in this picture and it makes me think that it is rarely open."

Photo by student Aurora.
**Rose on changing Greenpoint.** Rose sees gentrification as something that has already happened. She seems to feel like the Polish dominance in the neighborhood at the expense of other ethnic groups and races is gentrification and then a secondary process of hipsters is another layer of change that is in the process of happening.

Although living in my neighborhood it is obvious that everyone in my building is mostly white or Polish because I live in the Middle of Manhattan Avenue. In my building everyone is white and polish except for my family and a Puerto Rican man. Greenpoint has been gentrified by many factors especially influenced by the high populace of Polish people living in Greenpoint. Polish people being the predominant group would be prone to stopping change from happening in Greenpoint therefore excluding other ethnicities. Greenpoint’s rent has been gradually increasing making it harder for minorities to live in Greenpoint. Minor ethnicities of people in Greenpoint such as Hispanics, African Americans, Indians, and Asians have been pushed to the North of Greenpoint because it is no longer affordable to live on the commercialized street, Manhattan Avenue. Even now as rent has increased it has also increased in North of Greenpoint forcing the minorities to move out of Greenpoint completely. This is clear that Greenpoint is not a diverse nor segregated neighborhood and community. (Rose, Photovoice Narrative, May 2013)

Rose begins this section of her narrative by again describing the dominant group in Greenpoint as Polish and how this is also seen in the lack of diversity of people living in her building. She links this to the street she lives on, Manhattan Avenue, a street that is at the heart of the commercial and retail spaces in Greenpoint. She claims that “everyone is white and Polish except for my family and a Puerto Rican man” positioning herself in contrast to the dominant group. She sees gentrification as complex, influenced “by many factors” but “especially influenced by the high populace of Polish people living in Greenpoint” and how this has been at the expense of other ethnicities, especially minorities, like herself. It is in this reference from Rose that we see her understanding of gentrification as one mainly of cultural exclusion rather than a process where wealthier residents move in, property values rise and low-income families are displaced. However, Rose does understand that gentrification has already happened where “rent has been gradually increasing making it harder for minorities to live in Greenpoint”. This
Rose’s understanding of gentrification as a process that makes a neighborhood less diverse and more difficult for minorities to afford to live. She again speaks about geographic marginalization where “Hispanics, African Americans, Indians, and Asians have been pushed to the North of Greenpoint” where rents are also increasing and as a result minorities “move out of Greenpoint completely”.

As Greenpoint is changing another group of people are becoming dominant as well which is affecting the predominant group. “Hipsters” are a group of white people who travel and don’t follow trends, they typically march to their own beat. These “hipsters” also affect how Greenpoint is because they are also displacing the minorities by making the rent higher which then excludes the minorities even more. That is one of the major problems in Greenpoint which is letting less diversity into my neighborhood. (Rose, Photovoice Narrative, May 2013)

In this final part of Rose’s narrative we see how she defines hipsters as a “group of white people” who “typically march to their own beat”. She differentiates this other “group of people” who are “becoming dominant” from the Polish community, but seems to believe that both groups have contributed to the lack of diversity in Greenpoint by “displacing the minorities by making the rent high”. This group of people, according to Rose, are “displacing the minorities” and leading to “less diversity” in the neighborhood. Although Rose is aware of this phenomena, she does not include a deeper understanding of why this is happening or the intersection of economic and social forces at play in the Greenpoint community that is leading to the changes she sees.

Reflections on research and learning from Aurora. Aurora’s journey through the course speaks to many different areas of growth and shifting consciousness. She reflects on the research themes that emerged during the class and relates these back to her own experiences in Greenpoint. She describes empathy for other students who do not feel comfortable in their neighborhoods or who see their neighborhood identity being eroded by gentrification. Her learning about herself and her neighborhood has made her able to see things from a new
perspective however she, like many other youth, still struggle with what power they have to make any changes.

Though I view the world as integrated, more specifically New York, it's evident that there are still tensions concerning race and social class. I saw our conversations in class and all these photovoice projects as controversial because we were forced to think and question things that we normally would just let lay. We were forced to define stereotypes and see how gentrification affects different groups of people - in my neighborhood, for example, gentrification helps me because I get more access to commercialized stores like Starbucks, but the downside is the displacement of generations who have been living in my community for decades but can no longer afford the high spikes in rent because of all these new establishments. I've watched my neighborhood change throughout the years, but I never questioned it because I was comfortable - however, now I see my neighborhood through a different lens because of Photovoice. Society is constantly wrestling with itself, similar to how we have wrestled with the issues and questions presented from all these Photovoice projects. (Aurora, Final Reflection on Research Themes, June 7, 2013).

In this reflection, Aurora identifies two key components about the power of photovoice as a participatory methodology. First, photovoice allowed her and other students to “to think and question things that we normally would let lay” and secondly it allowed her to see her “neighborhood through a different lens”. Both of these comments made by Aurora speak to the participatory, transformative, and critical nature of photovoice and highlight the potential it has to contribute to a critical urban environmental pedagogy. Aurora recognizes the grappling that different youth are undergoing with issues of gentrification, acknowledging that there is not one common experience for all youth, but rather their perceptions of gentrification are varied based on multiple factors. She goes on here to connect her understanding of gentrification to tourism and her own experiences in her neighborhood.

Someone made a comment about tourism during their presentation last week and it's making me think about the flipside of things. My community, with its growing number of commercial chain stores and bustling neighborhood of Williamsburg, is attractive and can be seen as a tourist sight, increasing its value. It's more inclined to have work done on it because of its popularity, whereas other communities suffer because they are not as "popular". I think that it's unfortunate that other communities are undervalued like this because the people of those communities might want green spaces and more community
access to food and transportation but are not getting it because improvements are being focused on communities that are already kind of improved. (Aurora, Blog Post, May 2013)

Here Aurora raises a few points of interest. First, she is able to connect the economic value of tourism to her own neighborhood and the processes of gentrification that are continually shaping Greenpoint. The “commercial chain stores and bustling neighborhood of Williamsburg” is a place that draws many tourists and as a result, the value of the entire neighborhoods increases. This leads her to recognize the positive feedback of gentrification. As her neighborhood continues to improve, there are more people and more investments coming in that bring more improvements and thus more value to the neighborhood. Finally, Aurora speaks about issues of inequality that exist across the neighborhoods of her peers. Through the sharing of personal experiences in local environments, Aurora was able to gain a perspective beyond her own and with that a sense of empathy for those who are not privileged enough to have the kinds of improvements in “access to food and transportation” that she is experiencing. Following this post was a reflection on the research themes in which Aurora speaks to some of the ways her and her classmates experienced the research as perhaps beyond their agentic capacity.

Though some of us have spoken about how we want to improve our communities, I think we feel as though we don't have the agency to do that. A lot of the problems in our communities are not small - concrete parks, abandoned lots, unsafe projects, lack of transportation are all major issues that one individual cannot address by himself. I think our class discussions empowered us because we were passionate about our experiences and our desire for change; however, we simply don't know how to go about making these changes, which makes us feel powerless. (Aurora, Final Reflection on Research Themes, June 2013)

Aurora recognizes the magnitude of the issues that are facing many urban neighborhoods and she also recognizes that many of the youth in the course have a sense that they want to make improvements in their communities. These two ideas seem to create a tension for Aurora as she rightly states, “one individual cannot address by himself” these major issues. She speaks
collectively with her peers as she writes “class discussions empowered us”, but that many still “feel powerless” to make changes. This tension was a common experience for youth taking the course and one in which a critical urban environmental pedagogy can only begin to address. The actions needed to make improvements in communities can be big or small and other youth, like Lourdes, recognized that education and awareness are a first step for them.

Aurora also reflects on her own changes in thinking as a result of the course and some of the ways her consciousness was raised throughout the year.

Changes in my thinking over the course of the semester stemmed from the Photovoice projects and the class discussions I participated in. We focused on issues prevalent in today’s society - the objectifying of men and women in advertising; social and race issues; and our own experiences in today’s world. The reason my ways of thinking have changed this year is because of all that I’ve learned. Learning about things like dominant and subcultures from our Critical Pedagogy reading opened up my eyes to the reasons why our society works the way it does - there is a hierarchy that we adhere to, sometimes involuntarily. (Aurora, Final Course Reflection, June 2013)

In her final course reflection, Aurora speaks to the changes in her own thinking, citing the photovoice research and class discussions as large influences on these changes. She speaks about specific issues that are relevant to youth in society today as well as critical pedagogy and social hierarchies as theory and knowledge that is helping her make sense of the way things are. Her recognition that oftentimes we adhere to these rules involuntarily is a powerful acknowledgment of the ways that societal norms become internalized, particularly by youth, who then perceive the world through these internalized norms. Recognizing that these are involuntary is a testament to a consciousness raising where now ideas can be called into question and no longer accepted as face value.

Reflections on research and learning from Rose. In reading through the various reflections and blog posts generated by Rose, it is clear that the course, particularly her research influenced her to see ethnicity and gentrification as related and that participation in the course
both opened her up to the perspective of others as well as gained a confidence in her own
knowledge and experiences. In this post, Rose explains what she means by diversity, the
importance of diversity, and how diversity is linked to gentrification.

Diversity to me means different groups of people, meaning socially, economically and
various ethnicities that are different that would integrate and get along as a whole. I
believe it’s important because society is very ignorant to many ethnicities with
stereotypes and how ethnicities are portrayed in everyday life in ads and on television.
Like on the train when there is ads about teenage mothers that have babies that aren’t
particularly white but other minorities which are known to have high rate pregnancies
(i.e. African Americans and Hispanics) leaving a bad portrayal to these ethnicities on the
public.

Development in Greenpoint is becoming more gentrified. As hipsters start to invade my
community the rent has gone significantly higher pushing the minorities in my community
to move out because the rent is so high. These changes might be bad to the public but
create economic revenue in my community, which is good, but it doesn’t have a positive
impact on the people. It’s a really complicated situation because my community has
always been predominantly white throughout history and it has remained predominantly
white but I feel as if I can’t do much to change this because it’s a cycle to keep other
minorities out. (Rose, Blog post, May 2013)

The two themes that Rose is addressing in this post, diversity and gentrification, are essentially a
continuation of her narrative. Here she describes diversity beyond just ethnicity to include social
class. She states why diversity in communities is important as without it minorities are portrayed
negatively, and minority stereotypes are reified (e.g. high rates of pregnancy among minority
women). She continues to tie diversity to the process of gentrification and her own experience in
Greenpoint. She, like other students, expresses tensions in her understanding of the impacts of
gentrification on her neighborhood. She recognizes the complexity of the process and impacts
and tries to make sense of it from both an economic and social perspective. She sees that there is
more money in the local economy but also sees the costs of that as it continues a cycle of
keeping minorities out of specific communities. However, it also clear from Rose’s writing on
gentrification that she seems to conflate the dominant Polish group with the incoming hipsters,
both predominantly white communities. She fails to recognize the historical roots of Polish people in Greenpoint and their working class status in contrast to hipsters who are able to afford the higher rents in Greenpoint. It is also important to note that it is likely the Polish community is benefitting from these higher rents, as they own property in the community and are able to rent it out apartments at increased rates.

In reflecting on the research themes that emerged from the photovoice projects, Rose provides insights into the ways that youth struggle to articulate what they really want in their neighborhoods but that there are certain things that everyone should have access to. She connects her thinking to the power of stereotypes, both of people and places, and the ways these stereotypes shape our consciousness before we actually meet a person or visit a neighborhood.

*From all the photovoice projects I feel like I've been left with more questions. All the photovoice projects have shed light on important and huge social issues that cannot be easily fixed. What I've taken away from the photovoice discussions is that most of us contradict ourselves with what we feel and what we say, especially with stereotypes. Stereotypes are drilled into our head way before we meet a person which makes us all judgmental to other people that aren't our ethnicity or race. These stereotypes are usually negative and oppress certain ethnicities like Hispanics and African Americans. Also white people get stereotyped but not in a negative way, usually in a more positive way as opposed to other ethnicities. What I've also noticed is that we have ideas in our head on what is "ghetto" or "dangerous", for example like Brooklyn and Bronx is associated with those terms, why? Times have changed and maybe they do fit that description but just like in the TED talk it is only a part of the whole story.

From our discussion there is tension and conflict in what we say. We want certain things and then at the same time we don't. One huge issue that always comes up is how we would like our community to be and most of us would want to change the people who live there. Although we say this we wouldn't want people displaced, it's very conflicting because I feel that our neighborhoods were made to keep other ethnicities or groups of people together, to not integrate. As I am part of the group of young people I believe that we should all have the right to live in a safe neighborhood and welcoming neighborhood. From our discussions some of us don't live in a neighborhood that keeps one safe or is welcoming and I think that's important. Everything is connected together from the stereotypes that most of us have and to our communities and how it is segregated or diverse. (Rose, Final Reflection on Research Themes, June 2013)
Rose’s reflection illuminates a common theme from the research in that youth tend to be experiencing a lot of contradiction and tension in articulating what they actually want their neighborhoods to be. Rose’s insights into this phenomenon are valuable as she attributes the power of stereotypes to shaping some of these ideas about people and places that young people want. In her earlier blog she cited the influence of television and advertisements on perpetuating stereotypes and these tensions for youth seem to emerge from the many mixed messages they are receiving through media, school, family, and other societal messages. At the same time it is clear that she, like Aurora and others, believe that young people have the right to live in safe and welcoming neighborhoods. Rose’s last sentences speaks to her emerging consciousness and political ecology lens that allows her to see everything as connected together. This is in stark contrast to earlier in the year when most youth, like Angel, seemed to have narrow ideas and explanations for societies challenges.

Rose’s final course reflection continue to illustrate the ways in which Rose grew throughout the year as a result of her participation in the course. Here she speaks first about a personal confidence she gained in sharing her perspectives, in particular the value of speaking her story as otherwise it would go unsaid. Secondly, she speaks to her own personal growth and how her thinking has shifted as a result of the course.

The class also helped me grow as a person in many ways. I believe I am a social person but I get all nervous when I have to speak out loud or present. In our class we had to do both of those things. I had to push myself to do those things because I don’t feel comfortable doing so. After a whole year I feel a lot more comfortable to push myself and take risks because of this class. Even though I know I’m not the best speaker and freeze up, I’m glad that I can at least present something in class without not even saying anything. The biggest change I’ve gone through in the class is the way I think. I don’t claim I know everything but as I said before I learned a lot of valuable information. The way I think has changed because I’ve realized so many things about myself and as an individual on how one thinks. The way I used to think was the generalized story of what the news media says. I learned that there is more to that. I think more in depth and
Many students expressed that the course provided a space for them to voice their thoughts in ways that they previously had not felt comfortable. Personal growth for Rose, in her own words, is characterized by her newfound confidence in pushing herself and taking risks. The other area of growth for Rose and for other students like Lourdes, Angel, and Aurora, was in their expanded ways of thinking about issues. Rose acknowledges the way that the media presents a generalized story and how as a result of the course, she now is able to question those single stories, thinking “more in depth and critically” about the government and society.

**Constructs for Narrative Analysis**

All narrative analysis comes with its own assumptions that are reflected in the specific features of the study. For this study, these assumptions are embedded in how the narratives and other texts were generated. Photovoice narratives used youth images to represent concepts of interest, to draw attention to the dialogic exchange within the narrative of the voices of those depicted in the various neighborhoods, and allowed for a comparative approach to interpreting patterns and contradictions in the lived experiences of these four students. Additional texts were written in the form of reflections, often having students look across projects to draw out connections between personal and collective experiences of youth. The resulting analysis is personal and intimate, focusing on the lives of Lourdes, Angel, Aurora, and Rose, four geographically and ethnically different youth, writing about three distinct neighborhoods. It is by no means exhaustive and is lacking a critique of the larger forces of gentrification that might more deeply inform the ways in which the Astoria and Greenpoint neighborhoods are changing. But this analysis does attempt to reveal the ways that narratives of assimilation, diversity, and gentrification in the context of a photovoice project can help young people critically engage with
their neighborhoods and thereby develop a critical consciousness and a deeper understanding of their emerging social identities. Bang, Curley, Kessel, Marin, Suzukovich, and Strack (2014) state that “being in the world gives form to children’s learning and development – that is, people are continually coming into being through experiences” (p. 43) and a deeper look at those experiences through the writing of narratives allows students to reflect on the relationship between place and identity formation.

Voicing and emergence were key theoretical constructs used in the analysis of all of the narratives and texts. Wortham states how voices are presupposed by indexical cues in the narrative and are drawn from complex and often conflictual social worlds engaging in a dialogue that involves multiple perspectives and often-conflicting positions. (2001, p. 66) This notion of voicing seems prominent in all the narratives and texts. We see it in the kinds of identifiable categories voiced or produced when each young person speaks, what social categories are emerging, and how these social categories are being voiced. Indexical cues in each narrative specifically around race and ethnic categorizations, “Puerto Rican”, “mixed”, “white”, “Polish”, “Mexican American” are used in the analysis to help answer questions of voicing. Social categories are also emerging like “minorities”, “yuppies” and, “hipsters”. Each youth sees these categories differently and an analysis of their narratives and texts piece together their understanding of each, looking specifically at ways they try to define what these different ethnic and social categories mean to them. Their narratives and texts also attempt to explore how these social categories are different from one another and how in ways, these social categories are often murkyly understood and sometimes contradictory.

An understanding of how particular utterances position speakers in particular ways helps to understand the construction of self through narrative (Wortham, 2001). For example, the ways
that Aurora and Rose voice themselves and others in their narratives positions each, essentially constructing their sense of self through their lived experiences in Greenpoint. Both Aurora and Rose take up a position within the narrative, Polish and Mexican American, and these social positions are represented in various ways in relation to others and to Greenpoint. The analysis of each case study looks at how each youth position themselves by the words they are saying, the larger scale and local categories they describe, and the positions they take up in relation to these categories. Lourdes speaks about being Puerto Rican and her narrative and texts explore how she positions herself both within and in opposition to the Puerto Rican community. Angel constantly reminds the reader of his mixed ethnicity and how this mixed ethnicity positions him in relation to his Astoria neighborhood. The comfort he feels as a mixed race youth growing up in a community of mixed ethnicities provides a comfort and protectiveness that we continually hear throughout Angel’s texts. Aurora positions herself as Polish and uses that as a lens to makes sense of both a Polish community she does not feel comfortable in and the influx of hipsters, while Rose positions herself as a Mexican American in opposition to both the Polish and hipster community.

All the youth use ventriloquation (Wortham 2001), in various ways to establish their position by juxtaposing and speaking about others’ (Puerto Ricans, yuppies, Polish, hipsters). The process of ventriloquation where a narrator adopts a social position in the storytelling event with respect to the types of voices he or she has indexed while describing the narrated event, is utilized in two ways by the youth. Using the distance metaphor for ventriloquation, they each position themselves either with, as part of a group, or other than a part of a group, or sometimes, it is hard to tell which group they see themselves a part of. This speaks to the ways that various groups are represented as close or far as all the youth give a close and descriptive detailed
reading of certain social categories (Puerto Rican, American, Mixed, Polish and Mexican American) while reifying other social categories (Puerto Rican for Lourdes, Yuppies and hipsters for Angel, Polish and hipsters for both Rose and Aurora). Using the **refraction metaphor** for ventriloquation, we can see how youth enter the “atmosphere” of social positions and contestation specifically around assimilation, diversity, and gentrification. The refraction metaphor captures the positions and ideological struggles associated with assimilation, diversity and gentrification in the Bronx, Astoria, and Greenpoint. In ventriloquation we can see the ways the youth’s voices emerge through interaction with various other voices represented in narratives as they ventriloquate the voice of the Puerto Rican, Yuppies, Polish, the Mexican-American, and the hipsters.

The youth presented in the cases above have had unique experiences living in their respective neighborhoods. These experiences are based on their diverse and evolving subjectivities and there are multiple places where their voices intersect. Identifying emerging patterns of intersection and investigating how meaning is being constructed in each case around ethnic identity, assimilation, diversity, and gentrification, we can specifically see where there are shared experiences and perspectives between youth. In addition to coherence, contradictions within and between the cases are illuminated, specifically differences in meaning around assimilation, diversity, and gentrification and how this is related to the unique perspectives and positions of all youth. All of these cases of youth represent the knowledge youth bring through their personal experiences with local environments and the shifts in thinking that participation in a critical urban environmental pedagogy afforded.

Contribution of Authors and Co-Authors

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Contributions: Provided feedback on early drafts of the manuscript.
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A Political Ecology Approach towards Critical Urban Environmental Education

Marissa E. Bellino
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Abstract

In this paper we push forward an agenda for a critical urban environmental pedagogy that challenges the current neoliberal policies influencing education broadly and environmental education (EE) specifically. Using the pedagogical praxis and intent of critical pedagogy and participatory methodologies, this critical urban environmental pedagogy uses a political ecology lens to investigate environmental issues illuminated by youth. We elaborate on three key conditions to facilitate critical engagements and nurture a political ecology lens to understanding urban socio-environmental conditions including the introduction of critical pedagogy and social theory, the use of participatory methodologies, and the creation of a safe physical and pedagogical space.

Keywords: political ecology, neoliberalism, environmental education, critical pedagogy, youth participatory action research

Introduction

Environmental education (EE) is not living up to it’s transformative potential for youth living in urban environments. Through emphasizing “green” approaches and labeling youth with “nature deficit disorder” (Louv, 2006), it marginalizes youth living in socially and ecologically complex urban environments. It also serves to promote a narrow agenda that does not recognize the lived experiences of urban youth. Furthermore, since EE has become increasingly institutionalized into formal education, it has lost much of its critical and transdisciplinary potential, sacrificed in the name of “trying to fit in” to an already narrow school curriculum.
(Greunewald, 2004). A double-edged sword, the disciplining of EE both legitimized it as valid school subject but at the expense of the political, economic, and social roots it emerged from.

EE first took shape alongside the environmental movements of the 1960’s. As such, curricula that focused on pollution, population growth, depletion of natural resources, and environmental degradation was the norm (Gough and Gough, 2010). This was mainly highlighted at the national and global level, where large-scale issues like air and water pollution were becoming part of the consciousness of society. This version of EE emerged from deep concern for people and places that were being impacted, but it was based on a narrow definition of environment: the emphasis on the relationships between humans and their biophysical environments. The Belgrade Charter articulated the following goal for EE:

To develop a world population that is aware of, and concerned about, the environment and its associated problems, which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and prevention of new ones. (UNESCO, 1976)

While a common view amongst environmental educators is that people are provided with experiences and knowledge to care for environments, Gruenewald (2004) argues, “what counts as knowledge and experience, what constitutes care, and even the meaning of environment can differ widely among those with diverse political and personal commitments” (p. 73). Thus the hidden curricula of EE are often in connection to specific political and personal agendas about how one should care for or relate to the environment, without regard for needs, cultures, and propensities of diverse communities.

One of the dominant features produced from current EE, no doubt from its inclusion into formal schools, has been orientations to solving environmental problems that focus on individual
behavior and choice, rather than collective or community-relevant approaches. This can be seen in the countless lesson plans and websites written for EE where individuals are instructed to track household consumption of water and electricity and production of waste. These lessons often focus on small changes at the individual level to solve global environmental challenges like inequitable access to clean drinking water, an economy and food system dependent on fossil fuels, and global poverty and starvation (e.g. The Aluminum Can Challenge, Count Down Your Carbon, How to Reduce your personal water usage, Energy Star Kids: Be an Energy Star).

This approach becomes more problematic in the urban environment where Frank and Zamm (1994) describe urban EE as having “the same objectives as traditional EE: to encourage environmental awareness, knowledge, attitude formation, skill development, and participation in solving environmental problems” (p. 8). While not explicitly defining environments as solely “natural places,” there is a common trend in urban EE that continues to focus on migrating birds, urban trees, and polluted rivers, an emphasis on the “natural” environments within urban spaces (See Russ, 2015 for a recent text on urban EE). This approach obscures the social and built dimensions in urban environments, rendering them damaged (La Paperson, 2014) and in need of repair. This also limits opportunities for a deeper investigation and analysis of the social and political factors that structure the urban environment. Privileging a romanticized version of the “natural” environment, EE seeks to remove youth from their urban environments to “connect with nature”, failing to appreciate or value the ecological collective that makes up urban environments.

As ecological collectives, urban environments are socially, politically, historically and ecologically structured, and environmental issues within urban environments mirror this phenomenon. As Derby, Piersol, and Blenkinsop (2015) note, “despite the procession of birds
that might flock overhead, the coyotes that roam urban alleyways, or the families of raccoons
that rummage through garbage bins, cities are not *wilderness on its own terms*. Cities are, by and
large, colonized places” (p. 379), socially produced spaces that are shaped by “our desires,
manicured and conformed to fit our needs” (p. 380) providing different perceptions and
experiences for people coming to and occupying a city (Adams, 2013). Recognizing the
ecological and social complexities of urban spaces warrants a more critical approach to urban EE
that allows youth to examine multiple factors towards collective decision-making and
mobilization for an improved quality of life for all urban citizens, humans and nonhumans alike.

In the sections that follow, we will first briefly discuss neoliberal influences on urban
environments and EE along with conceptual frameworks that describe urban nature. We draw on
these in order to make a case for why these related concepts are important considerations for
contemporary EE, particularly as they relate to today’s rapidly changing urban environments.
Next, we use this conceptual framework to illustrate an urban EE that reframes conventional EE
by incorporating a political ecological approach to understanding local environmental issues. We
then apply the conceptual framework to our own classroom experience, highlighting three
overarching pedagogical approaches that we believe must be a part of any EE classroom. We
conclude with a discussion of the affordances, challenges, and tensions that emerged out of our
experiences as critical environmental educators.

**Problematizing Environmental Education For Urban Contexts**

Environmental educators, especially those working with urban youth, must consider their
own assumptions about urban environments and nature in their pedagogy. This should include an
understanding of the forces that are continually shaping and reshaping urban environments and
how they are linked to social, economic, and political systems. Additionally, while there is a
dominant conception of nature in the collective consciousness, reframing nature to include the human aspects of urban environments, including the built and social components, will open up opportunities for youth to engage with an urban EE rooted in their own lived experiences. Without these more nuanced and contextual understandings, youth will not be able to participate in critical conversations about urban spaces.

**Neoliberalism as a structuring force for social and material relations.** As an economic ideology, the neoliberal project includes policies that promote tax cuts and subsequent cutting of social welfare programs, the privatization of public resources and services, free trade, and deregulation (Harvey, 2005, Brown, 2003, Larner 2006). Both political parties are taking up these policies, and the discursive formation surrounding neoliberalism continues to maintain its place as a dominant structuring force for social and material relations (Orlowski, 2001). Touting individual freedoms and innovation in the name of endless entrepreneurship, Brown (2003) writes that the neoliberal discourse equates to “the rationally calculating individual bear[ing] full responsibility for the consequences of his or her action no matter how severe the constraints on this action, e.g., lack of skills, education and childcare in a period of high unemployment and limited welfare benefits” (p.4).

For the purposes of this paper, we are not interested in examining the economic policies themselves but rather the ways that neoliberalism, conceptualized as a project to restore class power (Harvey, 2007), is cloaked in rhetoric that serves the elite. As such, these policies create a citizenry that is working within a system that is harming people, communities, and the environment. In effect, neoliberal policies are reshaping urban environments and, in turn, how young people experience these environments. As the impacts of these policies are inequitably
distributed, they are differentially felt by youth who then struggle to make sense of what is happening around them.

Neoliberalism has influenced EE approaches in ways that are detrimental to the collective environmental health of cities. Harvey (2005) writes, “neoliberalism has pervasive effects on ways of thought to the point that it has become incorporated into the common sense way many of us interpret, live in, and understand the world” (p. 3). Hursh and Henderson (2011) also describe this entrenchment of neoliberalism: “neoliberalism has become so ingrained as the rationale for social and economic policies and, as such, is rarely challenged, but accepted as necessary and inevitable” (p. 178). They describe how the “neoliberal logic normalized individualism and entrepreneurialism, equating individual freedom with self-interested choices, making individuals responsible for their own wellbeing, and redefining citizens as consumers and client” (Hursh and Henderson 2011, p. 178). This neoliberal discourse has infiltrated EE with its consistent emphasis on individual choice and behaviors as “solutions” to environmental issues, as opposed to an approach privileging ecological approaches, collective decision-making, and community-based, grassroots actions.

EE, as it is currently situated within institutions of teaching and learning, has been subjugated to the larger reforms infiltrating public education today. Neoliberal education reforms have lead to a focus on “narrow skills approaches to math and literacy at a time when we need as educators and students to respond to more complex, interdisciplinary questions regarding how we are to live on this planet” (Hursh and Henderson, 2011, p. 181). The current climate of high-stakes testing and teacher evaluations, coupled with a narrow focus on decontextualized literacy and numeracy “skills,” leaves little room in schools for critical EE and alternative discourses and thus reproduces neoliberal values and ideologies. With these reforms dominating teaching and
learning, neoliberal EE is packaged around a “green” lifestyle that promotes individual choices and behavior modifications in order to reduce environmental impacts and carbon emissions, and this often includes the purchase of green products and technology, including opportunities to “purchase” trees to offset the carbon footprint of air travel.

If one of the goals of EE is to create citizens with a civic ethic towards pursuing and contributing to a cleaner environment, the promotion of these actions without a critical examination of the current context reproduces rather than challenges neoliberalism and its insidious policies. This squarely places the responsibility of environmental protection on the individual and leaves the state/nation with little responsibility, another product and tactic of neoliberalism. Individual people then appropriate “environmentally-friendly actions” based on cultural and economic capital, rendering green consumerism a political act. In terms of young people and the environment, Schindel Dimick (2015) notes, “prevailing neoliberal discourses about individual action and consumption position youth in ways that reinforce existing relationships of inequality rather than disrupt them” (p. 396), which serves to reproduce the economic, social, and educational inequities that shape many urban environments. However, she adds that pedagogical practices have the potential to disrupt these relationships by “working against systems of oppression and domination and toward both social and environmental justice” (p. 396), something we will discuss more below.

Reframing nature for urban EE. Reified in the minds of most people, nature is presented as a universal truth, an ideological imaginary of a pristine, untouched “first nature” (Cronon, 1992). This nature-human divide has been a part of our collective consciousness and a common discourse forwarded in most EE curriculum. However, we argue here, as others have, that nature is a social construct, and as such, we must interrogate this relationship between
society and nature. Braun and Castree (1998) write that “nature is something imagined and real, external yet made, outside history but fiercely contested at every turn” (p. 2) and call for “building critical perspectives that focus attention on how social natures are transformed, by which actors, for whose benefit, and with what social and ecological consequences” (p. 3). They further highlight three theoretical traditions that can help understand the construction of nature in our modern context including the influence of capitalism, representations of nature in culture and discourse, and the construction of nature through social relations. Smith (2008) further stresses that understanding nature separate from society is a false separation, as capital itself unabashedly views nature solely as a provider of use and exchange value.

A singular definition of nature has become so omnipresent that it has obscured other versions of nature that could and do exist. For example, Low, Taplin and Scheld (2009) note that many middle class people hold values that “reflect the Western romantic tradition of idealizing nature and wilderness, as well as present-day notions of environmentalism and civic-mindedness” (p. 59). This correlates not only with the emphasis on a nature, even in urban environments, that is devoid of human impact, but also of the ideals that influence environmental movements that are pervasive in EE. Social nature (Cronon, 1996; Castree & Braun, 2001) is an alternative nature, from critical geography, which we forward here. Social nature, as produced by and in the image of capitalism, is a more common reality for youth growing up in urban environments, capturing the human-created spaces that surround us in cities. This also includes the “green” spaces, such as parks, shorelines and refuges that cannot be described separately from the urban contexts in which they are situated. This social nature, as constructed by youth in our work, includes both material and social relations: the built spaces, material objects, the movement of people, and their ways of relating.
Yet urban EE tends to focus on the “natural” in urban environments, seeking the “first nature” amidst the urban nature. It furthers the discourse that cities took over natural places creating only pockets of nature. As a result, urban EE typically obscures important questions such as: what are the “natural resources” available to people in urban environments, and where are these found and are the quality of these equal across all people and places? We believe the challenge we face as urban environmental educators is a reframing or reconceptualization of nature, natural resources, and natural processes in urban contexts. Rethinking these concepts in relation to urban environments requires us to extend beyond the biophysical and embrace a more holistic description that includes the natural and built, technology and social (economic, political, technological, cultural-historic, moral, aesthetic) (Gough & Gough, 2010).

Incorporating A Political Ecology Lens Into Critical Urban Environmental Pedagogy

In order to challenge existing paradigms of neoliberal influenced EE, we need transformative pedagogical practices that push how we define and describe urban environments. This redefinition of environment can lead to more socially critical curriculum where students are engaged in social and political practices and structures while they are learning EE, rather than the notion of preparing them for later participation in civic actions (Gough & Gough, 2010). With this conceptualization, EE becomes “concerned with developing a curriculum that encourages the practice of just, participatory, and collaborative decision making and involves critical analysis of the development of the nature, forms, and formative processes in society generally and of the power relationships within a particular society” (p. 341). In this section, we conceptualize the ways a political ecology lens to understanding urban socio-environmental conditions can strengthen a critical urban environmental pedagogy. We first describe our understanding of what a political ecology lens has to offer and then apply this lens to the
example of gentrification, an issue relevant to many youth. We end this section with how a
critical urban environmental pedagogy that incorporates a political ecology lens can create new
curricular opportunities for EE.

The kind of critical urban environmental pedagogy we are forwarding is one that
incorporates a political ecology lens (Robbins, 2012) towards understanding local environmental
issues. Smith (2006) describes political ecology as rooted in social and political theory, grounded
in ecology, international in scope, and combined with local environmental justice activism (p. xiv). A theory of urban political ecology is an analysis that “foregrounds the urban condition as fundamentally a socio-environmental process” (Heynen, Kaika and Swyngedouw, 2006, p. 2). This political ecology lens seeks to ask questions about the network of power relations through which unjust socio-environmental conditions are produced and maintained in our cities, while challenging neoliberal, capitalist urbanization processes and the resulting environmental injustices. A developed political ecology lens allows us to see connections across political, economic, and social conditions, while illuminating more democratic processes by which these socio-environmental conditions are made and reproduced.

One common urban environmental issue that is visible and is impacting youth across
cities is gentrification. In New York City, the mainstream media often ignores debates about
gentrification, rendering the efforts of community organizers who fend off new developments at
the expense of long time residents invisible. Without a deeper understanding of the political and
economic forces driving gentrification, the social impacts are masked. Gentrification, framed
solely for economic development as revitalization or rehabilitation of blighted neighborhoods,
obscures the realities of displaced peoples and places. When presented in this capacity, it is
difficult to argue that gentrification is a way to improve neighborhoods. This is further
complicated by what La Paperson (2014) refers to as “settler environmentalism” where such communities are posed as wastelands, “whose inhabitants lack the liberal capitalist insights and technological know-how to properly occupy a city” (p. 120). This speaks to the way that environmental knowledge is both produced and legitimized, “embodied in local contexts and contested in debates not only about science policy or resource politics but about expertise” (Goldman, Nadasdy, & Turner, 2011, p. 4). However, a critical urban environmental pedagogy committed to fostering a political ecology lens would seek to unpack the connections gentrification has to both political and corporate interests in cities. Additionally, it would further critique the coded language used in media reports on gentrification as “expert knowledge”. A political ecology lens would further complicate an understanding of gentrification by including the knowledge and perspective of people who live in the communities. Often the most racially and economically marginalized residents, these people would benefit from an understanding of how the process impacts their daily lives and understandings of the urban environment.

A political ecology lens can leverage lived experiences of youth, such as how they experience gentrification, for an enacted curriculum described by Kincheloe (1999) as a “dynamic negotiation where students and teachers examine the forces that have shaped them and the society in which they live” (p. 72-73). By using educational spaces to problematize and deconstruct these dominant forces, a political ecology lens affords an opportunity where “justice oriented citizens are able to critique societal structures in order to understand the root causes of societal inequalities” (Orlowski, 2001, p. 156). The possibilities of a critical urban environmental pedagogy, if enacted, include transformation of the ways we think about and teach EE and the creation of a more critically conscious citizenry. We believe that classrooms must be sites for critical engagement with local environmental issues, especially since mainstream media outlets
fail to utilize a political ecology lens in their investigations and analysis of socio-environmental conditions.

The role of environmental educators has never been more crucial because without a critical understanding of the deeper connections between socio-environmental conditions of urban environments and neoliberal policies, these relationships will remain hidden. A critical urban environmental pedagogy asks important questions like, what are the environmental issues that people living in urban environments experience or face, and how are these issues understood, legitimized, and normalized for and by people living in urban environments? A political ecology lens infused into urban EE can reinvigorate the transformative potential of EE lost to disciplining and neoliberal education policies.

Through frameworks like ecopedagogy (Kahn, 2010), critical pedagogies of place (Gruenewald, 2003), and ecojustice (Mueller, 2009; Bowers, 2001), critical environmental educators have begun to challenge the dominant EE discourses that obscure underlying economic and political influences. However, there have been few examples of how these types of pedagogies have been enacted in formal secondary institutions and what would be required to achieve this. It is important to offer educators alternative pedagogical approaches so that they could begin to engage in critical discussions and participatory actions in spaces with even the most constraining curricula.

**Teaching for Critical Consciousness**

During the last five years, we have been drawing upon critical and participatory research methodologies and pedagogies to work with youth who live in urban environments. Many of the students we have worked with are first generation immigrants, the majority of them youth of color who live in different racially, ethnically, and economically diverse communities across
New York City. Through our ongoing work and research, we have come to believe very strongly that a critical approach to urban EE must include the following three interrelated components: first, youth must understand the larger structural forces shaping neighborhoods and the interconnection of these forces from both a systems perspective and a historical perspective; secondly, young people must locate their identities and social positions and unpack how these have shaped their own ways of understanding experiences in place; and finally, youth need spaces to critically reflect on how the above two components fit together in order to develop a political ecology analysis that investigates who benefits and who is harmed by pervasive ways of thinking, seeing, and acting in the world. In this section, we will briefly outline these three pedagogical components and reflect on our own experience as critical environmental educators, highlighting some of the successes and challenges of enacting a critical urban environmental pedagogy within the hegemonic institution of public schooling.

**Social theory and critical pedagogy.** In order to support youth in developing the capacity for critical consciousness and deep political ecological analysis, it is imperative to first describe the processes that shape our current society. We do this by introducing the ways that neoliberalism influences the current economic, social, and political context of our lived experiences. This sets the stage for much of the subsequent analysis of local environments. We introduce a variety of texts (e.g. readings, films, podcasts, advertisements) from various disciplines that are traditionally not associated with EE (e.g. history, geography, politics, economics, education) to help students make sense of the wide reach of neoliberalism in their daily lives. For example, we use the book *Is Everyone Really Equal? An Introduction to Key Concepts in Social Justice Education* (Sensoy & DiAngelo, 2012) because it is accessible to youth, introducing difficult concepts like socialization, prejudice, and oppression through
anecdotes and visuals. Exposure to readings on social and critical theory better equip students to engage in critical conversations and make connections between their experiences and larger systemic issues that they see across the city. These written and visual texts serve as touchstones for us to revisit as we reiteratively and reflexively connect our experiences to theory.

We also expose students to critical pedagogy to both situate our pedagogical philosophy, as well as to aid students in deconstructing hegemonic knowledge and the institution of school. This includes an introduction to the ideas of Freire and other critical pedagogues, writing critical educational autobiographies to critique experiences within formal schooling, and problematize common educational practices including tracking, state exams, common core learning standards, and college applications. Through a critical study of education and lived experiences, students are able to see their own role in perpetuating the myth of meritocracy and gain a better sense of the privileges (or disadvantages) experienced based on their position or academic track as students. Table 7 shows student reflections demonstrating their emerging critical consciousness and understanding of their positioning within education as a result of engaging with social theory and critical pedagogy.
Table 7. Student reflections on their emerging critical consciousness focused on education.

<table>
<thead>
<tr>
<th>Criticality and Schooling</th>
<th>“When I came to America my motivation died slowly. It started when I was moved down a grade because I didn’t know English. My surrounding environment consisted of buildings and bars. In math, the everyday routine was the completion of worksheets, not how well you did the work but if it was completed. When I realized that, I started cheating myself through the homework and just wrote useless crap that in the end only lessened my motivation for school. The constant restriction I felt when we had to form lines and walk to our next class as if we were little soldiers waiting for our next command.” (Pandora, Critical Educational Autobiography, March 2014)</th>
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<td></td>
<td>“What does it mean to be a student? We are categorized, put onto shelves and organized. I, for example, am a honors student and an AP student (I’ve taken two classes). All of these things give me some sort of status, while competing against other students as well. The theory (or stigma) states that honor students are more &quot;highly valued&quot; in the eyes of the education system. This, in turn, holds back general education students within their status. This method of categorizing sticks stigmas and ideologies to students. It as an unfair process, but it goes along with society and the educational theory, where, supposedly, more &quot;higher educated&quot; students are valued more than others.” (Glen, Critical Educational Autobiography, March 2014)</td>
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<td></td>
<td>“I left the cross country team and I picked up the guitar. Only a few people know this, but that was when I had time for myself to get into music and spirituality. I started to realize that I have a passion for things outside of what I was told that I “needed”. I liked art; I liked music, nature and history. I decided to put my time into things that mattered to me, and that was being happy. That’s when I learned a lot of things about myself. I think then I began to consider myself a human and not a statistic, not a student, and not someone in the system. I began to think of myself of a person.” (Taylor, Critical Educational Autobiography, March 2014)</td>
</tr>
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<td></td>
<td>Being an AP student and being a teenager I just assumed I knew everything but I don’t and that’s okay. Being an AP student isn’t exactly what I thought it was at the beginning of the year participating in this showed how there is a hierarchy in our school system and I had not realized that before. I didn’t really question why all of my friends were only AP/ Honors students. Now I have questioned that. (Rochelle, Critical Educational Autobiography, June 2014)</td>
</tr>
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**Participatory research methodologies.** The use of participatory action research (PAR) methodologies, including photovoice, narratives, neighborhood reflections, and mental mapping, have been critical in allowing youth to explore their ways of knowing and learning about place. Tzou, Scalone, Bell (2010) argue that “to disrupt dominant social hierarchies and patterns of oppression youth’s narratives must be placed at the center of the EE to create empowering positions for youth” (p. 116), and Cahill (2009) describes participatory analysis specifically as “a critical process of making visible the invisible” and should embrace a commitment to producing counter stories (p.187). By bringing youth’s knowledges to the forefront as they investigate local neighborhoods and community identities, the production and transmission of cultural, popular, and school knowledges are exposed and explored.

Investigating local neighborhoods using participatory methodologies can also raise issues that are inherently political. As an introduction to exploring local environments, students in my classes are asked to complete a neighborhood reflection on our course blog. Students are asked to describe the physical and social environments that they see as positive, negative, ideal, and in need of change. These responses are posted on a course blog where they are collectively analyzed, first individually, then in small groups, and finally as a whole class. Throughout the process of participatory data construction and analysis, youth share and document their experiences with local neighborhoods often illuminating issues most salient to youth. Themes that typically emerge for further exploration are neighborhood identity, diversity, safety, and access to spaces that youth feel comfortable. These themes are then further explored with additional participatory methodologies like photovoice and mental mapping to more deeply investigate the ways youth see different neighborhoods as valued/not valued. These assignments begin to reveal for youth how neoliberal processes have unevenly commodified urban spaces.
within and across neighborhoods. For example, youth are able to see neighborhood forces like gentrification, homogenization of people, differential access to retail, food, and housing playing out across the city and articulate the tensions of these forces that are redefining their neighborhoods, particularly in terms of who gets marginalized and pushed out. These experiences are then contextualized using the aforementioned critical, social, and environmental theory texts.

A pedagogical space open to student experience and critical dialogues. In a critical classroom, sensitive and personal issues dealing with race, gender, class and power often arise. As such, it is important to create a community of safety and trust that allows for these important discussions to emerge. Guided by Freire’s (2000) notion of culture circles, a dialogic and participatory learning space is nurtured where teachers take on the role of facilitators, providing resources for students to learn about and discuss issues that are salient to them. With students having a sense of agency in the learning that happens, what is learned and how it is learned, there is space for the sensitive issues to emerge in ways that are more comfortable and productive for the classroom community to discuss. In this space, strictly planned curricula or lectures are no longer needed but rather, a lived curriculum (Aoki, 2005) is enacted, where thematic units emerge from collective dialogue and in response to students’ interests. This creates the critical physical and social space within the classroom that allows for youth to feel safe in discussing personal experiences with others. The emphasis on collective dialogue is “nourished by love, humility, hope, faith, and trust” and can lead to critical learning and collective growth (Freire, 2013, p. 41) contributing to the creation of a safe space for students’ critical lens to grow and flourish.
Reframing the roles of teachers and students is an integral part of the culture of any critical classroom. In a critical space, both students and teachers take on multiple roles in both creating and maintaining a safe and nurturing classroom and are dedicated to collectively work through ideas. The job of all participants in the learning space is then to push both self and other in exploring the relationships between experiences, people, place, theory, economics, and policy. Urban environmental issues including neighborhood investment and disinvestment, corporatization of media, economics, and consumer culture are then explored through critical dialogues where youth can begin to unlearn the “commonsense” they have been taught for years in schools and at home. This opens up classroom space for youth to work together as they make connections, exercise critical thinking, discuss how privilege operates locally, and identify and name winners and losers of neoliberal policies. This shift in thinking is challenging, and students leave class feeling both unsettled and empowered, often with many new questions. Therefore, reflexivity as a pedagogical praxis is a necessary component for both teachers and students. When present, it allows all participants to continually respond to the needs and interests of the collective.

**Possibilities, Challenges and Tensions inherent in a Critical Urban EE**

Where there are opportunities for transformation, there is also resistance, challenges, and tensions that arise. Elsewhere we have described some of these tensions, for both teachers and students, including our own emerging critical consciousness, the evolution of a critical urban EE curriculum, as well as the shift for students from knowledge consumers to knowledge producers (See Bellino, 2015; Strong, Adams, Bellino, Pieroni, Stoops, & Das, 2016). Here we unpack the larger challenge and tensions that arose when enacting a counterhegemonic pedagogy in a hegemonic institution with academically oriented students.
The two contexts in which we have taught, reflected on, and co-created this approach to urban EE have typically involved working with academically advantaged youth. One context is a college-credit environmental science course in an urban public high school, and the other is an environmental science course offered through a pre-college public high school affiliated with a local university. While both of these contexts have similarities and differences compared to “typical” public high school settings, the advantage to each is access to college credits while still in high school. Access to these courses, however, is restricted to those who qualify (e.g. GPA benchmarks, passing required state exams) and provides both social and economic capital to enrolled youth, such as college credits and access to university personnel and resources. However, while these academically advantaged youth have benefited within the public school system, they are still often marginalized from larger educational opportunities (e.g. access to prestigious liberal arts colleges, jobs, cultural capital) because of their racial and/or socioeconomic positions.

We have found that young people who have been academically advantaged can initially resist engaging in a critical pedagogy. Often, they are positioned in these top classes because they have conformed to the dominant school culture, believing strongly in the rules of meritocracy that guide success in schools today. As such, it becomes unsettling for them to critically reflect on their academically privileged position, as they have long been benefactors of a system that rewards their “hard work” and marginalizes students who are deemed “lazy” or incapable of learning. Many students believe that their own hard work has created their academic successes without an understanding of the deep structural inequalities embedded in schools that have come to determine the types of behaviors that schools value: those of individuality, competition, conformity, docility, and control. From our perspective, this makes critical work
even more important for these students, as it is very difficult to accept one’s success at the expense of another. We see this happening now, both in the academy and in popular culture, with discussions of whiteness and white privilege. After some initial resistance, however, youth begin to see their identities as complex and intersecting vis-a-vis their peers and communities, as well as the role of the hidden curriculum in shaping their academic identities. The writing of critical educational autobiographies and exposure to critical theory allows youth to connect their experiences to the larger political ecology of education that has benefitted them.

As a result of neoliberal education policies, teachers experience the strong institutional demand to prepare students for state exams at the expense of teacher autonomy and professionalism. However, there are subversive spaces where critical pedagogy can be enacted. Elective courses provide the greatest curricular freedom, as well as spaces for relevant critical and participatory pedagogies to be enacted. However, one large challenge for many students was that our critical urban EE class was the only place where youth were hearing about structural inequality, neoliberalism, and critical theory. It was also the only place where their experiences were centered and analyzed in relation to theory. Students were simultaneously enrolled in advanced government and economic courses, but neither of these were evoking critiques or forms of deep and connected analysis of economic policy. Therefore, students were receiving mixed messages in what was “true”. This challenged them when attempting to take the learning from our classroom to others (i.e. peers and family) who were less familiar with the language we were using (e.g. socialization, neoliberalism, gentrification). However, these challenging experiences became new sources of dialogue for the class, so challenges almost always create opportunities for new learning.
Hopes for a Critical Urban Environmental Pedagogy

Taking into account the three pedagogical components described above along with the opportunities and tensions of doing counterhegemonic within institutions, it is important to end with the hopes we have for implementing a critical urban EE. We believe, first and foremost, teachers must be prepared to do this kind of critical work in classrooms with youth. Teachers need to be willing to take risks, deal with the different emotions that will arise, knowing that they may often feel uncomfortable and ill-equipped. Being open to learning from and with students allows youth to gain knowledge from both teacher expertise and limitations.

By bringing critical environmental pedagogy into urban places and beginning to understand young people's relationship with urban environments, we can challenge the power relations that create oppressive socio-ecological situations that have come to define our cities. Participatory methodologies afford the construction and analysis of data by youth while illuminating and politicizing issues most salient in urban environments. When youth are engaged in this form of critical urban environmental pedagogy, they can begin to connect the social, economic, and political processes that shape their neighborhoods and begin to contest the dominant forms of neoliberal urbanization. Using an urban political ecology lens, youth can more explicitly and critically recognize processes that shape urban environments.

A critical urban EE must recognize that neoliberalism is not a static process but rather “always in flux as it is made and remade, and new effects are being felt across contexts, settings, and countries” (Hursh, Henderson, and Greenwood, 2015, p. 300). Due to this mutability of the relationship between the environment and education as a product of neoliberalism, it is particularly important to investigate what this looks like from multiple perspectives. Critical youth participatory methodologies uncover the questions most important to youth, privilege the
knowledges of youth from their individual and collective experiences, and can be enacted and adapted for multiple situations. A political ecology lens to interrogating urban environmental issues provides language for young people to describe and challenge the unequal power dynamics that continue to mask and perpetuate the exploitation of people, neighborhoods, and resources. A political ecological analysis can also highlight the connections between places and a capitalist, neoliberal political economy. When students see that the places they live are a product of decisions that are social, political and economic in nature, they can hopefully begin to see that these decisions can also be contested and that they have agency to make salient decisions that will improve the quality of life for them and the communities in which they live.

References


Chapter 7: The "Data Carnival": A Participatory Data Analysis Approach

In this chapter I introduce the overall purpose, process, and findings of the “Data Carnival”, a participatory data analysis event engaging issues of history, power, and youth experience. I explore the ways participatory data analysis and interpretation in a research collective better help youth articulate the ways they understand the natural and socially constructed environment in which they are situated. As the culminating piece of this three-year study, the Data Carnival participatory analysis tells the story of how young people came together to discuss three years of data and reflect on their experience in the course. What emerged from this experience was an interconnection of themes that was impossible to untangle as well as multiple sites of contradiction and tensions that young people experience in their local environments.

A Participatory Data Carnival

The Data Carnival was the culminating piece of this three-year study conducted with students in the environmental science course in which we investigated the dialectic relationship between local environments and the meaning young people make about themselves and their neighborhoods. In this praxis, youth are co-researchers, and as was evident in the prior chapters, involved in almost every aspect of the research. Hart’s (1992) ladder of participation highlights the range of ways participants can be incorporated into participatory research, and Cahill (2007) describes participatory analysis specifically as “a critical process of making visible the invisible” and should embrace a commitment to producing counter stories (p.187). This call by participatory researchers necessitates a commitment to involve youth in analysis of data in addition to mere data collection and construction.
**Purpose.** The purpose of the Data Carnival was to engage participants in participatory data analysis and interpretation in a research collective to better help youth articulate the ways they understand the natural and socially constructed environment in which they are situated. The Data Carnival afforded youth a place to look anew at data they and other youth constructed as well as an opportunity to interpret data through the lenses developed by participation in the course. The term “carnival” was selected because the day was meant to be a celebration of our work, while also challenging dominant ways we do data analysis, typically in isolation, from purely a researcher perspective. By creating a fun space to come together and collectively and reflectively look back on our work, we hoped to allow for all the voices in the data to be heard. Throughout the three years of the study, a variety of field texts and data were co-produced by me, as the teacher, and over 70 students. These included neighborhood reflections, photographs, personal narratives, mental maps, and final course reflections. All 70 students from Environmental High who participated in the course over the three years were invited to the Data Carnival, and 15 were able to attend. In this part of the chapter we will specifically focus on how this participatory data analysis event was organized and then discuss the findings from the perspective of youth.

**Process.** The Data Carnival was organized into two sessions: a morning session, where participants would identify themes present in data sources, and an afternoon session, where the whole group would interpret the themes (See Appendix 7). The morning round of data analysis had four groups of two to four students working with researchers (Figure 25). Researchers acted as facilitators and were all part of an urban environmental research collective who helped plan and organize the Data Carnival. Each group was charged to deeply examine one data source from across the years in order to identify common themes guided by the following task description:
For each data source you were asked to select three artifacts that spoke to you. This may have been because it resonated with your personal experience or because you think it is an important idea or perhaps it contradicts with your own ways of thinking. In your small group you have an hour and a half to share which artifacts you selected, why you selected it, and what you learned from it (keeping the big research questions in mind). Use the time to talk together about what big ideas you see in the data. Document your thinking on post-it papers and place them on the big chart paper. Take the last few minutes to prepare a short (about five minutes) presentation that you can share with the whole group about what you saw in the data.

Table 8 shows the short description of each of the data sources given to participants at the Data Carnival.

Table 8. Description of the data sources analyzed at the Data Carnival

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photovoice Narratives</td>
<td>Participants selected a set of images that they used to tell the story of their neighborhood from the perspective of their research theme. Research themes included diversity/integration/segregation, safety/nature/crowding, community identity, and community access to resources. These narratives were shared on our course website.</td>
</tr>
<tr>
<td>Neighborhood Reflections</td>
<td>Participants were asked to quickly record their favorite places, least favorite places, ideal places, and ways their communities could be improved. Emotions and behaviors felt and observed in places were elicited. These were shared on our course blog.</td>
</tr>
<tr>
<td>Mental Mapping</td>
<td>Participants created maps of their neighborhoods focusing on places that had meaning to them (both positive and negative). Maps were shared in small groups and common themes were documented. Groups shared in a larger class discussion about big themes that emerged during conversations. Students published an image of their maps on the course website and reflected on the big learning and the mental map methodology.</td>
</tr>
<tr>
<td>Final Course Reflections</td>
<td>At the end of the year participants were asked to reflect on the learning process and how it impacted them. These were shared with me in a letter type format.</td>
</tr>
</tbody>
</table>

In the small groups, each data source was first coded. In order to identify the different data sources in subsequent rounds, we assigned a different color sticky note for each data source.
Big ideas from the data source were written on individual post-its and then placed on chart paper. These chart papers were then displayed around the room and each was shared with the larger group in a brief presentation to start the afternoon interpretation session. While youth were presenting their coded themes to the larger group, both students and facilitators took notes on what was being said. These notes were then shared back to the group, and as a collective, we decided to generate a systems diagram that could capture the ideas revealed in the data sources. Participants were able to move the post-its to a new big piece of chart paper and draw lines and words to explain the connections between ideas.

*Figure 25. Students discussing themes in the mental mapping data with a researcher facilitator. Photo by author*
Findings. The Data Carnival was designed to be a space for youth to look across multiple years and sources of data to interpreting their experiences. Results of the small group analysis sessions show the large themes present in the data sources (Figure 26). Present in the data were many of the issues that young people raised during the course of the year including diversity and segregation, neighborhood change and neighborhood identity, the process of gentrification and what that looked like in different neighborhoods, access and equity of quality parks and recreational spaces, safety and comfort. All of these socio-environmental issues raised by youth at the Data Carnival are present in photovoice data and described in Chapter 4. Most interestingly is how different data sources elicited a variety of themes that were present across multiple data sources. In the afternoon, when the small groups of participants presented (Figure 27), youth raised many questions, including who has access to human and material resources, what role does culture and community identity play in our neighborhoods, and can you improve neighborhoods without changing them? Youth also expressed statements concerning their own connection to their neighborhoods: “My local environment is not my home. I do not feel connected to it”, “It is hard to be who you are when you see a very different dominant culture around you”, and “Young people growing up today feel a tension between the culture of their parents and the dominant culture that surround us.”
Figure 26. a. Photovoice Narratives. Round 1 of coding data sources. Photos by author.
Figure 26. b. Community Reflections. Round 1 of coding data sources. Photos by author.
Figure 26. c. Mental Mapping. Round 1 of coding data sources. Photos by author.
Figure 26. d. Final Reflections. Round 1 of coding data sources. Photos by author.
As the conversation came to a close, what happened next, for me, truly demonstrates the excitement but also some of the anxiety of conducting participatory research. As the teacher and researcher I had gone in with an idea of what I wanted to happen in the afternoon. I imagined that common themes would emerge from the data sources, and we would be able to track them across data sources to see how themes were represented and documented. However, what we found from our dialogue was an interconnection of themes that was impossible to untangle, as well as multiple sites of contradiction and tensions that young people experience in their local environments. This conversation led to the collective decision that separating the themes obscured their interconnections. Instead students decided to integrate themes into a systems
diagram that showed the relationships between them and how the socio-environmental conditions observed and experienced by youth are situated within a larger, complex system. They instinctively began moving post-its from one data source to another onto new chart paper and began drawing in lines and words to explain the connections between ideas (Figure 28).

Figure 28. Students looking through data to construct their interpretations. Photo by author

The final posters (Figure 29) shows how youth understood connections between their own neighborhoods, access to resources within those neighborhoods, and the larger systems of history, education, economics, and politics their neighborhoods are embedded within. Youth growing up in cities experience their local environments as not independent of class, gender, ethnicity, or other power struggles but clearly see the ways power has been maintained within
privileged groups, while disempowering more marginalized groups. The final diagrams show the way young people are naming and connecting their experiences, using terms like systemic inequality, under-resourced communities, and lack of opportunity. Their diagrams were littered with powerful terms like systemic inequality, under-resourced communities, and lack of opportunity. On one diagram, disconnect to nature was linked to a new questions about how parks are maintained, described by students as either “lush and green” or “gray and barren”. Three connected post-its labeled individual vs. society, resources, and privilege was connected to the statement “Even though it is difficult to create change, it can be done collectively, but the city needs to give basic resources to back up its citizens”. During presentations of the diagrams, one group described the following in their diagram:

And race and ethnicity also plays into money distribution because your race and ethnicity determines the institutional norms. And that again goes to disconnect but that also goes to the idea of meritocracy so people will try to counter all of this by saying if you work hard enough you can break the system and go all the way back here (points to assimilation) and that is false and a lot of people feel trapped because of it and after they know it is false it leads to an awareness.²

² The bold terms represent the post-it note concepts participants selected from the data sources.
Figure 29. a. Group one. Participant posters showing the interpretation and interconnections of themes from multiple data sources. Photos by author
Figure 29. b. Group two. Participant posters showing the interpretation and interconnections of themes from multiple data sources. Photos by author
One participant, reflecting on the data, made sense of young peoples’ disconnection to their neighborhoods through the following observations: “We all come with ideas about our neighborhoods based on the ways in which they are portrayed and stereotyped and when we feel like we are not reflected by that stereotype, we feel disconnected from the places we live.” This statement has a profound impact on youth identity formation as it can be in conflict with what might be expected of them by family and friends. In turn, they seek other places where they feel more “comfortable” to be themselves, where they feel safe. In this final section youth experiences are interpreted in light of neoliberal discourses and we end by exploring the implications of this work for the way we teach environmental sciences.

The Data Carnival afforded youth the time and space to work together, alongside researchers and educators to see the themes presented in the data sources as connected issues. The interpretation session where students presented their understanding of the relationships between the themes revealed the ways in which neoliberalism has impacted on the social and material relations of youth and mediated much of their experiences with their local environments. Both of these outcomes will be discussed in further detail in Chapter 8.
Chapter 8. Findings, Implications, and Conclusions

This chapter reflects upon the outcomes of the research over the three years and the Data Carnival and presents the findings from both my own pedagogical perspective as well as the connections the findings have to neoliberalism. The findings shared summarize my conceptualization of a critical urban environmental pedagogy and the intersection of neoliberalism and EE. Finally, this chapter discusses the implications of these findings for environmental educators working in urban areas as well as a larger call for a reimagined environmental education and how it might be useful to mainstream EE.

Overall Research Outcomes

The findings of this study intersect within the fields of environmental education and critical youth studies and include pedagogical, methodological, and epistemological insights. This project primarily supports the notion that as educators we need to understand our students ecologies, their environments, and their unique subjectivities in order to be better, more critical teachers. Appendix 9 provides the syllabi from the third year of research, including the texts (e.g. book chapters, journal articles, short films, feature length films) and community research projects that were utilized. These text choices reflect and make transparent my pedagogical philosophy and ideologies and are further discussed here as a finding of this research. Additionally, the need for EE to include an understanding of the current neoliberal context in order to make sense of local environments is a major contribution of this research.
Pedagogical reflections and findings. This study supports and extends the notions that utilizing critical pedagogical approaches and YPAR as a methodological, epistemological, and pedagogical tool in a critical classroom has the power to increase youth’s critical consciousness and affords a deeper understanding of the issues most salient to young people growing up in urban environments. When introduced as a pedagogical approach, YPAR affords students the opportunity to breakdown and codify experiences through critical dialogue and participatory analysis. This dissertation project includes many critical and participatory pedagogical approaches to the teaching of EE. Here I make explicit my conceptualization of a critical urban environmental pedagogy and make a case for other urban environmental education to embrace this local, critical, and participatory pedagogical praxis in classrooms.

As someone who identifies now as a critical environmental educator, this dissertation project is about the intersection of my own identity as an educator and what I valued in terms of teaching and learning. It was also about embracing the lived experiences of my students, and acknowledging the diversity of experiences and knowledge we all bring into the classroom. This project originated as a pedagogical mission inspired by critical pedagogy and place based environmental education leading to three years of teaching and research alongside youth and arriving at a reconceptualized urban EE, critical urban environmental pedagogy. Each of the parts of this term are important to me in ways that relate to my own pedagogical, epistemological, and methodological orientation and I use the space here to further unpack these terms in light of the research.
From a pedagogical perspective, the term “critical” means questioning the underlying assumptions in everything, not accepting that things just exist but rather came to be, uncovering the power relations in what we deem normal, and seeing the ways ideas, knowledge, and norms impact and shape society. Epistemologically, critical allows me to recognize that knowledge production is socially constructed and to acknowledge that power is entwined with any construction and representation of knowledge. Methodologically, being critical creates opportunities for youth to be part of the knowledge production, to leverage lived experiences as opportunities to question assumptions and power relations and to challenge their own ways of seeing the world. We see youth capacity for critical thinking across contexts (e.g. neighborhoods, education, media) as a major outcome throughout the dissertation.

From my 13 years of working with youth living in urban environments it is clear that there are unique pedagogical considerations that must be addressed in our urban classrooms. These more than anything include teachers and students checking assumptions and recognizing subjectivity and to create a safe classroom space where this work can be done out in the open, a space where all voices are valued. Epistemologically, urban knowledge is deeply rooted in the people and places that make up our cities. This knowledge is unique to people who grow up, live, work, go to school in diverse urban environments. Knowledge of urban spaces and urban environments needs to be valued by bringing it into our educational spaces and our teaching of EE. Methodologically, participatory action research allows for the unique knowledge held by urban youth to be explored. Throughout the chapters of the dissertation we see the deep, local knowledge urban youth possess and the ways a critical urban environmental pedagogy created multiple opportunities for youth to uncover, share, and reshape their knowledge.
Conceptualizing and reconceptualizing the term environment has been a big part of my own process and that of my students. For a long time, my identity as an environmental educator meant that I take my students to the city parks, catch turtles and fish, count insects, and clean up beaches. While there is nothing wrong with this form of EE, I cannot deny that by only focusing environmental curricula on these experiences, especially in urban environments, I was severely limiting my own and my students understanding of the social and built spaces that surround us and shape the meanings we make of ourselves and others. I have wrestled with this myself, and received lots of pushback from other people in EE that this work is not environmental enough. But at the same time I have also heard from many educators and researchers that this is exactly the ways that the environment needs to be reconceptualized in order to address inequality, particularly in urban spaces where we see it very starkly in our day to day lives. Participatory research is an ideal way for youth to explore their relationships with their local environments and the dissertation provides multiple examples where youth are thinking about environments in terms of social and material relations as well as processes of change and resilience.

Pedagogically, the approach of this course involves critical dialogues, emergent and transdisciplinary content, and utilized PAR methodologies as praxis. This creates opportunities for youth to engage in research and knowledge production, to gain critical thinking and research skills including data collection and analysis as well as dissemination of knowledge to multiple audiences in multiple formats. The course valued the individual and collective knowledge of youth and placed that as equally valuable to my own. We were all resources for one another and experts of our own lives and experiences and this allowed youth to feel they had a voice in shaping the course.
As an emerging field urban EE is often in the form of nature studies, limiting the socio-ecological justice perspectives. This singular focus on the natural and ecological relations in urban areas tends to be uncritical, lacking any assessment of the economic and political forces shaping urban environmental conditions and relationships to power. However, at multiple conferences that I have attended, there is a call to develop pedagogy that is relevant and engaging to youth living in urban environments. For the youth in this study, it is clear that insects and turtles are not what are important in their day-to-day interactions with their environments. What we do find is that social and material relations dominate their interactions with their local neighborhoods. This challenges EE to engage with these relationships as well and a critical urban environmental pedagogy presented here does that. It is embraces youth as citizens, consumers, agentic members of a community and pushes their thinking about environments towards the history and processes that shape spaces. Bringing together individual and collective knowledge of local environments and that of social and environmental theory, a critical urban environmental pedagogy can begin to change the narratives youth like Leyva (from chapter one) have about themselves and their neighborhoods.

**Findings connected to neoliberalism.** Across all data produced by youth throughout the study, including case studies presented in Chapter five and the Data Carnival themes and interpretations, we see the prevalence of neoliberal discourses in the way youth are constructing their understanding of self and place. The data support the notion that a deeper understanding of neoliberalism can be a very powerful tool to understanding relationships and processes in local environments and thus reimagining EE. Schindel Dimick (2015) writes, “prevailing neoliberal discourses about individual action and consumption position youth in ways that reinforce existing relationships of inequality rather than disrupt them” (p. 396). She goes on to write that
pedagogical practices have the potential to disrupt these relationships by “working against systems of oppression and domination and toward both social and environmental justice” (p. 396). She promotes practices that can achieve this including (1) a critical pedagogy of place in which students develop critical consciousness by critically analyzing the social and economic systems that uphold inequalities in the educational system and society. Environmental education has the potential to break the normative habits that inhibit social and environmental justice while simultaneously engaging youth in the knowledge production of their current ways of living. (2) Youth should have a more nuanced understanding of the context in which decisions are made at the societal level and the individual level and that these are always interacting with one another. (3) Finally, youth should have a sense that they alone are not responsible for care of the entire Earth and that political entities at all levels need to be held accountable. This can be done through the teaching of empathy and that our individual actions have larger consequences that we are all mutually implicated in one another’s lives (Schindel Dimick, 2015). All of these pedagogical practices are embedded in the enactment of a critical urban environmental pedagogy and can be seen in the Chapter five case studies of neighborhoods from the perspective of youth. Three interrelated themes emerge from the research study that suggests how neoliberal discourses are shaping the material and social relations of youth in place: the relationship between neighborhood change and inequality, an expansion of youth voice in articulating the meaning they make of neighborhood change and inequality, and a political ecology lens allowing for deeper understanding of neighborhood experiences.

*Changing neighborhoods and inequality.* We cannot make sense of recent changes in neighborhoods where urban youth live separate from an understanding of neoliberal policies that are shaping urban environments. This includes the privatizing of public spaces including schools,
parks, and housing, as well as the homogenization of the people and places across distinct neighborhoods. The ways that youth see these processes playing out in their neighborhoods and the impacts these processes have on them and their communities is full of tensions and contradictions. Depending on the neighborhood, youth vacillate in their sense of belonging and attachment, and there are multiple factors that youth cite as to why they have these differing experiences. We saw this emerge throughout the three years and again at the Data Carnival. Most youth cite stereotypes of neighborhoods as one large factor that influences their feelings of belonging, comfort, and connectedness. A negative stereotype of a neighborhood marks that place as one that youth do not feel comfortable or safe within. These stereotypes are a product of media and the way neighborhoods are positioned in the news and television shows. When youth see their neighborhood of the South Bronx on shows like Law and Order where the show represents the community as one filled with crime, abandoned spaces, and little value, this imprints on youth and their sense of belonging. These media representations along with neoliberal policies create a semblance of decay and crisis in neighborhoods, leaving them vulnerable to neoliberal economic policies presented as solutions.

In the work we have done, by looking across many neighborhoods in which youth reside, we have been able to create a topography of neighborhood value in which it is clear to youth that some neighborhoods are valued more than others. This value is typically in the form of access and ability people in that neighborhood have to the very products of neoliberalism (e.g. big box stores like H&M, Pinkberry, Starbucks, new development, well maintained parks that are the product of public-private partnerships). These stores, housing developments, and parks are commonly found in the neighborhood near Environmental High and certain neighborhoods in which youth live. Youth who live in these communities have access to endless consumption
opportunities, the new retail stores that accompany development, and well-funded recreational spaces. These neighborhoods, characterized by neoliberal social and material relations, are often tied to tourism and gentrification, and as a result, these neighborhoods are cleaner in order to maintain a vibrant housing market and tourist industry. However, youth who do not live in these parts of the city, who live in neighborhoods that are not valued by tourism or gentrification, experience a clear disinvestment where litter lines their streets, trash cans, recycling, and composting are considered a luxury, and where safe and well maintained parks are not the norm. This inequality as youth experience begins to reveal the relationship between power, privilege, and value. In the Data Carnival youth expressed that the course allowed them to begin to see these relationships and to see the ways that neoliberal policies have led to systemic inequality in neighborhoods where things are available or not to certain people. Youth clearly articulate that those who live in neighborhoods where access to resources (urban natural and built resources) are available tend to be White and middle to upper class and that those most often marginalized by neoliberal policies are of are Black, brown, immigrant, and lower socioeconomic status.

Expanding youth voice. A critical urban environmental pedagogy and the culminating Data Carnival helped students articulate things they see happening in their neighborhoods and helped them make connections to social, economic, and political processes. Questions like who are these urban spaces for? continued to surface during the Data Carnival discussions. When discussing gentrification specifically, youth question who lives in the communities that are being gentrified and in what ways are they of value. They see the processes associated with gentrification as signaling changes in the diversity of communities, as well as the value and access to property for living and retail. They state that they are “living the contradictions of gentrification” as they are made to believe that their only value comes in the form of their
neighborhood’s ability to consume. This is supported by the notion that in a neoliberal economic society, the dominant narrative for youth is one where their only value as humans is through their consumption habits (Gruenewald & Smith, 2008). Youth articulated that gentrification often leads to a homogenization and removal of local places that were formally valued in neighborhoods in favor of a reproduction of a dominant culture. Examples of youth experience with gentrification are articulated in Chapters 3 and 4. Here, Angel voices this contradiction when he writes about his photovoice image (Figure 30): “Our neighborhoods are being changed and some may even say ‘renovated’. Gentrification is something I think many of us struggled with, I know I did.” However, the illusion of gentrification is a very powerful one for youth, as they understand it on a theoretical level as the displacement of minoritized people, but on a practical level, they see it as a way to improve the quality of their neighborhood. One youth stated during the Data Carnival that “because of the stereotypes that have been placed onto our neighborhoods, we don’t feel a connection to them, and so when gentrification happens, we don’t really care, we actually want it.” This observation aligns with Klein’s (2008) work on the creation of “crisis” in order to introduce neoliberal policies that will “fix” these neighborhoods. But the “fixes” are not introduced to benefit the people that are living in these neighborhoods; they are meant to benefit power elites who will make money off of the perceived crisis. As Hursh and Henderson (2011) point out, neoliberalism has differential impacts at multiple scales, and therefore they stress the need for context in any analysis of the impacts of neoliberalism. Local processes, like gentrification, that are producing the neoliberal vision in neighborhoods where youth live, are the product of “larger neoliberal discourse promoting markets, competition, individualism, and privatization” (p. 181).
Figure 30. Angel’s photovoice image highlighting the blatant messages of social reproduction in his neighborhood. Photo by Angel
Hursh and Henderson (2011) suggest that neoliberal logic has become so widespread and commonsensical because it attempts to limit alternative discourses while supporting discourses that “marginalize particular groups of people and where they live” (p. 176). These discourses have become so pervasive, and youth are equally susceptible to them. As young people hearing over and over that their neighborhood of the South Bronx or East New York is unsafe, violent, and blighted, it is not the disinvestment and historical and structural inequality in these places that is challenged, but rather the people in these neighborhoods who do not “care enough” or are “bad parents” bearing the burden of the blame for these situations. These situations are then ripe for a neoliberal swooping in to erase these places and rebuild them in the neoliberal image.

Neoliberal discourse “often reduce social justice to access to markets, ignoring differences in access to monetary, legal, and social resources” (Hursh & Henderson, 2011, p. 176). This notion supports the neoliberal agenda as it limits social justice to purely economic responses. Youth do not have a sense of who is responsible for making sure their neighborhoods are safe or clean, and they have internalized the notion that it is the fault of the people who live there. But the Data Carnival allowed for youth to begin to see and make these connections to the larger structural inequalities that exist and how these are tied to history and to power.

**Deeper connections through political ecology lens.** An urban political ecology lens allows for a more nuanced analysis of neoliberalism, not as an all-expansive force, but as a network of relations that all have something to gain by maintaining the status quo. We see a relationship between discourses that limit alternatives and blame the victim and the actual practices and processes that are playing out in these neighborhoods from the perspective of youth. The ways these processes are seen by youth as contradictory, pervasive, unfair, confusing, normal, all representative of the struggle that youth are bringing to their understanding of a
situation that is happening locally but also has larger national and global implications for people, communities, and our planet. A deeper understanding of the ways these processes are occurring is challenging to youth as they push against what has been taught in schools and the larger media and entertainment culture.

Contesting neoliberalism in education, through a critical urban environmental pedagogy, requires that we first understand that the current education reforms are not neutral and apolitical and that they ignore the root causes of student and school failure, namely the lack of jobs, adequate nutrition and health care, and underfunded schools (Hursh & Henderson, 2011). All of these root causes have been illuminated by students in the global environment class through participatory research methodologies and thus the students leaving this course are armed with a critical consciousness that is needed to challenge the neoliberal status quo.

**Implications**

This dissertation forwards a vision for a reimagined urban EE bridging critical pedagogy and YPAR into what I have called a critical urban environmental pedagogy. I end with a discussion of the implications this work has for urban EE research and practice as well as the ways this work can be incorporated into teacher education and intersect with mainstream EE.

**Importance of place in a critical urban environmental pedagogy.** In this section I conceptualize this critical urban environmental pedagogy as a form of place-based education incorporating both YPAR and critical pedagogies. Place-based education has been EE’s response to neoliberal education reforms. Across disciplines the concept of place has many meanings, therefore answering questions about what definitions of place and what aspects of place are worth studying has pedagogical consequences. In formulating a critical urban environmental pedagogy, questions of place and environment emerged, including in what ways do the physical,
biophysical, social, and cultural intersect in our urban environments? Stevenson (2008) pushes educators to ask themselves: which aspects or dimensions of the local and place are important pedagogically to engage students? Bowers (2008), borrowing from Geertz (1973), calls for a pedagogy in which youth gain the skills of “thick description”, in order to develop an understanding of local intergenerational knowledge. He views this as a way for youth to articulate their experiences in multiple cultural commons, including those in local places that are both resistant to and influenced by our current consumer culture. My work borrows from critical pedagogies of place and Bower’s thick description by utilizing YPAR as a way to engage youth with place. YPAR methodologies create multiple opportunities for writing/speaking thick descriptions and then connecting descriptions to experiences in and across place. Investigation of place provides a concrete learning experience for students as they come to realize how places frame their ways of seeing and being in the world. A critical urban environmental pedagogy highlights the power of youth’s place knowledge, showing how young people participate in the construction of new knowledge about communities and how this knowledge becomes incorporated into the ways place gets constructed and reconstructed by youth.

In this study, sense of place is reflected in the relationship between youth and place and how through this relationship, youth learn about their social positions, culture, their place in their community, and the larger contexts that influence their lived experiences. Youth are most often positioned in schools as passive consumers of knowledge and are seldom asked or given opportunity to critically reflect on their deep personal knowledge of place. When given an opportunity to explore relationships to place in a formal educational setting, young people raise questions about who they are, what agency or lack of agency they feel they posses in engaging with neighborhood issues, and how their neighborhoods have been structured by urban processes
like globalization, overconsumption, gentrification, and displacement. Tzou, Scalone, and Bell develop a framework for understanding how place gets constructed for and by youth in EE. Included in their framework are three planes: the individual experiences of the learners, the social activities and environments that the learners are engaging in, and the cultural resources (including technologies and ideologies) that learner’s access. These planes intersect and interact to create what the authors see as the construction of place by EE and the construction of place by the learners. While many argue that EE should be more connected to student lived experiences, these two constructions of place are not always aligned leading to a disconnect and disempowerment of youth. This leaves open the opportunity to create spaces where “youth see the places in which they live, learn, play, and work as places in which they can enact positive social change” (Tzou, Scalone, and Bell, 2010, 105).

Gruenewald synthesizes a theory of place informed by sociology, critical geography, and ecology to attempt to “reveal the relevance of place as a unit of cultural and ecological analysis” (Gruenewald, 2003b, 621). Places are not inevitable; they are products of historical, cultural, social and political influences that must be understood as such and in this understanding can begin to be reconceived. As a result, we make places, and places make us. This dialectical relationship seems obvious, and yet in our schools as they are today, we pretend this doesn’t exist. A place-conscious education challenges this connection between places and people and asks students and teachers to embrace the role we play in creating places and perhaps how we can connect with and create new places, hopefully better places.

Gruenewald attempts to show how places are pedagogical, and that through place, we are constantly interacting in places and the ways that these places are constructed create opportunities for learning. Through these learning experiences connected to places, we are able
to see ourselves as place-makers. This responsibility as place-makers “suggests a more active role for schools in the study, care, and creation of places” (Gruenewald, 2003b 627) and can be an empowering new vision for education reform. If we begin to see places (both in schools and in our local communities) as part of our educational experience, with meanings and social constructions, not objects or places void of ideology, our perceptions of these places can begin to “open our senses to the life that place makes possible” (Gruenewald, 2003b, 624). This new perception of place as social and ideological spaces that express cultures and shape identity can begin to be critically examined, along with our role in their creation. With this lens of place, where everyone recognizes their part of making place, we no longer see ourselves as passive and isolated individuals. The empowerment and possibility can create a new culture and collective identity in our classrooms that incorporates alternative ideologies. Teachers and students in traditionally restrictive school environments can reimagine the role of schools, teachers, and students.

This study was committed to working with youth to incorporate participatory and critical methodologies and pedagogies into EE. This critical urban environmental pedagogy offers a way for youth to move beyond knowledge consumers, towards knowledge producers of place. In conventional and disciplined EE, the question of who is producing knowledge and how this knowledge is used to tell stories, make decisions, and justify neighborhood change is often obscured. What a critical urban environmental pedagogy creates is both an opportunity for youth to interrogate the knowledge perceived as truth, as well as contribute their own stories about their environments. In this study, youth produced counternarratives investigating and questioning issues and observations, feelings and social positions, with and within their local environments. This alternative form of knowledge generation, by and about youth in urban environments,
contributes alternative knowledges generated through participatory research methodologies. The knowledges produced by youth are often absent in discussions about neighborhood decisions that happen at levels that can disregard entire communities and groups of people. Youth perspectives about their neighborhoods are telling in that they show the tensions and contradictions that youth experience growing up in these rapidly changing contexts but also the ways that youth are able to, through a more political ecological investigation and analysis of their neighborhoods, see the ways they are contributing to these changes and ways they can resist.

Finding spaces in teacher education. A critical urban environmental pedagogy can inherently challenge the hidden purpose of education as reproducing social class (Bowles & Gintis, 1976) and is therefore a threatening and subversive act, particularly in classrooms today. However there are real challenges to this approach. In addition to the little room in current disciplined curriculum for EE, teachers are often ill-equipped to handle the social justice and critical components needed to get into the deeper, systemic and power-laden political ecology of education.

Schools of education are also under the influence of neoliberal policies, where issues of social justice, especially in the context of urban schooling, often do not get adequately addressed even while these issues are more salient than ever. Neoliberal education policies force teachers to turn a blind eye to the inequalities they see in the classrooms, schools, and neighborhoods of youth in favor of preparation for high stakes examinations. Additionally, many teachers have never been asked to challenge their own assumptions about urban youth, check their privileges, and challenge the knowledge production and reproduction that happens in classrooms. As a result, environmental educators were (and I would argue still are) trying to infuse environmental curriculum into science (and in some cases social studies) education but made it “fit by leaving
out the difficult bits of values, participation, and decision making, but retaining the relatively uncontroversial ecological content” (Gough & Gough, 2010, p. 342).

I believe my work has deep implications for teacher education, where the utilization of YPAR methods in the classroom allows the opportunities to critically connect to relevant issues most important to the lives of young people. How we teach reveals our ideas and assumptions about the purposes and goals of science and EE and what we believe the roles of teachers and students are in the process of learning. Critical pedagogy and YPAR are one means by which, as Peter McLaren asks, if we “conceptually undress the role science plays in the larger society, we can see how it stabilizes dominant social relations. If we make problematic the commonplace notion that science equals progress, we can begin to develop a different view of how science works” (Calabrese Barton, 2001a, p. 851). Conceptualizing YPAR as a pedagogical practice that can be introduced in teacher education programs incorporates a more critical, participatory and equity-oriented pedagogical practice. While we know the challenges that exist in producing environmental educators who are critical and engage in reflexive praxis, this is what we need more than ever. This is most significant now, when as a society, we only value critical thinking as lip service and where schools of education are increasingly under attack and left defenseless against the standardization and testing reforms that are dominating education.

**New directions for EE.** This work extends the conversations in multiple areas, including EE, critical pedagogies of place, and critical youth studies. Each intersecting with the other, these conversations merge to speak to the ways that young people are being educated in the neoliberal, globalized context in urban environments. Because of the particular context that youth are growing up in, their local environments must be incorporated into any critical study of environments. A critical pedagogy of space and place in the environmental science classroom
along with a political ecological lens affords the reimagining of EE for urban youth. Many ways of thinking about environmental science classrooms were challenged by this reimagined pedagogy. The content and context of the course were the students and their neighborhoods, moving the more conventional thinking about global environments to a more local and lived experience for youth. The critical pedagogy we engaged with also challenged conventional definitions of science in environmental science, refocusing science as a process of inquiry of one’s community raising important questions, including: where does EE fit within the larger context of science education, what is the best way to achieve critically conscious citizens to promote and participate in a democracy, and what can we learn about young people living in a changing global city and how to think about their schooling?

Within critical youth studies, this work situates youth within a neoliberal, urban environment, heavily influenced by the time and place in which they are growing up. The ways young people are most impacted by the global issues they see play out on a local scale (gentrification, homogenization of cultures, neoliberalism, and postmodernity of youth). The research highlights multiple layers of contradictions and tensions, including cultures of production and consumption (“if you don’t consume, you are not valued”). Connected vs. Disconnected, Comfort vs. Discomfort, Safe vs. Unsafe, Nature vs. Urban, Diversity vs. Sameness, Change vs. Staying the Same (Can you change a community, improve a community, without changing the identity of that community?), Access to Resources vs. Under-Resourced Communities, and Freedom vs. Structure (in the classroom).

Conclusions

The goal of this study was for youth living in urban environments to develop a critical consciousness of the world around them, subscribing to what Hursh and Henderson (2011) argue
“contesting neoliberalism needs to occur at three levels, the discursive, the political, and the pedagogical” (p. 182). Using participatory methodologies we are able to address all three of these places for contestation of neoliberalism. The discursive aspect of neoliberalism is explored as the ways in which the ideas we hold about our neighborhoods are shaped by history and media. We explore the ways these narratives have been constructed about neighborhoods and the impact these narratives have had on student’s sense of identity as well as belonging and attachment to the places they live and go to school. We do this in a collective data construction and analyses that supports our individual and collective thinking. We nurture and expand these experiences in the classroom with sociocultural and critical theory that explores and challenges the neoliberal logic and reveals it as a social construction.

The political examination of power is also supported through participatory methodologies, as youth are able to identify the ways that particular neighborhoods are deemed more valuable than others and how this is the product of economic and political power. The process of gentrification, which is recognizable by almost all youth, is visible in images of corporate invasion into neighborhoods that formally were populated by local businesses, the new housing and retail development that is rising higher and higher in these neighborhoods, and the shift in community identities that were once reflective of diversity and ethnicity, being replaced with hipsters and mainly white, middle class people. Power was also contested inside the classroom as the roles of students and teacher was constantly being renegotiated.

Participatory methods allow for full participation by youth in the creation of artifacts, the analysis of artifacts, and the interpretation of the artifacts. Utilizing YPAR, young people can address issues that are important to them, create a democratic and participatory classroom community that value many ways of knowing, and create new knowledge through reflexive
praxis. Developing, utilizing, and documenting multiple forms of participatory engagement in a formal classroom setting reveals the ways that pedagogical practice can become more relevant for youth and contribute to their development of critical consciousness. Too often, socio-environmental contexts are parsed using canonical features such as global climate change, deforestation, and loss of biodiversity. While these issues are of significance, they may or may not have pressing meaning to young people. To engage students in the study and meaning making of their local environments, there is a need to support them in observing and identifying key features of the environment that have relevance to them. Local environments can be examined and documented through YPAR methodologies like photovoice, narratives, and mental mapping, affording students opportunities to document their lived experiences in various contexts, share personal stories, and problematize the complex socio-environmental situations they encounter.

Finally, YPAR as a pedagogical praxis affords youth the opportunities to raise essential questions in ways that challenge, rather than reify, the existing disciplined structures of education. Critical YPAR begins with questions most important to youth and privileges their knowledge and experiences to being to address these questions. For youth in the global environment course, questions most important to them made connections between environments, communities, and neighborhoods, in ways that redefined environment, connected neighborhoods across the city, and allowed for a true transdisciplinary political ecological investigation of local places and local processes.
Appendices
Appendix 1. Photovoice Year 1 and Year 2 Descriptions and Generalized Photovoice Methodology

Year 1: (2011-2012)

Photovoice:
- Used as a tool to build knowledge
- Provide opportunities for you to contribute to your local communities

Our Photovoice Goals:
To capture images from your local environments that reflect:
- How do you define your local environment
- How you interact with your local environment
- What are the strengths you see in your local environment
- What are areas in your local environment that you don’t like or you feel need improvement

To help you think about what interests you in your local environment and where you can develop your research project.

Overview:
- Consent and Safety
- Over the break take at least 100 pictures, upload to your own gmail accounts using Picassa
- At your tables, discuss your photos - where you took them, why you took them, how do they relate to our overall goals (define, interact, strength, improvement)
- Choose one picture and write a short narrative about why you took the picture.
- Share with your table

Class Reading:

Group Sharing of Photos:
Share your images with your group using the following questions:

SHOWED Method:
- Use to talk about your photos
- What do you see here?
- What is really happening here?
- How does this relate to our lives?
- Why does this condition (problem, strength, concern, situation) exist?
- What can we do about it?
• How could this image educate the community/policy makers?

Journal Reflection: How do you perceive the collective goal(s) of our Photovoice project? (Why are we doing this?) Do you think Photovoice is an effective way of achieving them?

Narrowing Down Pictures:
• Choose 10 to 20 pictures that speak to you and that you think best represent what we are working towards (based on your understanding and our class discussion)
• Once you have chosen your small group of pictures, put them into a PowerPoint presentation in an order that you like.
• Share with your group telling the story of the pictures - really set the context of where the picture was taken, what you see in the picture, why you took the picture and what you think the issues are that you can see in the picture.
• One person in the group should be the scribe and write down what was said during the group discussion)

Individual PowerPoint:
• Set the context of your pictures, where were pictures taken, what are the pictures of, who or what is in them, why are these places important to you.
• Why did you choose these picture?
• What are the big ideas or themes that emerge from your pictures?
• How does these pictures connect with topics we have discussed in class so far (from the entire year)?
• What is the story behind these pictures?
• How can you investigate what is happening in these pictures?

Photovoice Narratives:
Use a subset of your pictures to write about your experience in your community. Email your narratives to me.
• Write a narrative (no more than 5 pages) reflecting on your pictures. Focus on the following ideas:
  • Set the context of your pictures, where were pictures taken, what are the pictures of, who or what is in them, why are these places important to you.
  • Why did you choose these picture?
  • What are the big ideas or themes that emerge from your pictures?
  • How does these pictures connect with topics we have discussed in class so far (from the entire year)?
  • What is the story behind these pictures?
  • How can you investigate what is happening in these pictures?

Group PowerPoint:
• Each person in the group can choose 5 of their pictures - you can do this individually or as a group
• Cluster your images into themes
• Prepare a 10-12 minute presentation of your images
• Include 2 discussion questions at the end of your PowerPoint to prompt dialogue.
• Each group will have a scribe to take notes about what was discussed (you will hand these in to me so I can see what you are talking about in your groups and comment)

**Journal Reflection:** Thinking back on all of the presentations that we saw, what are some research topics that came up. Make a list of 5 ideas. Share at your table

*This led to individual research projects from Year 1.*
Year 2 (2012-2013)

(See Appendix 4 for Neighborhood Reflection Description that led to Photovoice Research)

Class Reading:

Research Planning:
• How would you describe the problem statement for this research? A problem statement describes the situation that is being investigated with the intention of exploring the issue through research.
• How would you define the research question in this project?
• What do you hope to accomplish with your research? Who is your intended audience? Who is most affected by your research?
• What is your data collection plan? Your plan should involve capturing images in your community for your research topic.

Developing a Research Plan using Photovoice:
• Develop your own problem statement, research question, and intended audience and outcomes. Record in your notebook
• Share and comment on research plans

Journal Reflection: What are your concerns about doing research over the break? What are important safety concerns to keep in mind when conducting research with human participants, especially photos?

Capture Images as part of your Data Collection:
• Begin to upload and organize pictures in online database
• Share photos with your group
• Create a google doc guide to your individual photos - choose a subset (20-30) of your images and for each include:
  • An ID number
  • A location
  • Why did you take this picture?
• Prepare for sharing

Updated SHOWED Questions: (eliminate pictures that don’t generate conversation easily)
• What do you see here?
• Why did you take this picture?
• What is really happening here?
• How does this relate to your research topic?
• How do you relate to this picture? How do other people in the group relate to this picture?
• Why does this condition (problem, strength, concern, situation) exist?
• Is there any action that this generates? What can we do about it?
• How could this image educate the community/policy makers?
• What do some of our pictures have in common?
• Are there any images or issues that are really different that stand out?

Narrowing Down Pictures:
• You are going to narrow down your pictures at both the individual level and the group level
• Goals:
  o Individual: Have 5-10 pictures that really generate conversation and are relevant to your research topic to write a personal narrative
  o Group: Have 15-20 pictures that really exemplify an understanding and analysis of your research topic

Journal Reflection: Think about the discussion you had in your group today. What pictures really stuck with you? Why? What ideas came up in your discussion that are relevant to your research topic? Explain. What really piqued your interest? Why? How?

Photovoice Narratives:
• Write a narrative (no more than 5 pages) reflecting on your pictures. Focus on the following ideas:
  o Set the context of your pictures, where were pictures taken, what are the pictures of, who or what is in them, why are these places important to you.
  o Why did you choose these picture?
  o What are the big ideas or themes that emerge from your pictures?
  o How does these pictures connect with topics we have discussed in class so far (from the entire year)?
    o What is the story behind these pictures?
  o How can you connect your pictures to readings and ideas from class?

Photovoice Narratives Blog Post:
• How do young people identify with their communities?
• What kinds of communities do all young people feel they deserve?
• Do communities have equity of access to resources that students feel are important to them?
• Where is the hope?
• Does this work?
• What challenges and tensions are you experiencing?
• What emotions have you experienced throughout the project?
• What benefits exist from a research based, critical curriculum?

Final Presentation Considerations and Points to Discuss:
• How do you feel you photos inform your original research problem?
• What types of photos/themes do you have in common as a group? What types of photos/themes are unique to one or two group members?
• Why do you think these common photos/themes exist and how do they relate/inform to your research problem? Why do you think some pictures are unique? How do they relate/inform to your research problem?
• Select the photos that you all feel best address your research problem? Explain how each fits into the way you are theorizing about your research.
• Summarize your findings into a full class presentation of your photos and understandings of your research. Include a discussion question or two for the class.
• Write up a short abstract of your research for the website and select one photo to be your icon photo on the website.
• You can use any presentation style, think like a TED talk style presentation - check out Prezi.com

**Final Research Reflection Blog Post:**
• What are the behaviors or environments that are embodied in the kinds of neighborhoods we want?
• What do we collectively value in a neighborhood/community and how is that reflected in our group pictures?
• What kind of community do we ALL deserve access to and how is that represented equally/unequally across your group pictures? What do you feel you are learning from your photovoice project? The images, your interpretation of the images, your conversations, your collective experiences with your individual communities and the actual photovoice project.
• Do you feel a sense of solidarity with your classmates? In what ways do you all have similar experiences? Different experiences? What can we learn from these differences?
Generalized Photovoice Methodology

Local environments can be examined and documented through photovoice, a participatory methodology by which people identify, represent, and enhance their community through images (Wang & Burris, 1997). Photovoice as a methodology functions as a participatory needs assessment with three main goals: (1) to enable people to record and reflect their community’s strengths and concerns, (2) to promote critical dialogue and knowledge about important community issues through large and small group discussion of photographs, and (3) to communicate concerns with policymakers (Wang & Burris, 1997, p. 370).

The following are the stages of a typical photovoice project:
- Introduce the photovoice methodology to participants through reading about previous photovoice studies
- Train participants on the use of cameras, power, and ethics
- Obtain informed consent from participants
- Develop an initial theme for taking pictures
- Review how to obtain informed consent if people are photographed
- Conduct a guided photo shoot and debrief issues, questions, and concerns
- Meet in small groups with photos and discuss using the following questions adapted from Wang and Burris.
  - What do you see here?
  - Why did you take this picture?
  - What is really happening here?
  - How does this relate to your research topic?
  - How do you relate to this picture? How do other people in the group relate to this picture?
  - Why does this condition (problem, strength, concern, situation) exist?
  - Is there any action that this generates? What can we do about it?
  - How could this image educate the community/policy makers?
  - What do some of our pictures have in common?
  - Are there any images or issues that are really different that stand out?
- Groups select a set of images they wish to share with the group/class.
- Individuals select a series of images that they will use in the writing of a personal narrative.
- Photos and narratives are shared in a variety of contexts (e.g. class website, book, gallery).

Any ethical concerns associated with photovoice specifically will be addressed using the following best practices (adapted from Wang & Redwood-Jones, 2001, 570):
- Provide and review participant consent form.
- Provide an ‘Acknowledgment and Release’ consent form on which participants obtain the signatures of the people they photograph.
- The first meeting with participants is framed around the use of cameras, power, and ethics, emphasizing safety and the authority and responsibility that comes with using a camera.
- Create a brochure that outlines the photovoice project (i.e. goals, how photos will be used) that participants can hand out to photo subjects and other community members.
- Provide and review with participants a consent form indicating permission to publish any photographs or written material.
- Continually discuss the methodology and ethics of a photovoice project with participants.

References:

Appendix 2. Final Course Reflection Self-Assessment: Reflections on Learning

Please write an 800-1000 word final reflection for the class. In your reflection please respond to as many of the bullet points as you feel apply. Bullets with * are required, so make sure to respond to those.

Process:
• Active participation in class discussions
• Active engagement in course content
• Relationship building with group
• Personal growth
• Took risks, pushed yourself out of your comfort zone (whatever this means to you)
• Effort
• Listening
• Sharing and responding to ideas on the blog
• Asking questions in class and on the blog
• Connecting ideas from readings, class discussions, blogs, outside class

Products:
• Completed your Photovoice research (photos, sharing, narratives, presentation, blogging, reflection)
• Used your research journal to record your own thoughts and connections
• Presented your work to the class in an engaging and thoughtful way
• The quality of your work progressed over time
• Relationship building in class

Self-Assessment
• What criteria do you use to assess your learning? How do you know when you have learned something?
• Identify your strengths, limitations, and areas you would like to improve upon
• *Explain the biggest change in your thinking over the course of the semester
• *Explain what concept(s) most influenced your thinking
• *What grade would you give yourself and why

Course Evaluation
• *What course structures facilitated/limited your learning
• *What would you change/not change
Appendix 3. Critical Advertising Investigation

**Project Description:** The purpose of this project is to begin to look at our environments through a critical social justice framework. You will photograph advertisements that you encounter over the course of a few days. Advertisements can be found in many places so try to capture the diversity of ways that advertising messages are presented to you. In class and at home you will work on a two-part analysis. First you will perform a content analysis to collectively investigate the types of messages that you find in your advertisements. Second you will choose one advertisement that you would like to investigate deeper through a critical lens. This will give you the opportunity to apply some of the concepts from the book to the ways that advertisers send messages to consumers.

**Your tasks:**
- Take pictures of as many advertisements that you encounter over the course of a few days
- Upload your pictures to your weebly research page
- Conduct a content analysis on your collection of advertisements
- Conduct a critical discourse analysis on one of your advertisements
- Reflect on your findings on your research page

**Project Deliverables:**
- Your advertisements in a gallery slide show on your research page
- Your research page with a description of your method for data collection and content and critical discourse analysis.
- Your research page with a visual representation of the results of your content and critical discourse analysis
- Reflection of the implications of your results

**Content Analysis:** A content analysis is a way to quantitatively analyze data.

**Goal:** To quantify the images and text used based on categories (Content includes words, meanings, pictures, symbols, ideas, themes, anything written, visual or spoken that is meant to communicate). There are many ways to do this. Here are some suggestions:
- Looking across all of your advertisements, what are some identifier categories? This can be images, words, themes.
  - What is included?
  - What is not included?
- Count up the number of times you see something (images)
- Count of the number of times a word is used
- Count up the number of times a particular theme is seen (ie. Luxury, beauty, pleasure, function, violence)
- Count up the different audiences intended.
- Create tables/graphs/visuals to represent your data
**Critical Discourse Analysis:** A critical discourse analysis is a more qualitative and interpretive way to analyze data.

Goal: What are the ideas (ideologies, representations, agendas and motivations) behind the images and text? How are these reinforcing dominant ideologies? It is used as a tool to investigate language and communication from a social and political perspective specifically to study social problems (ie. Sexism, racism, colonialism, other social inequalities). Here are some suggestions:

- Choose one advertisement that you are interested in investigating more deeply and critically
- What are the visual messages being presented? Are they overt or covert?
- What are the textual messages being presented? Are they overt or covert?
- Are stereotypes being used? How? What social relations are being presented as normal?
- What are the subconscious ideologies embedded in the advertisement?
- How is power, dominance, and inequality reproduced or resisted?

**Reflection:**
- Your reflection should address what you learned from your results, the implications of these advertisements on young people, and what new questions emerged from your study.
Advertising is our environment

Critical Content Analysis and Discourse Analysis

Your task...
- Take pictures of as many advertisements that you encounter on your journey from home to school.
- Upload your pictures to your weebly research page.
- Conduct a content analysis on a series of multiple advertisements.
- Conduct a critical discourse analysis on one of your advertisements.
- Summarize your findings on your research page.

Content Analysis
- Quantitative
- Goal: To quantify the images and text used based on categories (Content includes words, meanings, pictures, symbols, ideas, themes, anything written, visual or spoken that is meant to communicate).
- Deductive (top down) vs. Inductive (bottom up)

Critical Discourse Analysis
- More qualitative and interpretive
- Goal: What are the ideas (ideologies, representations, agendas and motivations) behind the images and text?
- A way of investigating language and communication from a social and political perspective.
- Used to study social problems (e.g., Sexism, racism, colonialism, other social inequalities).

Ideas to consider in analysis
- Content Analysis:
  - Looking across all of your advertisements, what are some identifier categories? This can be images, words, themes.
  - What is included?
  - What is not included?
  - Count up the number of times you see something (image).
  - Count of the number of times a word is used.
  - Count up the number of times a particular theme is seen (e.g., Luxury, beauty, pleasure, function, violence).
  - Create tables/graphs/visuals to represent your data.

Ideas to consider in analysis
- Critical Discourse Analysis:
  - Choose one advertisement that you are interested in investigating more deeply and critically.
  - What are the visual messages being presented? Are they overt or covert?
  - What are the textual messages being presented? Are they overt or covert?
  - Are stereotypes used? How? What social relations are being presented as normal?
  - What are the unconscious ideologies embedded in the advertisement?
  - How is power, dominance, and inequality reproduced or resisted?
Discussion

• Your discussion should address what you learned from your results, the implications of these advertisements on young people, and what new questions emerged from your study.

Example: Content Analysis

Content Analysis

<table>
<thead>
<tr>
<th>Issue/Device/Theme</th>
<th>Number of Times Appears</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Television show</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Female (body parts)</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Female (with face)</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Beasts</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td>Communication</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Luxury</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Consumption</td>
<td>8</td>
<td>88</td>
</tr>
<tr>
<td>Entertainment</td>
<td>2</td>
<td>22</td>
</tr>
</tbody>
</table>

Think about how to transform this data into something more visual???

Final Product

• Upload your series of images to weebly
• Describe your method for data collection and content and critical discourse analysis
• Present the results of your content and critical discourse analysis
• Discuss the implications of your results
Appendix 4. Neighborhood Reflection

Respond to the following post about your neighborhood.

FAVORITE PLACES
- Identify and describe your most favorite spaces and places in your neighborhood
- Describe the behavior associated with these places (what do you do there, when and with whom do you go there)
- Why are these your favorite place?

LEAST FAVORITE PLACES
- Identify and describe your least favorite spaces and places in your neighborhood
- Describe the behavior associated with these places (what do you do there, when and with whom do you go there)
- Why are these your least favorite place?

IDEAL PLACES
- Imagine your ideal spaces and places that either exist or you wish existed in your neighborhood.
- Describe these spaces and places.
- Describe the behaviors associated with these spaces and places.
- Why did you image this space and place as you did?

IMPROVEMENTS
- How would you change or improve your neighborhood?
- Why are these changes/improvements important to you? Explain.

Participatory Analysis of Neighborhood Reflections:
- Code the Neighborhood Reflection blogs individually
- Pick out 7 to 10 major themes in the data
- For each theme include evidence (quotes) from the data
- Theorize the themes - why do you think each theme emerged?

Codes vs. Themes:
- Codes are used throughout the data analysis process to represent larger themes
- Themes are the more conceptual idea that is represented by your code(s)
- Example:
  - Theme: Lack of safety
  - Codes may include: drugs, gangs, unsafe, dark, scary, dangerous, stay indoors

Journal Reflection: Briefly explain how you coded your data? What new questions emerged for you during this process? Why? What more information would you want to know from your classmates?
Data Analysis in Pairs:
- Share your codes from the Neighborhood Reflection blogs with one person in the class
- Each partner explain your process of creating codes
- Compare your codes and as a pair, pick out 7 to 10 major themes in the data
- For each theme include evidence (quotes) from the data
- Theorize the themes - why do you think each theme emerged?

Creating Class Codes:
- Each group share your codes with the class
- As a class choose 7 to 10 codes that represent the Neighborhood Reflection data
- Discussion: Where do we want to go from here?

Journal Reflection: What do we obscure by only focusing on common themes that repeat themselves? What can we learn from the “uncommon” themes? Think of one particular response that you would like to learn more about...Why did you choose this one and what more would you like to know from this person about their community spaces? What questions would you ask? Why?

Class Discussion Questions:
- Why do you think these themes emerged for our class?
- Which of these themes is most salient (important) to you personally and why?
- Where do you want to go from here?
- How might these themes differ for young people in suburban/rural/other urban environments?
- What did you learn from this data?
- What more do you still want to know about?


Goals of Participatory Analysis of Neighborhood Reflections:
1. Trying to see if there is an overarching issue/set of issues that concern all of us in our relationship to our communities/environment
2. See how we can collectively investigate these issues

For each theme:
- Reflect on your own connection to/interpretation of this theme.
- Record your:
  - Thoughts
  - Questions
  - Experiences
  - Theories
  - Images
  - Anything else you can think of
**Journal Reflection:** What would you say is an overarching issue/set of issues that concern all of us in our relationship to our communities/environment?

*Write down the one theme you are most interested in. Find other people that are also interested and create small groups.*

Develop group research topic: (Audio record your discussions as a piece of data)

**Discussion Questions:**
- Why is this theme/issue important to you?
- How are you/have you been directly affected by this issue Indirectly affected?
- Share stories/experiences
- Do you believe you/your community is entitled to better?
- How do you imagine new possibilities?
- What more would you like to learn/explore around this issue?
- How can we use images to capture your experiences/perspectives of this topic?

*These research topics led to the Photovoice Project for Year 2 (2012-2013)*
Appendix 5. Critical Educational Autobiographies

Writing a critical autobiography can be a powerful way to develop a deeper understanding of how your schooling experiences have shaped the person you are today. This project asks you to be “critical”—to analyze carefully and make judgments—about your educational experience. You can start anywhere and end anywhere. You might reflect on this paraphrase of John Muir’s words regarding the environment: “When you pick out anything to look at, you find it is hooked to everything else in the universe.”

Your challenge is to tell a coherent story relating your schooling experience to specific course concepts, readings, and happenings in the world and the schools as you have moved through them from child to young adulthood. Since you cannot say everything, you will have to pick a theme, an issue, or an experience that was transformative or repetitive as a way to organize your story. You should address issues of class, race/ethnicity, religion, (trans)nationality, and/or gender—though one of these may be a stronger focus of your paper. The accompanying list of questions may help you think about your experience critically. I’m not giving (or requiring) any set approach or topic, and you may focus on historical contexts, describe your feelings of anger or triumph over adversity, comment on the power of social location to shape your educational experience, or any number of other ways to describe your experience. BUT . . . this is more than just an opportunity to simply “tell your educational story.” It is important that you recognize the challenge to integrate course materials in developing a deeper understanding of your schooling experiences.[ii]

What will I expect from the autobiography and how will they be graded? You can write this as a paper, but ultimately I want it uploaded to your research page at www.gloenvironment.weebly.com. If you are not comfortable writing a paper you can create a 10-minute audio narrative that can be uploaded to your page. The criteria is as follows:

**Development**: The balance in your paper between “the story”—that is, your description of the experience, your telling of the tale—and your analysis, which should be weighted towards the “critical” more than the “autobiographical.” I will be looking at how well you describe your experience (i.e., with concrete facts and vivid details), but will be more interested in how well you analyze your experience in the context of what we’ve discussed around identity, social justice, and critical and educational theory.

**Mechanics**: Is the autobiography organized, free of spelling, typographical, and grammatical errors? Please proofread!!!

**Reflection Questions to Consider**: Use these questions in dialogue with others to help you think through, reflect, and write.

1. What kinds of opportunities does/did your schools make available to you? Did this change while you or others you know were attending these schools? How do you think these opportunities have affected your development?
2. What memories do you have of learning about the experiences of persons who differed from you in ability, social class, race/ethnicity, gender/sexuality?
3. Do you have strong views about the way formal schooling is organized and carried out? Do you have strong views about how things should be changed?

4. How would you characterize your early background (family, neighborhood, school)? Are there any outstanding historical events or processes that either directly or indirectly affected your early socialization experiences? When did you become aware of these?

5. What do you remember about your motivation at school? Why do you think you have been motivated in this way? Have you been a conformist? If so, what kind of conformist? If not, what kind of non-conformist? Is conformity/nonconformity a concept that is useful in describing your motivation? What other words would you use? How would family members describe your motivation?

6. What would you say about your peer group relationships? How might differences of social class, gender/sexuality, and race/ethnicity have affected these relationships? Have you been aware of the existence of subcultures in your schools (anti-school/pro-school)? If so, why do you think those existed? What was your attitude towards them? Were you in a subculture? If so, describe it. Is subculture a useful concept for analyzing your experience? What other concepts would be useful?

7. Can you remember (or do you still) think about how intelligent or disruptive other students were/are? What was your attitude to fellow students who you perceived as disruptive? What was your attitude to fellow students who you perceived as intelligent? What was your attitude to students who were treated as “less able?” What do you think about differences between students today? Why do you think that way?

8. What did you expect of teachers when you were in school? Did you have nicknames for teachers? What did these indicate about how you thought about teachers at that time? How influential were teachers as far as your personal development was concerned?

9. Have you been aware of labeling processes at any stage of your school career? For example, have you felt that teachers have treated you as having a certain identity because you were in a particular program of study? Because you were of a certain racial/ethnic group? Because you were female or male? Because of your social class background? Because of your time living or not living in America? Because of your parents involvement or lack of involvement in the school?

10. Are you conscious of having an “identity” in school? What “kind” of student would you describe yourself as being? How do other people look at you? What is the origin of this identity? Has it changed?

11. What are the main areas of ambiguity, ambivalence, confusion, threat, conflict, or contradiction in your school life? Why do these exist? What are their origins?

Appendix 6. Mental Mapping Data Collection and Analysis Tools

Introduction to Data Analysis:
After you have collected images, audio, and field notes of your mental maps and discussion, it is time to analyze this data. The purpose of data analysis is to sift through these data sources looking to identify threads that can be woven together to tell a story about the observed social world. The ultimate goal is to produce coherent, focused analyses of aspects of the social life that have been observed and recorded. There are several distinct practices that can be used to carry out analysis. The first step is to reread all your data sources. You created mental maps, recorded discussions, wrote jottings and field notes (research texts). Now it is time to take in the entire experience and subject all of these ideas to close, intensive reflection and analysis. Through the reading of the research texts you will use open coding and code memos to document ideas, themes, and issues that emerged from the mental maps and associated discussions. We will end this analysis by updating our research pages with our mental maps and reflect on what we have learned, the effectiveness of the methodology, and explore ways of sharing our new knowledge.

Part 1. Rereading Notebooks and Field Notes (Individual)
Spend some time rereading your jottings and field notes in your journal, listening to audio recordings, and looking at the maps from your group.

Part 2: Open Coding and Code Memos (Individual)
Open coding allows us to explore the “what is happening” in our research texts. Codes are short phrases that seek to answer questions about the process (rather than the cause). Use the following questions to guide your coding:

1. What do individuals include in their maps?
2. What are the characteristics and meaning that individuals are giving to the places they have included?
3. Do these places hold positive or negative or ambiguous meaning? Why do they say this place is important/significant to them? What emotions do these places generate?
4. What are the practical concerns, conditions, and constraints that individuals expressed that they confront and deal with in their everyday lives?
5. How do individuals talk about and understand these concerns, conditions, and constraints? What assumptions are being made?

For each code you will include evidence from the research texts that support that code. While you are documenting codes you will also write code memos. These are used to identify the larger ideas behind the specific code. These are your thoughts and connections to ideas from class and connections to patterns of texts or differences in texts. Write about why you selected this as a code and what you believe this code represents.

Part 3: Open Coding and Code Memos (Group)
Get together with your group and discuss each set of codes, evidence, and code memo that you generated. As a group create a single set of codes with evidence and code memos for each individual map.
Part 4: Selecting Themes (Group)
In this part of analysis we are going to go beyond individual maps and begin to look across maps. What common themes emerged from within your group of maps? What differences emerged? Why do think these patterns and contradictions exist? For each theme write a short description of what that theme means to you and what evidence from the maps, discussion, field notes you are using to support that theme. How do these themes relate to ideas from previous class readings, films, and discussion? How do these themes help us think about and answer our overall research questions?

- What does it mean to be you in your neighborhood? Community?
- What do you want it to feel like in your neighborhood? Community? Your ideal neighborhood? Community?
- What are the mechanisms that either promote or discourage this ideal?
- How have outside perspectives influenced how you experience your community?
- What is the perception of diversity (race, age, sexuality, class) in your neighborhood?
- How have your experiences growing up in your neighborhood/or not in growing up in your neighborhood influenced how you perceive your neighborhood?
- Where (outside of your neighborhood) to you find a sense of place/community and how does that compare to how you experience place in your own neighborhood?
- How have you experienced changes in your neighborhood? How have others experienced community change? How have your social identities/socialization informed how you experience place?

Part 5: Generating Theories about Youth and Place (Class)
Now we will come together as a class and discuss the themes that emerged from each group of maps and try to generate some overarching themes for all the maps in the class. What do these themes tell us about the everyday meaning, underlying assumptions, and practical concerns of youth who live and act in this city?

Part 6: Reflections on Methodology (Individual)
Upload your map image to your research site. When you add it as an image, be sure to check the button that turns the LIGHTBOX ON. This will allow users to click on your image to see a larger view. Write a two-part reflection about the mental mapping process. The first part should address what YOU have learned about how you see the places in your neighborhood as a result of the activity. How has this overall experience impacted you (or not impacted you) as a social actor in your neighborhood? What new questions emerged for you during the research process? The second part is a reflection on the mental mapping methodology. What do you think was beneficial about this way of collecting data? What was effective? What was not effective? How would you improve this method? Was it able to capture the questions we were interested in? Why or why not? What other ways could we capture what we are interested in learning about our neighborhoods?

Part 7: Sharing your Knowledge (Class)
How can we share what we have learned with the larger community (school, neighborhood, family, others)?
Mental Mapping PowerPoint Description:

Class research questions
- What does it mean to be you in your neighborhood? Community?
- What do you want to feel like in your neighborhood? Community? Your ideal neighborhood? Community?
- What are the mechanisms that either promote or discourage this idea?
- How have outside perspectives influenced how you experience your community?
- What is the perception of diversity (race, age, sexuality, class) in your neighborhood?
- How have your experiences growing up in your neighborhood, or not, growing up in your neighborhood influenced how you perceive your neighborhood?
- Where (outside of your neighborhood) do you find a sense of place/community and how does that compare to how you experience place in your own neighborhood?
- How have you experienced changes in your neighborhood? How have others experienced community change? How have your social identities/socialization informed how you experience place?
- Additional questions of interest to you about young people (teenagers) and neighborhoods and community.

Mental Mapping
- Questions we can ask using mental maps:
  - Do you have a place in your neighborhood? Are young people displaced?
  - How do young people perceive their neighborhoods and the larger city? What spaces are attractive to them? Why? How do they move in their neighborhoods? The city?

Your Mental Map should...
- Represent the public and private places that have meaning to you (both + & -). Give the places labels.
- Be creative

Mental Mapping Methodology
- Create your map
- Discuss your map
- Analyze maps and discussions

Discussion of Methodology
- DATA CONSTRUCTION
  - How should we group?
  - How should we discuss the maps?
  - How should we document our conversations? (settings and field notes)
- ANALYSIS
  - How should we analyze our maps and discussions?
  - How should we collectively share our ideas from the maps?

Discussion Protocol (Record and upload audio files to Google drive)
- Presenter shares map
  - Share the significance of each place included and labeled
  - Neighborhood changes in your opinion – has this always been there?
  - How you feel about the stereotypes of your neighborhood?
  - Do you like where you live? How would you change? Where would your ideal place be?
  - Talk about specific experiences you had and how it has impacted the way you experience your neighborhood.
- Focus group
  - What are our perceptions/stereotypes of this place?
  - Emotions, sounds, memories
  - Who do you go to these places? What do you do there?
  - Are these good or bad places to you? Why?

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Mental Mapping Final Reflections - Webpage

Part 1: Image of Your Map
- Take a good picture of your map
- Upload your map image to your research site.
- When you add it as an image, be sure to check the button that turns the LIGHTBOX ON. This will allow users to click on your image to see a larger view.

Part 2: Reflection
- **Paragraph 1:**
  - What are you taking away from the mental mapping process?
  - What new questions emerged for you during the research process? How might you like to address these?
  - If we were going to share this research - what would you share? Who would you share it with? How would you share it?

- **Paragraph 2:**
  - What are your overall thoughts on the mental mapping as a methodology to capture the research questions we were interested in?
  - What do you think was beneficial about this way of collecting data?
  - What was effective? What was not effective?
  - How would you improve this method?
  - What other ways could we capture what we are interested in learning about our neighborhoods?
Mental Mapping Data Analysis Handouts:

We will use this format to organize our mental mapping codes. For each map and field notes, use the related questions to create your codes. Codes are words or phrases that address the question:

1. What do individuals include in their maps?
2. What is the meaning that individuals are giving to the places they have included? Do these places hold positive or negative or ambiguous meaning? Why do they say this place is important/significant to them? What emotions do these places generate?
3. What are the practical concerns, conditions, and constraints that individuals expressed that they confront and deal with in their everyday lives?
4. How do individuals talk about and understand these concerns, conditions, and constraints? What assumptions are being made?

Code memos are notes on why you chose this as a code, how this relates to ideas from class discussions and readings.

**There is no right number of codes for each map, add rows as you need**

**Name of Map Maker (Use your research alias):** Kathy

<table>
<thead>
<tr>
<th>Code</th>
<th>Evidence</th>
<th>Code Memo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree</td>
<td>Kathy described two trees that shade out the stairs that she has to walk through from her apartment to the train station.</td>
<td>I think this is important because it speaks to how darkness can create an unsafe feeling. This idea of darkness and safety has come up often in class discussions (especially last year). This then shapes how we interact in these places, what time of day we feel comfortable to be in them, when they belong to us and when they do not, how the meaning of place can shift depending on the time of day and how places can have multiple meanings depending on the time of day. This darkness also defines the kinds of activities that occur in these places.</td>
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</table>

**Name of Map Maker (Use your research alias):**

<table>
<thead>
<tr>
<th>Code</th>
<th>Evidence</th>
<th>Code Memo</th>
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**Name of Map Maker (Use your research alias):**

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**Mental Mapping**

**Selecting Themes (Group)**

In this part of analysis we are going to go beyond individual maps and begin to look across maps.

- What common themes emerged from within your group of maps?
- What differences emerged?
- Why do think these patterns and contradictions exist?
- For each theme write a short description of what that theme means to you and what evidence from the maps, discussion, field notes you are using to support that theme.
- How do these themes relate to ideas from previous class readings, films, and discussion?
- How do these themes help us think about and answer our overall research questions?

**RESEARCH QUESTIONS**

- What does it mean to be you in your neighborhood? Community?
- What do you want it to feel like in your neighborhood? Community? Your ideal neighborhood? Community?
- What are the mechanisms that either promote or discourage this ideal?
- How have outside perspectives influenced how you experience your community?
- What is the perception of diversity (race, age, sexuality, class) in your neighborhood?
• How have your experiences growing up in your neighborhood/or not in growing up in your neighborhood influenced how you perceive your neighborhood?
• Where (outside of your neighborhood) do you find a sense of place/community and how does that compare to how you experience place in your own neighborhood?
• How have you experienced changes in your neighborhood? How have others experienced community change? How have your social identities/socialization informed how you experience place?

GROUP THEMES: Record your themes below
Appendix 7. Data Carnival Agenda

Agenda:
9:00-9:30: Breakfast

9:30-10:00: Welcome and Introduction to the day

10:00-11:30: Data analysis round 1

11:30-1:00: Data analysis round 2

1:00-2:00: Lunch and video reflection

2:00-3:00: Share out of small groups (10 minutes per group for both data sources)

3:00-4:00: Interpretation and group theme activity. What are the main themes in our data? Where do we see these in the data sources? Why do you think these are our themes and how do they answer our research questions?

4:00-5:00: Small group discussion of methodologies and how they addressed the research questions. Share out and wrap-up.

Research questions:
1. How do young people make sense of their local environments? What are the processes most impacting young people and are these positive, negative, neutral, impacts? How do young people's identities intersect with the meanings they make of these places?

2. What methods were utilized in class to best address these questions? What were the benefits of these methods? What were the limitations of these methods? How might these methods be modified to better understand the experiences young people have in their local environments?

3. What were the impacts (if any) of this course on young people? What were the classroom structures that led to this impact? What readings, films, experiences were most memorable? What changes in thinking took place? What are the lasting impacts of this shared experience?

All data artifacts can be found at www.gloenvironment.com/data.html
Password:

Data sources:

Photovoice images and narratives:
Participants selected one image that spoke to their research project and explained how. These images and writing was shared on our course website. Participants selected a set of images that they used to tell the story of their neighborhood from the perspective of their research theme. Research themes included diversity/integration/segregation, safety/nature/crowding, community identity, community access to resources. These narratives were shared on our course website.
Community reflections: Participants were asked to quickly record their favorite places, least favorite places, ideal places, and ways their communities could be improved. Emotions and behaviors were elicited. These were shared on our course blog.

Mental mapping: Participants created maps of their neighborhoods focusing on places that had meaning to them (both positive and negative). Maps were shared in small groups and common themes were documented. Groups shared in a larger class discussion about big themes that emerged during conversations. Students published an image of their maps on the course website and reflected on the big learning and the mental map methodology.

Final course reflections: At the end of the year participants were asked to reflect on the learning process and how it impacted them. These were shared with me in a letter type format.

Your task: For each data source you were asked to select three artifacts that spoke to you. This may have been because it resonated with your personal experience or because you think it is an important idea or perhaps it contradicts with your own ways of thinking. In your small group you have an hour and a half to share which artifacts you selected, why you selected it, and what you learned from it (keeping the big research questions in mind).

Use the time to talk together about what big ideas you see in the data. Document your thinking on post-it papers and place them on the big chart paper. Take the last few minutes to prepare a short (about five minutes) presentation that you can share with the whole group about what you saw in the data.
Appendix 8. PAR map published by the Public Science Project identifying the assumptions and commitments of PAR (Torre, 2009).

<table>
<thead>
<tr>
<th>Assumptions of PAR</th>
<th>Commitments</th>
<th>Method/Practices</th>
<th>Questions Worth Asking Throughout the PAR Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>All people have valuable knowledge about their lives and experiences.</td>
<td>To value knowledge that has been historically marginalized and delegitimized (i.e., youth, prisoner, immigrant). To value traditionally recognized knowledge (i.e., scholarly). To share across the various knowledge and resources within collective so members can participate as equally as possible.</td>
<td>Qual/quantitative research methods trainings; Knowledge building sessions relevant to research from youth, elders, historians, statisticians, judges, etc.</td>
<td>- Who should be a part of the research collective? - Does the research necessitate same-only focus groups/research teams? Is there a need for purposely diverse inclusion? - What needs to be in place within the collective to facilitate participation? - How do different collective members and allies to the research use the data in distinct ways? - How does the research/project connect to ongoing struggles for social justice? - Who owns the data? - In whose voice(s) will the work be written/analysed/published? - How will both the coherence and rich difference of the collective be represented? - What is the purpose of the research? - Whom does the research want to reach, educate, provoke to action? - How might research be used/missed? What warnings/cautions against misuse be inserted? - What other disciplines/discourses might be useful for communicating the data? - Who is made vulnerable by the research? - How can supports and protections be created for people sitting in institutions under scrutiny during/after the research? - What is the audience being asked to do? - What is necessary to shift collective responsibility into collective action? - Where does the collective want to initiate change?</td>
</tr>
<tr>
<td>All people have the ability to develop strong critical analyses (of the world, data, social experiences, etc.).</td>
<td>To collaboratively decide appropriate questions, research design, methods and analysis as well as useful research products.</td>
<td>Develop concepts and theory from rounds of “rough drafts” of methods/analyses that the group creates and re-creates; Discussions of/and theory of change exercises.</td>
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<tr>
<td>All people have multiple identities, and carry important histories, connections and responsibilities to various communities.</td>
<td>To create a research space where individuals and the collective can express their multiplicity and use this multiplicity to inform research questions, designs and analyses. To creative risk-taking in the interest of generating new knowledge; that individuals and the collective are “under-construction” — that ideas, opinions are in formation, expected to grow, etc.</td>
<td>Methods that allow for multiplicities; Surveys with scaling and answer strategies that are less likely to box people into restricted responses; Identity mapping; Focus groups; Graffiti museums; Varieties of activities to allow members to excel in some and fumble in others to highlight within-group diversity and encourage risk-taking.</td>
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<tr>
<td>All people and institutions are embedded in complex social, cultural and political systems historically defined by power and privilege.</td>
<td>To interrogate and engage power relationships within the collaborative and throughout the research. To excavate and explore disagreements and disjunctures rather than smooth them over in the interest of consensus (as they often provide insight into larger social/political dynamics at play in the research). To strategically work the power within the group when necessary to benefit both individual and collective needs/agendas.</td>
<td>Re-member that which has been excluded, forgotten (badly, knowledge, histories of resistance, oppression). Seek outlier data – the strange, transgressive “cases” to understand how margins are created and defined. Surface counter-stories – i.e. probe social injustice and resistance, damage and possibility, conditions/experiences of neglect and privilege.</td>
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</tr>
<tr>
<td>The production of knowledge is not objective, or value-free.</td>
<td>To think through consequences of research and actions. To attend theoretically and practically to issues of power and vulnerability within the collective and created by the research.</td>
<td>Create multiple research products; Seek audiences who will respect and engage research findings.</td>
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<tr>
<td>Social research is most valid using multiple/triangulated methods to help capture interconnected individual, social, institutional and cultural layers.</td>
<td>To use a variety of approaches best suited to address the questions being asked. (This requires strong awareness/honesty about what types of data/knowledge can and cannot be derived from certain methods.)</td>
<td>Surveys, interviews, focus groups, archival data, maps, oral histories, photo-voice, participant observation, cross-site visits, etc.</td>
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<tr>
<td>Participation is not automatic.</td>
<td>To ongoing negotiation of conditions of collaboration; building research relationships over time.</td>
<td>Think through project beginnings/ends and consider multiple (meaningful) ways of participating, entering and/or exiting the research.</td>
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<tr>
<td>Change is an ongoing process.</td>
<td>To conceive of action on multiple levels over the course of the PAR project – some of which occur in one project, some of which link multiple projects over cross-sectional moments over time (past and future).</td>
<td>Scholarly/public/policy articles; Presentations; Community feedback sessions; Symposia; Performance/theatre; Data postcards; Campaigns; etc. Sometimes simply conducting research in a closed institution is subversive.</td>
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</tbody>
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Appendix 9. Year 3 (2013-2014) course syllabus of a critical urban environmental pedagogy designed by author.

Course Overview:
Environmental problems make headlines every day. How can we help to develop participatory citizens who understand the complex socio-environmental issues behind the headlines, make informed decisions, and meet these environmental challenges? The course will help you gain the knowledge and tools to make informed decisions regarding the environment and the earth’s future. We will look at the global environment through a socio-ecological justice framework. A socio-ecological justice framework highlights the links between our current political economy and modern state and the “myriad environmental problems for human and nonhuman communities all over the globe” (Furman & Gruenewald, 2004). This framework highlights the ways in which environmental crises are inseparable from social crises and are often experienced differently by different social groups. By the end of this course you will have a better understanding of the connections between such varied topics as pollution, deforestation, climate change, food production, soil depletion, economics, biodiversity, history, poverty, and social justice. The course stresses a systems approach in evaluating problems and potential solutions as well as an understanding of the critical role of power and privilege in many of the environmental challenges facing the world. My educational philosophy is not to stand up in the front of the room and lecture to you. I strongly believe that you all have much to contribute to this class and I will expect that you take full responsibility for your individual and our collective learning. Your participation in daily journal reflections, class discussions, and our course blog will be places for you to engage and dialogue with one another and the course readings. The spring semester is dedicated to zooming in on our lived experiences where we will conduct collective participatory research using Photovoice to unpack and deconstruct our relationship to our neighborhoods and communities with a specific focus on equity and action.

Guiding Questions:
- How is our current way of life/society tied to the earth both directly and indirectly?
- Do we accept things (the structures in society including political, cultural, economic, educational, religious systems) as they are or as changeable?
- How do you define the dominant culture(s) in society today and how do these dominant culture(s) impact/affect people and places, humans and habitat? Is this impact equal for all people?
- What are our responsibilities as citizens today? How are we being prepared to think about our role in the global economy? Our role in ensuring a sustainable future?
- What are the cultural and ecological conflicts that come from a preparation of young people to participate in the global economy?
- What are the purposes of education/schooling in the larger arena of cultural and ecological conflict?
- How does change happen? Can one person make a difference?
- What does it mean to be critical? Thinking about what it means to be critical - problematize the taken for granted assumptions and unjust outcomes of conventional education and cultural practices

Knowledge Streams (digital technology):
We will be using various forms of digital technology to communicate with one another as well as our ideas to a larger audience. If you are unfamiliar with them, that is okay, we will have time and space in class to learn from one another. We will have a no real name policy when
conducting our research and there is no posting of any personal information about yourself or others. It is also assumed that respect will be taken at all times in our online community and any posts or comments that are inappropriate or irrelevant will be removed. Some of the knowledge streams that we will engage with are:

<table>
<thead>
<tr>
<th>Twitter</th>
<th>Instagram/Flikr</th>
<th>Blogging</th>
<th>Podcasts</th>
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</thead>
<tbody>
<tr>
<td>Storytelling</td>
<td>StorymapJS</td>
<td>Tiki-Toki</td>
<td>Social Explorer</td>
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<tr>
<td>Data Visualization/Infographics</td>
<td>Pinterest</td>
<td>Mural.ly</td>
<td>Web Design</td>
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Course Requirements & Assignments

Attendance: As a college course, there is a strict attendance policy. For each marking period you are allowed to miss two days. Any more than two days will result in 5 points being taken off your attendance grade in the class.

In-class Participation: Contributing your voice to our class discussions is important for everyone. However, I do understand that this can be intimidating at first and that some of you are more comfortable with expressing your thoughts than others. I hope that by the end of the course you all find the best way to share your thoughts with the class.

Online Participation: It is expected that you will continue class discussions and share new ideas and information through our course blog. You can access the blog through the course site as well as instructions on creating new blog posts. Each week you will be expected to contribute to the blog, whether that is through a response to the readings, a comment on a post, or creating a new post on something you found that is related to class. We will also use twitter to share your thoughts and ideas with a larger audience. We already have a few followers but it is up to you share your thoughts beyond the classroom walls.

Reading and Response (R&R): At the start of each unit we will assign a person to begin the blog discussion on a particular reading, film, or other piece in the unit. This will require you to create the first post using your weebly account and include your thoughts and questions to generate discussion. Everyone is responsible for responding to the original post with his or her own comments and questions. For each unit you must comment on at least 15 blog posts.

Learning Journal Reflections: Your learning journal will be a notebook that you use to communicate your learning process as well as any thoughts or questions that come up in the process of the readings, discussions, etc. This is a space more for you and I to communicate about your learning. This journal should be organized and legible but can include drawings, photos, quotes from readings or classmates, research ideas, etc. We will spend the last ten minutes of class each day reflecting in our learning journals.

Collective Participatory Research Project
Throughout the year we will infuse small assignments that will become incorporated into our class research project. These assignments will introduce different research methods including mapping, narratives, archival, autoethnography, interview, and Photovoice. All of these assignments will become data sources that you construct and we will collectively analyze exploring issues related to your own lives and communities. The following assignments will help scaffold our research:

1. Defining Terms: How do YOU define community? How do YOU define environment? How do YOU define nature? Where are these places for you? How do you see yourself in these various places? How have they influenced you and you them? What are your defining experiences with these places?
2. Mental Map: We will create a mental map of our community the first week of school and use these as reference points throughout our research. Our mental map is a drawing from memory of your neighborhood.
3. **Community Reflection:** Reflect on your experiences in your community. What are the environments and behaviors in your favorite places? What are the environments and behaviors in your least favorite places? Why? How would you improve your community? What does your ideal community look like and why?

4. **Community Walk:** You will spend some time walking around your neighborhood. Collect images and sounds from your neighborhood. Take field notes and write an in-depth description of your experience.

5. **Historical Community Research:** Learn more about your neighborhood by visiting a local community center or historical archive. Create a ten-minute podcast about the history of your neighborhood.

6. **Autoethnography:** Each of us will write our own autoethnography that will explore who we are in relation to what we have been learning in class.

7. **Community Interview:** Find a person who is very active in your community to interview. Write up an interview guide, audio record, transcribe, and reflect on your interview.

8. **Place/Mobility Mapping:** Trace your movements throughout a few days to represent and average day. For each place you go, observe your surroundings. Why did you go to these places, what are your experiences in these places? As a class map your movement and see where you overlap with others? What similarities and differences are experienced for each of us?

9. **Photovoice:** Based on the prior assignments, what themes have emerged as most important to all of us collectively? Which are you most interested in focusing on? Choose one theme and work with your team to generate a question a research question and plan. Generate pictures from your community that address your theme and share with your group. Look for common themes and differences through images and dialogues. Critically investigate your research questions/themes in light of the literature and theory you have learned.

10. **Final Presentations:** Prepare a final presentation with your group of your images using the literature and theory you have learned. Who is most impacted by your research and what implications do your findings have for your community? Highlight points of action where you and others can make positive changes in your community. What might that look like and how can you start or become part of a larger movement?

11. **Final Reflections:** After all the presentations, what have we learned about our collective research question(s)? What evidence have we generated to support your conclusions? What new questions have emerged for you throughout this process?

**Course Assessment:**
Each marking period you will complete a self-assessment that will help us determine your grade. This reflection will ask you to show evidence of your participation and contribution to your individual as well as our collective learning. Evidence will be in the form of your participation in class and online discussions, engagement with the readings on the blog, attendance, and your learning journal. Roughly your grade should be based on the following percentages:

- **30%- Effort, attitude, and time invested** – this grade will be a combination of your own self-assessment, my interpretation, and your attendance.
- **30% - Literacy** – Reading and Writing participation in class and on the course blog.
- **30% - In Class Discussions, Assignments, Projects** – Research projects, small and large group discussions.
- 10% - Learning Journal – organized, reflective, creative, representative of your learning, shows engagement with readings and new knowledge

**Course Schedule:**

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<th>Unit/Theme</th>
<th>UNIT 1: INTRODUCTION TO SOCIO-ECOLOGICAL JUSTICE AND INEQUALITY</th>
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<tbody>
<tr>
<td>Dates</td>
<td>September – October</td>
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| Readings   | • Conceptual Frameworks for Diversity and Social Justice. Section 1. Conceptual Frameworks  
            • Kilbourne, J. (1999). In your face...all over the place: Advertising is our environment. In Can’t buy my love: How advertising changes the way we think and feel. New York. Touchstone.  
            • Inequality: It Matters. An Interview with Janet Gornick (2013)  
| Activities/Assignments | R&R Blogs  
Learning Journals |
| Short Videos | • TED Talk: Chimamanda Adichie: The Danger of a Single Story  
• TEDxMidAtlantic: Cameron Russell: Looks aren't everything. Believe me, I'm a model.  
• Wealth Inequality in America  
• Killing Us Softly  
• TED Talk: Sir Ken Robinson, RSA Animate: Changing Education Paradigms  
• Def Poetry - Mayda del Valle - Descendancy |
| Films | • Schooling the World (2015)  
• Precious Knowledge (2011)  
• People Like Us (2001) |
| Project(s) | • Neighborhood Ad Busters Project |
| Community Research | 1. Definition of Terms  
2. Community Mental Map  
3. Community Reflection |
| Knowledge Streams | Instagram/Vine – Use Instagram or Vine to share your Neighborhood Ad Busters Project  
Webpage Design on Weebly |
### Unit/Theme: UNIT 2: AN EDUCATION FOR SUSTAINABILITY: ECOPEDAGOGY

#### Dates
November – December

#### Readings
- Overshoot – Jay Hanson
- The Earth Charter
- Introduction to Keeping Things Whole
  - The Economics of the Coming Spaceship Earth – Kenneth E. Boulding
  - Tragedy of the Commons – Garrett Hardin
  - The Closing Circle – Barry Commoner
- Case Study: The Collapse of the Easter Island Civilization

#### Activities/Assignments
- R&R Blogs
- Learning Journals

#### Short Videos
- Neoliberalism as a Water Balloon
- TED Talk: Naomi Klein: Addicted to Risk
- The Story of Stuff
- SUNY ESF Rick Beal: EROI Videos

#### Film
- Home (2009)
- I Am (2010)

#### Community Research
- Community Walk (Participant Observations and Field Notes)
- Historical Community Research (Archival Research)

### Unit/Theme: UNIT 3: ENVIRONMENTAL ISSUES

#### Dates
January – February

#### Readings
### Methodological Praxis

**Qualitative Inquiry.** 7(6). 706-732.

- Reading on Interviewing
  
  For each topic below, select readings that interest you...

- Climate Change
- Energy – Energetic Limits to Growth,
- Biodiversity
- Food/Fisheries – The Omnivore’s Dilemma, Hungry City,
- Water
- Poverty

### Activities

- R&R Blogs
- Learning Journals

### Films

- King Corn (Food) (2007)
- Crude (Energy) (2009)
- Vanishing of the Bees (Biodiversity, Food) (2009)
- Dirt (Soil) (2009)
- The End of the Line (Fisheries) (2009)
- Tapped (Bottled Water) (2009)
- Sprawling from Grace (Suburbanization) (2008)
- The End of Poverty (Poverty) (2008)
- Climate Refugees (Climate Change) (2010)

### Community Research

- 6. Community Interview
- 7. Autoethnography

### Knowledge Streams

- Data Visualization and Infographics

### Unit/Theme

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<td><strong>Dates</strong></td>
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### Readings

- History of New York
- Urban Political Ecology – Short & Short
- Gentrification (Neil Smith?) – Class Struggle on Avenue B
- Public Housing NYC –Goetz readings
- Public Parks NYC
- Stop and Frisk
- Integration: Are we there yet?

### Activities

- R&R Blogs
- Learning Journals

### Short Videos

- TED Talk: Majora Carter
- David Harvey: Right to the City

### Films

- No Impact Man (2009)
- Park Avenue (2012)
### UNIT 5: INVESTIGATING LOCAL COMMUNITIES

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<td>• Michelle Fine and Maria Torre: Knowing Inequality and Social Justice Research</td>
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<td>TEDX Columbia College: Brandon Stanton: The Good Story</td>
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<td>10. Final Presentation</td>
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<td>11. Final Reflection</td>
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Bibliography


