

Two Sides of the Megalopolis: Educating for Sustainable Citizenship

Alexander POPE¹ & Timothy PATTERSON²

Abstract: *Despite widespread focus on literacy and math at the expense of other subjects, citizenship and environmental education have an important role in American public education. Citizenship and environmental education are broadly tasked with helping students develop the knowledge, skills, and attitudes needed to shepherd the body politic and natural world, respectively, into the future. For educators and administrators concerned with instructional efficiency, educational farm visits offer one means of pairing these two approaches into a unified learning experience. This paper presents findings from a qualitative case study analysis of two such programs, incorporating interviews with and observations of visiting students, teachers, and parents. The authors argue that sustainable citizenship—a typically European conception of citizenship that stresses the natural as well as the national world—is an important outcome of these types of educational experiences.*

Keywords: *Civic education, environmental education, sustainability, field trips*

Introduction

Citizens in the United States are generally detached from the natural world. In the American northeast alone, continued urban blending has created a Megalopolis, “52,000 square miles with only 1.4% of the national land surface [that] still contains over 17.3% of the population” (Vicino, Hanlon, & Short, 2007, p 346). By 2000, 97.8% of nearly 50 million Megalopolis residents lived in a metropolitan area, a number that continues to grow (Vicino, Hanlon, & Short, 2007). While green spaces do remain, contact between the residents and the natural environment is significantly limited, particularly during formal schooling.

Despite recent popular attention from various “green” movements, sustainable citizenship has historically been absent from broad social studies curricula (Disinger, 1983; Palmer, 1998). This paper presents two case studies of programs designed to stress sustainable citizenship by

¹ Teachers College, Columbia University, pope@tc.columbia.edu

² Teachers College, Columbia University, tjp2123@columbia.edu

exposing school-age children to structured educational farm visits. Based on interviews with visiting students, teachers, and parents; site educators; and a review of these programs' curricula, we conclude that such experiences directly contribute to the development of sustainable citizenship in students. Sustainable citizenship is "a national and international policy goal" for promoting a citizenry invested in making sustainable choices about society and nature (Bullen & Whitehead, 2005, p. 499).

Based on initial investigations of these two educational farm programs and the suggestions of sustainable citizenship, we developed a case study approach guided by two aligned research questions. These questions are detailed in the next section. From these research questions, we describe the relevance of sustainable citizenship to social studies education in the United States before addressing the specific methods, findings, and implications of this study.

Research Questions

Field trip research is often the purview of environmental science (e.g., Farmer, Knapp, & Benton, 2007), but we see a clear connection between field trip experiences and the stated goals of social studies education. Generally concerned with educating students towards an understanding and acceptance of social justice and social activism (Barton & Levstik, 2008; Hess, 2008; Wade, 2008), social studies is a suitable lens through which to view and value such experiences. Perhaps more importantly, this approach suggests two other implications. First, that such experiences reverberate beyond a specific consideration of life cycles or ecological systems, to include truly global concepts such as labor inequality. Second, that ideas of active American citizenship (often focused on individual, quantifiable acts like voting) need to be expanded to include an appreciation of the natural world.

The mission statements of both case study institutions directly reference sustainability and civics education, prompting us to ask:

Following educational farm visits, are student and teacher commentaries consistent with the ideals of sustainable citizenship?

How do the particular locations of these farm visits promote sustainable citizenship among students?

Conceptual Framework

We approached the research questions above through a framework adapting sustainable citizenship to established American educational thought. This framework combines three central theories that describe the goals and methods of social studies education in the United States (See Figure 1). Following Bullen & Whitehead (2005) this framework embodies the aim of social studies education (democratic citizenship) while incorporating a relevant theory (sustainability) and examining a pedagogical practice (place-based education) that we believe promotes a desirable outcome (sustainable citizenship).

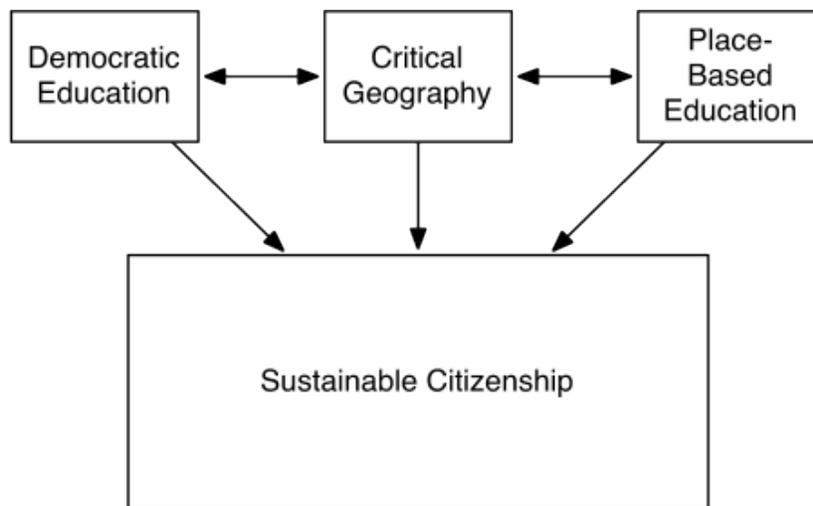


Figure 1. Framework for sustainable citizenship

In this framework, educators may embody one or more established stances towards education while still working—perhaps unwittingly—towards sustainable citizenship. This qualification is necessary to allow room for American educators to demonstrate key components of a theory that is not commonly discussed in their country. That is, without including additional components to describe the goals and methods of this type of education, it could be impossible to investigate sustainable citizenship within the context of the American education system. In this section, we detail the particulars of these theories and describe how their interplay relates to the experiences of students and teachers during educational field trips such as farm visits.

Democratic Education

Social studies education should focus on education for democratic citizenship (Kahne & Middaugh, 2010). We agree that citizenship education must emphasize collective action, and the notion that students must be aware of the root causes of social issues (Westheimer & Kahne, 2004). We will examine how the efforts of Manhattan Country School (MCS) and Snipes Farm are linked to civic action, and correlate these with students' deeper understanding of their connection and responsibility to the Earth.

As social studies educators discuss and focus on the concept of democratic citizenship, they should acknowledge the global relevance of local decisions. Such a “moral undertaking to consider other members of *this* generation in decisions” (Sherren, 2008, p. 247) is ideally suited to discussions of the environment. Decisions that impact the environment are not limited to the local areas of influence; the environment remains a “commons” for all of humanity (Hardin, 1968) applicable to civics education. This approach to democratic education involves an integrated system of curricula and pedagogies designed to instill in the students an appreciation of their “ability to contribute to a healthy and abundant world” (Federico & Cloud, 2009, p. 109). This is a critical topic in areas like the northeastern United States, where urban development remains most widespread.

Critical Geography

Critical geography emphasizes how identity is shaped by and reacts to power relationships based in space; “the ways in which the spatial sets limits on bodies, and the operations of people in making space” (Helfenbein, 2006, p. 112). Critical geography allows us to explore nontraditional sites of education, such as farms, and the impact these environments have on sustainability curricula and pedagogy. These sites are places where educators make space for the interplay of social justice and civic participation through a sustainability curriculum.

Places are imbued with histories and experiences that give and take power from certain groups (Soja, 1989; Storey, 2001). The two sites detailed in this study are products of their particular places. Critical geography provides an avenue into our analysis of the philosophies of the MCS and Snipes Farm. The founders of both of these educational centers were concerned with power relationships, but geography (among other factors) shaped how their struggles manifested themselves.

Place-Based Education

Like critical geography, place-based education (PBE) focuses on the importance of place to meaningful learning experiences, and the way that an awareness of place can impact our understanding of experience. PBE encourages community-minded, experiential learning opportunities integrated with traditional curricula (Promise of Place, 2009). The typical PBE program is heavily environmental, and most promote student senses of “environmental stewardship” (Place-Based Education Evaluation Collaborative, 2009).

Commonly used for environmental and general science education, PBE has recently enjoyed more serious attention from social studies teachers and researchers (American Institutes for Research 2005; Glenn, 2000; Lieberman and Hoody, 1998). Such studies have demonstrated the ability of PBE to create meaningful learning experiences that result in significant academic gains relative to more traditional, school-based approaches. MCS and Snipes Farm both offer educational, field-based programs common to place-based education programs.

Sustainable Citizenship

Sustainable citizenship is the ultimate goal for the promotion of a citizenry invested in making sustainable choices about society and nature (Bullen & Whitehead, 2005). This concept is primarily championed in the United Kingdom (e.g., RSA, 2012) but has important implications for the United States. Sustainable citizenship can be understood as an expansion of the more traditional view of citizenship that privileges individual acts such as voting. More narrowly still, transactional citizenship, which defines citizenship “as a set of skills necessary to get into college and obtain meaningful employment” (Lautzenheiser et al, 2011, p. 8) has gained traction in the United States and other Western democratic countries.

In many locales, environmental education is associated with controversial issues. Critics often try to reframe the debate to focus on the supposedly questionable nature of issues like global climate change. In these cases, teachers may feel pressure to avoid environmental topics. The de-professionalization of teaching (see Ingersoll & Perda, 2008) and continuing curricular squeezing in the social studies (see Wills, 2007) have only added to a perception that teachers should focus on content delivery and not involve themselves in social or political issues (see Hess, 2009).

We present sustainable citizenship as the outcome of effectively paired social studies and environmental education. Social studies is the primary school subject through which educators bring students’ attention to public issues relating to democracy and citizenship (Barr, Barth, &

Shermis, 1977; Woysner, Watras, & Crocco, 2004). The concepts that fall under the umbrella of sustainability, such as preservation of ecosystems, access to water, and pollution, are themselves both social and public issues, worthy of inclusion in the social studies curriculum (Chandler, 2009; Dobson, 2003; Fleury & Sheldon, 1996; Martusewicz, 2001; Sterling, 1996). The specific methods through which teachers help their students reach this goal may vary. In the case studies described below, we review one such method: the educational farm trip. The sites and trips described incorporate clear references to democratic citizenship, critical geography, and place-based education. Through discussions with visiting students, parents, and teachers, we conclude that these educational farm visits resulted in participant conceptions of citizenship consistent with the outcomes of sustainable citizenship.

Site Descriptions

This paper presents a study of two programs that promote sustainable citizenship by exposing school-age children to structured educational farm visits. Our findings are based on qualitative investigations at two specific educational farm sites. Both sites are located in the Megalopolis, the portion of the American northeast characterized by urban sprawl and a reduced connection between residents and natural spaces (See Figure 2). Their mission statements directly reference sustainability and civics education, suggesting a connection between experiencing the natural world and developing the knowledge and attitudes associated with sustainable citizenship. This section includes an overview of the sites. We have kept the site names unchanged, but have used pseudonyms to refer to study participants.



Figure 2. The American Megalopolis (About the USA, 2012)

Manhattan Country School (MCS) and Snipes Farm & Education Center are working to help residents and students maintain or uncover their relationship with the land. Founded in 1966, MCS is partnered with a 180-acre working farm located in the Catskills region of New York State; students visit the farm at least once per semester, and graduating 8th-grade students are required to complete a variety of farm activities. Students are also exposed to concepts of civic engagement, social justice, and social activism, and are expected “to champion excellence and justice, compassion and peace, and the rights of all people to racial, economic, environmental, and educational equity” (Manhattan Country School, 2010). MCS seeks to help students in one of the most urban and human-altered areas on the planet maintain a relationship with nature.

Founded in Morrisville, PA, in 1808 the Snipes Family Farm is a relic surrounded by housing developments, four-lane highways, and shopping malls. In 2008, Jonathan Snipes and Susan Snipes-Wells converted the for-profit farm into a nonprofit educational center “to model and teach sustainable farming, building community and reconnecting people to the land” (The Farm School at Snipes, 2009) through an outdoor 25-acre classroom. The farm conducts classes on sustainable food production throughout the growing season and hosts field trips for area schools. Snipes’ educational vision of the farm is for visitors to “leave with a new understanding of agriculture, especially organic agriculture and the natural systems that allow for food production” (as cited in Carey, 2009). The farm’s educational efforts reflect Snipes’ belief that sustainable agriculture and open-space environmental issues are social-justice issues affecting the local and global communities.

Pope had an established professional relationship with MCS and Patterson with Snipes, but we had no knowledge of each other's site before we began discussing the potential study. Through our conversations, we realized that the sites took similar approaches to their work. Additionally, both sites address environmental education, sustainability, and democratic citizenship in their mission statements and seek to reach similar student populations. Through our connections, we were able to secure multiple observation visits and interviews with site educators and visiting students, parents, and teachers. The particulars of these methods are addressed in the next section.

Methods & Analysis

Based on an initial review of these sites based on our familiarity, we posed our guiding questions to focus on the role of these sites and their locations in promoting sustainable citizenship. To address these questions, we conducted interviews with faculty, visiting students and parents; formally reviewed program curricula; and observed field trip experiences.

Oral interviews (Seidman, 2006) with one administrator from each program focused on their goals and guiding philosophies for the programs. Oral interviews with three teachers from each program focused on their understanding of the farm/school missions and philosophies, as well as the pedagogies they use to implement those goals. Oral interviews with five students from each program focused on student experiences in the programs, with particular attention

given to their prior understandings of sustainability and citizenship compared with those after the program. Interviews were conducted based on availability and willingness.

Naturalistic observations were conducted at both farm sites during school trips. We observed one full-day field trip at each site. During observations we looked for examples of activities involving the larger environment or society. Our focus was on lessons that involved hands-on activities. The process was iterative; observations also helped generate ideas for interviews and curricula analysis.

We individually coded the resulting data using a pre-determined set of codes culled from extant literature regarding components of our conceptual framework (Marhsall & Rossman, 2011). During this process we revisited site curricula to look for examples of pre-existing activities that related to or deviated from the descriptions offered by administrators and visitors, as well as our own observations. The most frequently appearing codes concerned awareness of relationships, costs of production, and relationship to the land. We collected these and other recurring codes into two main themes: feeling the land and conscious consumerism.

Holistic curricula structured hands-on experiences with the natural environment around discussions of citizens' roles in making sustainable choices as conscientious, active members of a global society. Visits to MCS and Snipes gave students the opportunity and tools to talk about issues of national and natural responsibilities. In the next section we detail the two themes, and argue that these sites directly contribute to the development of sustainable citizenship in students.

Discussion

Student, parent, and faculty interviews revealed a deep understanding of how individual choices have far-reaching consequences in the national and natural world. Students from 3rd through 8th grade were able to verbalize clear examples of how their decisions impacted more than the food they ate. This and other data were used to identify the two themes detailed in this section: feeling the land and conscious consumerism. Taken as a whole, our findings suggest that sustainability-minded field trips can be an important component of successful social studies and citizenship education. For those unable to commit to full field trips, we also offer suggestions for how to incorporate these concepts into an urban classroom.

Feeling the Land

One of the most prevalent notions expressed by site administrators and visiting students was that the farms help people feel a connection to the land. As one 3rd grader visiting Snipes noted, “When you go to the store and buy an apple, you don’t know what the process is, what it goes through” but that through experiences like those at Snipes “you can actually see everything and appreciate [that process] more.” Margaret, an educator at Snipes, reports that a lesson at Snipes “does feel different than the typical educational system that a child finds his or herself in which is to say mostly indoors, and not very hands-on. I mean, we really want kids to discover things on their own through exploration and that’s a messy process sometimes.” *Feeling the land* is about more than the sense of touch. Participants consistently noted that part of that messy process evoked emotional reactions. Students visiting a working farm were keenly aware of the distinctions between that farm and the urban area where they live. In many cases, this awareness was based on the experience of traveling from one area to the other, but students also discussed the intrinsic value of the spaces in themselves.

For example, one student described the trip from Manhattan to the MCS farm in Roxbury. As he traced the route along a map of New York State, he emphasized the power of moving between his urban home in Manhattan and the rural refuge of the farm in Roxbury, connecting the physical trip with a new understanding of the land. “In New York City, we’re used to having everything just be on the street. You can just go within three blocks to the supermarket and find everything you need” without thinking about where it all comes from. He continued, “here, everything needs to be grown and everything needs to be raised.” This represents not just a different way of thinking about his food, but also a different way of thinking about his relationship with other people. Through his narrative, this student echoed the voices of other New York City youth who expressed a simultaneous alienation from their own communities, while maintaining a desire to reform and better those spaces (Kinloch, 2010). For this student, traveling to and being at the farm represents more than just a getaway from life in the city, but

also a means for critically engaging within a community of individuals through collective stewardship of the land.

Following the suggestions of place-based education, site programs are designed around the specific qualities of the farms that allow for physical contact with the land and communal sharing of responsibilities. As noted by Roger, an educator at Snipes, because they are located "in the midst of suburban sprawl" Snipes arranges short-term events that offer a glimpse of what Bucks County used to be like. This offers visitors the chance to feel what life on a farm was like in Bucks County, a reality for only a small percentage of the population in the Megalopolis. The educators at Snipes feel that it is critical they do this work in such a densely populated area as a means of reconnecting young people with the land they inhabit and the food that they eat. Experiences cater towards students who will visit for part of the day, then return home. The quick turnaround helps bring home the emotional shift that accompanies the physical change from farm to city, reinforcing that "for city kids, it's about seeing that citizenship is not just the way we construct it in an urban environment." In addition, Roger hopes that these experiences that contrast heavily with the students' daily existences have the possibility for civic engagement later in life: "If kids can learn to love one farm and understand how one farm works then when they grow up and they are in a position to make policy or vote they can begin to make changes that will mean that other small farms can survive."

At the same time, educators at both Snipes and MCS expect that feeling the land will bring their students into a closer relationship with their own environment, be they suburban or urban settings. James, an educator at the MCS farm in Roxbury, echoes Dewey's (1900) frustration that students study content divorced from its real life context: "Kids are studying the rain forest but they're not studying the forest outside their classroom window. Say let's go save an acre! Let's raise some pennies for it, but they've never measured an acre, they've never walked it." Thus these educators seek opportunities to meld the content of the classroom with learning in the natural environment. One teacher at the MCS school in Manhattan enacts a pedagogy meant to "put children in natural situations, where what we're studying is right around them." To that end, she and her students visit Central Park every day. Her expectation is that her students will have concrete and tangible experiences with the last bit of nature in the heart of the Megalopolis.

MCS maintains a deliberately low-impact and low-tech presence that echoes the traditionally rural routes of upstate New York. As long-term visitors, MCS students are responsible for running the farm, which includes collecting eggs, cleaning barns, and harvesting crops to prepare their own meals. The physical labor helps students get their hands dirty and feel the effort involved in sustainable living. Eric, an educator at the MCS farm in Roxbury, argues that by doing the work of the farmer, students internalize not only an appreciation for the effort that goes into food production, but also a realization of the interconnectedness of the systems of nutrition. This lesson is not lost on the students at MCS, because the work they perform is literally connected to the sustenance of the next class of students to visit the farm. Reports one female MCS student: “One class supports the next class by getting all the food from the garden in the spring, and so it’s like, it’s all kind of a cycle. And so, if one class doesn’t do their job well, the other class doesn’t eat well, or they don’t eat well, and it’s just kind of a big circle of events.”

Conscious Consumerism

With their messages of sustainability, social justice, and raw environmentalism, we expected an anti-consumerism message to pervade Snipes and MCS. Instead, we found a version of consumerism we call *conscious consumerism*. This approach reflects how “sustainability has grown, and gotten to be a much broader term. I’m not saying they have to become environmentalists...say ‘oh this world is horrible.’ It’s just a different perspective of how people live.” Sarah, an MCS educator, was describing the awareness that most people live in urban areas, and that all of the visitors to these sites depend on purchased goods to live. Rather than challenge the basic economic systems in place, Snipes and MCS expose students to experiences and questions that provoke introspection about the types of goods they buy, and the consequences of those choices.

That said, sustainability is a central component to conscious consumerism, but it’s what one Snipes visitor called “sustainability in general.” Sandra, an educator at Snipes, joked about one of the parents who said, “What did you teach my kid, he won’t let me take him to McDonald’s anymore!” The parent was sharing how her son was considering the choice of what to eat and where. The new challenge this mother faced was helping her son make the good food choices that began with his visit to Snipes. These sites certainly promote environmental

sustainability. In the main, this includes decisions about food and traditional environmental impact.

Relevance is a key component of good teaching, and these sites excel at helping students find connections with their everyday life. At its most basic level, this involves teaching their students what food actually is. At Snipes, the educators expressed a concern that at home their students' habits and knowledge are completely divorced from the production of the food they consume. A local teacher, who brings his classes of third graders to Snipes five times throughout every school year, reported that his students believe the fruits and vegetables they eat are produced at the grocery store. Confirming these concerns, a Snipes educator argued, "a lot of families these days don't even cook, so kids don't understand what food really is, where it really comes from and how it can be healthful versus out of a bag and not all that healthful, just full of calories."

As a result, potential impacts often focused on personal health and well-being. Perhaps that is expected; after all, these were youths in elementary and middle school. One of the teachers visiting Snipes believed his students need to "see where their food is coming from [so] they're more likely to try that broccoli, try that carrot before reaching for the mac n' cheese for that snack." Students themselves associated these personal choices back to their source. For example, local third graders discussed with us the differences in nutritional value of vegetables found at a grocery store "that can be days old" and those found at a local and sustainable farm where "they just grow and [people] pick them," and even noted a difference in the quality of produce they are used to eating.

This conscious consumerism was not limited to an understanding of healthy eating choices, but also social awareness of the impact their purchases may have on other people. One activity we observed at MCS involved students spinning thread from wool taken from sheep on the farm. Some students had tried spinning before, but for many of the students this was their first time. While the activity involved arts and crafts, there was also a clear focus on sustainability content. The activity began by helping students "appreciate more how much technique and effort you need to put into making one ball of string" as one of the spinners said. But the educators leading the lesson helped students make the connection with their choices. Another student involved in the lesson told us that as a result of her education, she was more likely to reflect on the larger impact of her individual choices. She said, "It's just like, next time

I buy a shirt or something, I think about how much it really costs and how much energy was put into it, and it's still like *only* a dollar. Going through it ourselves, it's kind of, it's enlightening." Through a study of life cycles, students are prompted to think about the ways in which other aspects of life are connected. In our observations and interviews, this was demonstrated as students reflected on the broad impact of their choices can have. For example, several MCS students also picked up on the impact their consumerism specifically with regard to clothing choices. Through our conversations, they demonstrated knowledge of child labor practices, an empathy with those young people forced into such choices, and an ambition to right those wrongs in their own, personal ways.

Conscious consumerism directly addresses the hidden costs of what Americans buy and use. Talking with a group of MCS students, they bounced this idea off one another.

Student 1: A big part of coming to the farm is you learn where a lot of the stuff, like all the necessities come from.

Student 2: And you get a week away from your parents!

Student 1: But we're learning about energy and we're learning about solar energy, and so we've also been learning about oil drilling like up in the Catskills, right?

Student 3: Natural gas.

Student 2: Natural gas, right, Natural gas drilling. And so we're like learning about our necessities and how the process of getting them is so complicated. But we think it's so simple to get them, but it's not.

Their free-form discussion demonstrated an easy connection with broad issues. Even when discussing something outside their immediate experiences, like drilling in another part of the state, students were able to use the framework offered by their farm visits. We cannot say whether these students will act on their awareness as they grow up, but the suggestions at this point were clear.

The educators at Snipes and MCS believe that the powerful experiences their students have working on sustainable farms will lead to their achieving a lasting conscious consumerism. At MCS, Tom suggested that the goal of their curriculum was not to influence career decisions, but to influence their lifestyle choices towards sustainable outcomes: "We're not turning out farmers, but those kids are going to join a food co-op...they're going to make those educated choices as opposed to based on someone's opinion from a magazine." One of his students

supported his hopes, describing how the experience “is one of those things where we can put a little social justice into decisions that are just getting started to get noticed.” The expectation of these programs is that the result of feeling the land will be powerful enough to affect their civic understandings throughout adulthood.

Critiques

Implicit in most approaches to sustainable citizenship is an assumption that a natural world exists or at least existed at one time. As Mann (2006) argues, this assumption is often based on the premise that pre-Columbian America was something of an environmental paradise, unaltered by the efforts of humans. Presented as a new form of the white man’s burden (Kipling, 1899) modern environmental stewardship is largely grounded in historically inaccurate attempts to roll back the clock to this idealized vision.

Educators concerned with accurate historic and contemporary interpretation might shy away from presentations that could offer such a simplified mythology about the American environment. However, our investigations of MCS and Snipes educational programs suggest that these and other sites are more concerned with instilling attitudes of moderation and healthy choices in their visitors. As both sites are themselves evidence of human impact on the environment through agriculture, they do not take the final step of promoting ascetic environmentalism.

Significance and Suggestions for Further Research

These programs, as effective as they are, are limited by their structures and locations. Although Snipes Farm offers adult education classes, summer camps, and a Community Supported Agriculture program, their school partnerships are limited by available funding, primarily through donations and grants. Even though third graders will meet with farm educators five times a year, their teacher noted that the program could be enhanced if it was something that students did every year. What Snipes Farm lacks in repetition they make up for with a focused curriculum that reaches dozens of schools each year. Even without the repetition, this teacher and other educators were firm in their belief that it was important for students to see a working, sustainable farm early in their education.

MCS is able to provide their students with this repetition, but reaches a smaller community. By eighth grade the average student has visited the partner farm 22 times. This

allows farm educators and students to build a personal and working relationship, which allows students and the curriculum to grow together. However, the farm in the Catskills is primarily occupied by MCS students, limiting the farm's ability to work with other schools. An administrator at MCS notes that they have "added a couple of extra trips for public schools in the last 10 years because we felt that it was as important to offer the opportunity for public school students." MCS administrators are working to make the farm experience more accessible. One of their key concerns is cost.

The importance of this type of education extends beyond students who live in the Megalopolis. Expanding on the wish that students in rural upstate New York were exposed to more experiential, place-based education, Tom, a teacher at MCS reflected on his own family: "And here are urban kids who are just so comfortable in this, and I think it's just such a telling tale of these rural kids not having a rural experience. Again, they're in this four-walled classroom, and they have all this outside, but they rarely use it. And I get it back because of my own kids. You know: What did you do today? It was a beautiful day! You know: We didn't go outside..." This is particularly poignant because Tom's children live in a predominantly rural area, surrounded by farms. Regardless of setting, these types of experiences are available; many New York City schools have begun rooftop gardens (Ozer, 2006).

Future research could support this hope by investigating the ways teachers conceive of connections between traditional environmental and citizenship education. Studies should also seek to assess increases in student content knowledge and performance on typical measures of content knowledge. Both of these efforts should help provide support for these beneficial experiences.

Indeed, more research into the connections between sustainability, place, and social studies education is needed. As with our own research in this area, many available studies are too narrow in scope. For example, we did not directly compare the classroom experiences of the students who visited either farm; for that information, we relied on reports from the students, educators, and classroom teachers. The above limitations can be controlled in a future study. We

hope to continue our research in this area. The relationships we have established with MCS and Snipes have allowed for long-term contact and deep longitudinal study.

In order to give findings greater utility in the current standards-based climate, we suggest research that involves empirical investigations of student content-knowledge. We contend that place-based sustainability education does not in any way detract from students' learning of standardized social studies content knowledge. Yet, without quantitative evidence, many administrators are likely to maintain a concern over instructional time lost.

As the Common Core State Standards take effect around the country, interdisciplinary education is expected to gain greater attention. For educators concerned with the implications of education on their students' ideas about citizenship, educational farm visits offer a means to effectively address science content and social studies skills. On visits, students are tasked with real world applications of biology and chemistry. At the same time, they are prompted to consider the ways their daily actions impact a sometimes intangible community. This attention to the natural and national community is at the heart of education for sustainable citizenship. Our hope is that educators will consciously seek out and leverage these opportunities.

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