

Moving Beyond the City-Wilderness Paradox: A Study of Environmental Education in an Urban High School



**Doug Costello
Thesis**

Submitted in partial fulfillment of the degree of
Bachelor of Arts with Honors in Environmental Studies
at Brown University

Providence, RI
December 2001

This thesis by Douglas Costello is accepted in its present form as satisfying the thesis requirement for the degree of the Bachelor of Arts with Honors in Environmental Studies at Brown University.

Dr. Christina Zarcadoolas
Adjunct Assistant Professor
Center for Environmental Studies
Brown University

Date

Bil Johnson
Clinical Professor of Social Studies/History & Lecturer
Education Department
Brown University

Date

Heather Flewelling, MSW
Assistant Director, Youth Education
Howard R. Swearer Center for Public Service
Brown University

Date

Acknowledgements

Immense thanks to:

Christina Zarcadoolas, my advisor, for always pushing me to do my best work, asking the right questions, and being a great source of support when needed. I really value your opinions and am constantly impressed by your knowledge and attitude.

Bil Johnson, for being a great teacher, and for reminding me what that means.

Heather Flewelling, for your great advice, and for believing in my work and the OLEEP program. It means a lot.

Jill Homberg, Charlie Plant, Laura Maxwell, Suzette Thiebault, Charly Adler, and other advisors at the Met School, for their incredible cooperation with my research conducted with the Met students, and for being amazing individuals.

The students of the Met School, for agreeing to participate in my research, and for constantly stunning me by achieving things in the world I thought impossible for high school students to do.

Harold Ward, Caroline Karp, Kurt Teichert, Patti Caton, and the CES community, for providing an unbelievable college learning environment.

My housemates, friends, and family, for being there for me through the highs and lows of the thesis process.

Table of Contents

1.	Introduction.....	4
2.	Background.....	8
3.	Methodology.....	15
4.	Findings.....	22
5.	Discussion.....	41
6.	Information Packet.....	46
7.	Works Cited.....	62
8.	Appendices.....	65

Introduction

“I think that a really relevant issue is the idea of connecting the wilderness and the city, and talking about environmental issues within a city...environment doesn't necessarily mean woods and trees, because environment is wherever you happen to be living...” -- Julie, a mentor in the OLEEP program

A 1996 EPA report assessing environmental education in the United States stated that this type of education has five components, which are:

1. Awareness and sensitivity to the environment and environmental challenges
2. Knowledge and understanding of the environment and environmental challenges
3. Attitudes of concern for the environment and a motivation to improve or maintain environmental quality
4. Skills to identify and help resolve environmental challenges
5. Participation in activities that lead to the resolution of environmental challenges.”¹

Environmental education has numerous benefits to today's society, which include, “Protecting environmental health, advancing quality education, expanding employment opportunities, promoting sustainable development, and protecting America's national h ² However, according to the EPA, this field also currently faces many challenges, in that “Environmental education is not a priority across the country, and important audiences are not being reached.”³ Although an important component of American education, environmental education is currently not given the importance it deserves.

OLEEP, or the **Outdoor Leadership Environmental Education Program**, is one program which seeks to integrate the five components of environmental education listed above,

¹ National Environmental Education Advisory Council USEPA Env. Ed. Division, Report Assessing Environmental Education in the U.S. and the Implementation of the National Environmental Education Act of 1990, (Washington D.C.), Dec. 1996, p. 2, referencing UNESCO, 1978.

²Ibid, p.4.

³ Ibid, pp. 14 & 16.

advance the aforementioned benefits, and address the listed current challenges of the field of environmental education.

What is OLEEP?

OLEEP is a cooperative program between Brown University and the Met School, a public charter high school in Providence, Rhode Island, and provides three different avenues of exploring the relationship between urban youth and the environment:

- weekly workshops examining environmental issues
- periodic hiking and camping experiences in ‘the outdoors’
- one-on-one mentoring relationships

Its mission is to:

“Provide the Met School students an opportunity to explore outdoor and urban environments, and make connections between the two by learning about local environmental issues and by becoming involved in local environmental action.”⁴

As a mentor in OLEEP from the period of 2000-2001, I witnessed an enthusiasm among fellow mentors for educating urban high school youth about environmental issues. As the program moved forward in new directions, though, there was an uncertainty among these mentors as to the best methods of environmental education, due to a lack of communication with the high school population itself. Thus, I hoped to fill this communication gap between mentors and mentees in the OLEEP program, asking the central question:

⁴ OLEEP, 2001.

What are urban high school students' current perceptions of the physical environment, and how can these perceptions be used to design curricula and advance the mission of OLEEP?

This question will be addressed in the following chapters, which provide:

1. A **Background** on the OLEEP program, the Met High School, and the relationship of urban youth to the outdoor environment
2. An explanation of the **Methodology** of the social research conducted to answer the central question
3. **Findings** of this research conducted with the stakeholders in the OLEEP program
4. A **Discussion** of the importance of these findings in the context of OLEEP
5. An **Information Packet** for mentors in OLEEP on the curriculum of an environmental action project, aligned with the learning goals of the Met High School.

Again, the **Outdoor Leadership Environmental Education Program** is one instance of an environmental education program exploring the relationship of urban youth to their environments. Read on to see how these *students themselves* perceive their relationship to the environments around them, and what that means for this local environmental education program.

Background

History of OLEEP

In order to fully understand the OLEEP environmental education program, one needs an explanation of its history. The OLEEP program was started in 1997 by a group of Brown students as an outgrowth of a program called BOLT, or Brown Outdoor Leadership Training Program. BOLT is a program which enables Brown sophomores to develop leadership skills through a week-long backpacking trip in the White Mountains, and through group activities throughout the academic year. Many of the nine original mentors in the program had been involved in the BOLT program as participants or as leaders.

Thus, OLEEP started as the Outdoor Leadership Experiential Education Program in the fall of 1997 as a two-part program, involving one-on-one mentoring, and outdoor leadership on periodic trips. In the following year, weekly workshops were introduced in an attempt to give the program more educational weight. These workshops started as a way to reinforce the leadership skills emphasized on the trips. However, in the fall of 2000, the OLEEP program metamorphosed yet again, and changed its name from “Experiential” to “Environmental” education. It is important to note here that OLEEP and programs similar to it have been labeled as everything from “experiential” to “outdoor” to “wilderness” to “environmental” education. However, it is clear from the present mission and action of the program that OLEEP is an *environmental education* program, as it accomplishes the five previously mentioned goals established by the EPA for this type of education.

When OLEEP changed its name to *environmental education*, it changed its identity as well, as environmental issues became the focus of the weekly workshops. Instead of teaching students how great the places in which they did not live were, the OLEEP program chose to focus on connecting different environments in order to foster an awareness and an appreciation of environmental issues. The program has existed in this state for the past year and a half, and plans to maintain this focus in the coming years.

To restate, OLEEP currently seeks to involve Met students in exploring both “natural” environments, and in making connections between these environments by learning about environmental issues and by becoming involved in local environmental action. However, to gain a complete grasp of its mission, it is necessary to gain a fuller understanding of the Met School, the high school with which the program works.

What is the **Met**?

The Met School is officially named the, “Metropolitan Regional Career and Technical Center.” It is a state career and technical school which was started in Providence in 1996. It has two campuses composed of 100 students each, located on Westminster St. in downtown, and on Peace St. in the South Side of the city. The student population, following with the population of Providence, is an ethnically diverse one, of 38% Caucasian, 32% Hispanic, 22% African-American, 2% Asian, and 6% “Other” ethnicity.⁵ This is of relevance to the OLEEP program, as the EPA stated that one of the main challenges facing environmental education is that important populations are not being reached, and it lists “people of color” as one of these

⁵ The Big Picture Company, Inc., “The Met 1999-2000 Portfolio,” Providence, RI, 2000, p. 18.

populations.⁶ OLEEP faces this challenge head-on in attempting to reach the diverse population of the Met through environmental education.

However, the Met and OLEEP have more in common than a mission to educate ALL students. On a theoretical level, the Met School believes in educating, “one student at a time,” through the progressive goals of:

- individually developed curriculum – each student decides what he or she wants to learn through the creation of an individual learning plan.
- real-world experience – each student participates twice a week in an LTI, or Learning Through an Internship.
- assessment – each student exhibits his or her work at quarterly points in the year to Met advisors and other interested parties in the Met community.
- family engagement – parents are expected to play an active role in their child’s education.
- community involvement – students are expected to extend their work beyond the confines of the school itself.⁷

As will be explained in the findings and discussion sections, many of OLEEP’s goals overlap with those of the Met School listed above, notably those of individually developed curriculum, real-world experience, and community involvement.

Equipped with a basic knowledge of the history of OLEEP and its relationship with the Met School, it will be appropriate now to examine the history of the interaction of urban youth

⁶ USEPA National Environment Education Advisory Council, p. 16.

⁷ The Big Picture Company, Inc., pp. 1-18.

with the outdoor environment in order to develop an entirely complete understanding of the OLEEP program.

The history of taking urban youth to “the outdoors”

Given that OLEEP is a program examining the relationship of the urban youth to surrounding environments, one must wonder where this idea originally developed. The relationship between urban youth and the outdoor environment has endured a very complex history dating back to the end of the 19th century. Just as perception currently plays a strong role in human interaction with the environment, it strongly affected the way Americans viewed their environment at this time period. With the rise and expansion of the American industrial city, people longed for a sense of “wilderness” that was socially constructed. Cronon offers an explanation of this idea when he writes, “By the end of the nineteenth century, all this had changed. The wastelands that had once seemed worthless had for some people come to seem almost beyond price...Wilderness had once been the antithesis of all that was orderly and good it had been the darkness, one might say, on the far side of the garden wall – and yet now it was frequently likened to Eden itself.”⁸ As urban populations increased, a longing developed for a connection to natural wild beauty. In 1872, a first program involving urban youth, based on this cultural narrative, emerged. Upper class urban youth engaged in a leisurely retreat to the “country” in the summers, to get away from the heat and dirt of the city. The higher classes came to take pity on poorer children who stayed in the city. Thus, the New York Times

⁸ William Cronon, “The Trouble with Wilderness; or, Getting Back to the Wrong Nature,” in Uncommon Ground, William Cronon, ed. New York: W.W. Norton, 1996, pp. 71-72.

created a program at this time called, “Fresh Air Charity,” which enabled New York City children of lower socioeconomic class to go on day excursions to the countryside. This charity was seized as a great idea, and immediately other programs sprang up in cities across the country. The charity ultimately evolved over the next fifteen years into the Fresh Air Fund, which gave thousands of New York City children a full week of experience in nature. Schmitt writes, “Participants in Country Week (the name for the week) welcomed reared in poverty’ into their own families, fed them a little more than usual, answered a bit more gently such questions as, ‘Mister, do you have to buy gum for all them cows to chew?’, and otherwise introduced them firsthand to country life.”⁹ Poor urban children were thus exposed to the culturally constructed idea of returning to wild nature.

Just as lower socioeconomic classes were being moved to a state of nature at this time, wealthy urban children were heading to the “great outdoors” as well, but for different reasons. The first evidence of this is a program started in 1881 entitled Camp Chocorua. This camp, founded by a Dartmouth student named Ernest Balch, was one of the first instances of what are now summer camps, and in the words of Schmitt, “functioned as a ‘Boys’ Republic’ where wealthy campers traded indolence at a summer hotel for an island ‘work camp.’”¹⁰ Instead of becoming a place to retire to for relaxation, nature, in this case, was treated as a place where “real work” was done. Those who lived a privileged urban lifestyle could experience a simpler, more hard-working life.

⁹ Peter J. Schmitt, Back to Nature. New York: Oxford University Press, 1969, p. 98.

¹⁰ Ibid, p. 99.

This connection between urban youth and the natural environment continued as more cities sprang up around the country. Nash writes of American sentiment in the 1920s, “Actually the urban situation of increasing numbers of Americans contributed to the growing vogue of the nature movement. Cut off from contact with the land, people longed for it. The pioneer, in a sense, had too much nature to covet it, but the city-dweller reached out for what was rare and, consequently, precious.”¹¹ Thus, the idea of nature as something missing from the city was created. Nature took on qualities that were missing from urban youth’s lives, whether it was “fresh air,” “hard work,” or other constructed attributes of this environment.

Taking urban youth to the “outdoors” today

Today, the natural environment is still perceived as something lacking from urban youths’ lives by many environmental education programs. Outward Bound offers a prime example of this perception, in its programs taking youth to experience the outdoors. Even programs which are centered around urban youth, such as New York City Outward Bound’s Summer Literacy and Environmental Studies Program, where South Bronx High School students are transported to North Carolina to do activities such as rock climbing and canoeing, focus on removing these youth to a more natural environment to develop qualities missing from their urban lives. Cronon comments on this existing idea of idealized wilderness, writing, “By imagining that our true home is in the wilderness, we forgive ourselves the homes we actually inhabit. In its flight from history, in its siren song of escape, in its reproduction of the dangerous dualism that sets human beings outside of nature – in all of these ways, wilderness poses a

¹¹ Roderick Nash, The Nervous Generation: American Thought, 1917-1930. Chicago: Rand McNally College Publishing Company, 1970, p. 82.

serious threat to responsible environmentalism at the end of the twentieth century.”¹² Many environmental programs today fall into the simplistic paradox of wilderness and city.

Where OLEEP differs

OLEEP is also an environmental program which involves taking urban youth to a more “natural” environment. However, the *goals* of this activity are fundamentally different from other existing environmental education. The focus is not on removing urban youth to the “wilderness” to remind them of the bad traits of city life, but instead is one tool of many used in the program to *make connections between environments* in their lives. OLEEP attempts to move beyond the city-wilderness paradox to use different physical environments, natural *and* urban, as tools to foster environmental awareness and appreciation among urban high school students. The comments of Andrew, one OLEEP mentor, provide an appropriate explanation of this issue: “*Why not teach them that the city is an environment and not just play it as a dichotomy...it’s an environment, it’s their environment, and there are really important issues.*”

However, in order to ultimately foster an awareness and an appreciation of physical environments, it is necessary to understand how students currently perceive the environments around them. The methodology of the research which had this goal will now be explained in greater detail.

¹² Cronon, p. 81.

Methodology

As has been illustrated in the previous chapter, perceptions of environments are important and most effectively studied through social research methods. Shanahan and McComas write, "...Stories and images ("narrative rationality") rather than facts and scientific arguments ("technical rationality") help to determine what we think we know about the environment. By extension, in a process first discussed by Lipmann (1922), these stories and images may come to stand in for environment."¹³ Student *perception* of their environments can play a larger role in retaining knowledge than the actual, physical existence of the environment. A variety of research methods were used from April to November of 2001 to explore the perceptions of the stakeholders of the OLEEP program, who were identified as mentees, mentors, and the larger Met School student population. The research methods included:

- ethnographic observation of mentor meetings, trips, weekly workshops, and the Met learning environment
- semi-formal interviews with Brown student mentors in OLEEP
- a written survey administered to the Met student population
- focus groups of 4-6 Met students, not simply those in OLEEP
- semi-formal interviews with Met student mentees in OLEEP

Each of these research methods was carried out separately, with distinct goals. In a final meta-analysis, coded themes were examined and compared across different methods.

¹³ James Shanahan and Catherine McComas, "Introduction," in Nature Stories. Cresskill, NJ: Hampton Press, 1999, p. 17.

Observation

Lofland and Lofland describe participant observation as, “The process in which an investigator establishes and sustains a many-sided and relatively long-term relationship with a human association in its natural setting for the purpose of developing a scientific understanding of that association.”¹⁴ More simply, Fetterman states that participant observation is, “Immersion in a culture.”¹⁵ For the purposes of my research, I chose to immerse myself in the culture surrounding the OLEEP program. The goals of the ethnographic observation were to:

- gain a sense of OLEEP Met student interaction with the physical environment
- understand the environmental education challenges that Brown students and Met students face in the planning and execution of workshops
- comprehend the structure of the Met school and the best methods for OLEEP to fit into this structure

The observation environments varied greatly, from mentor meetings to weekly workshops to the Met school environment. Observation of each of these environments occurred on a weekly basis in the months of April, May, and June, and on a biweekly basis from September through November 2001. The Met learning environment was given the most attention, and I devoted an additional 3-5 hours a week in October and November of 2001 to observing school activity at both campuses. This was emphasized over the other environments because I

¹⁴ John Lofland and Lyn H. Lofland, Analyzing Social Settings. Belmont, CA: Wadsworth Publishing Co., 1995, p. 18.

¹⁵ David M. Fetterman, Ethnography. Thousand Oaks, CA: Sage Publications, 1998, p. 35.

needed to become familiar with the context in which Met students learn on a day-to-day basis.

The observation was informal, with notes taken in process.

Semi-formal interviews with mentors

In order to successfully triangulate the data collected and to ensure that the voices of all the people involved in OLEEP were heard, I decided that it would be necessary to conduct semi-formal interviews with mentors. Fetterman explains the importance of interviewing when he writes, “The interview is the ethnographer’s most important data gathering technique.

Interviews explain and put into a larger context what the ethnographer sees and experiences...semi-structured interviews...serve comparative and representative purposes comparing responses and putting them in the context of common group beliefs and themes.”¹⁶

The goals of these semi-formal interviews were to:

- obtain suggestions for improvement in OLEEP’s effort to provide environmental education
- gain mentor assessment of each of the different facets of the OLEEP program
- discover a sense of the personal, individual experiences of each mentor

The interview protocol went through a series of revisions until the final 15 mostly open-ended interview questions were selected and ordered in April of 2001 (*see Appendix 1 for final protocol*). The interviews were voluntary, and confidentiality was assured. **Fifteen interviews** were conducted over a series of three weeks in April and May, and were recorded with a tape recorder to ensure accuracy. A spot-transcription analysis was

¹⁶ Ibid, pp. 37-38.

conducted of each interview through iterative listening. The data from the interviews were then given an initial and focused coding analysis for relevant themes.¹⁷

The written survey

A twenty-one question survey was administered to **94 Met students** (the majority of freshman, sophomores, and juniors), to explore the following central questions:

- What are the students immediate perceptions of the “outdoors” and the “city”? Are these two views fundamentally different?
- How frequently do students participate in outdoor activities?
- What is the level of students’ *access* to participating in outdoor activities in natural environments? What are some barriers to this access?
- What is the level of student *connection* to the environments around them?

The survey was piloted in an advisory at the Shepard campus on June 4, 2001. After minor adjustments, the survey was administered at the Peace campus on June 6, and at the Shepard campus throughout the week of June 7-14. (*see Appendix 2 for a complete copy of the survey*).

One important consideration that went into the survey was the learning styles of the target population. Time for the survey had to be kept at a maximum of 20 minutes to prevent the students from losing interest in completing it. The visual style of the survey was also considered, and clipart images were used in questions at a halfway point, to engage students in a

¹⁷ Lofland and Lofland, p. 192.

different format and to hold participant interest. A variety of question styles were used throughout the survey. (*see Appendix 2 for the different types of questions used*).

An informed consent form was attached to the survey, ensuring that participation was voluntary, and guaranteeing complete anonymity. A final sheet of biographical information was attached to the survey so the data could be cross-referenced for factors of gender, ethnicity, working outside of school, and participation in the OLEEP program.

A statistical analysis was conducted using SPSS and Excel. The data for each question was entered in a spreadsheet for each campus, and the frequency of responses, and a cross-tab analysis of the aforementioned factors, were examined. Open-ended responses were recorded and coded for themes. Survey analysis was done separately for each school, and then combined. In the case that a question led to a large discrepancy of responses, this discrepancy, whether one of campus, gender, or ethnicity, will be addressed in the findings section, as will be seen in the example of Hispanic familial influences on use of natural environments.

The focus groups

In order to delve more deeply into student perceptions of environments, a series of three focus groups were conducted with the Met student population. Krueger provides a synopsis of some advantages of this research tool when he writes, “Focus groups place people in natural, real-life situations as opposed to the controlled experimental situations typical of quantitative studies.”¹⁸ These focus groups, conducted to reach the Met student population on a deeper level, had the main goals of:

¹⁸ Richard A. Krueger, Focus Groups. Thousand Oaks, CA: Sage Publications, 1994, pp. 34-35.

- determining student awareness and appreciation levels of environments and environmental issues
- determining reasons for and barriers from learning about specific environmental issues
- understanding how OLEEP can increase environmental awareness and appreciation levels, and what teaching strategies work well for this specific population

Logistically, **three focus groups of four to six participants** (two at the Peace campus, one at Shepard) were conducted over a three week span in the months of October and November 2001, where I acted as moderator of the groups (*to see a copy of the moderator's guide, see Appendix 3*).

The participants for the focus group were chosen if they had checked yes to a question on the survey asking if they would be interested in participating in such a group. Efforts were also made to have participants of ethnic diversity, as the Met is a very diverse school, and as it is important to examine the views of every population at the school, especially in light of the fact that important audiences are not being reached in current American environmental education. As was the case with the survey, an informed consent form was administered to ensure voluntary participation and guarantee complete anonymity.

Each focus group was analyzed using a tape-based analysis method, which included the drafting of an abridged transcript from the remarks of each group.¹⁹ These transcripts were then coded for themes relevant to the goals of the focus group.

Semi-formal interviews with mentees

¹⁹ Ibid, p. 143.

To finalize the research, I felt it was necessary to conduct interviews with mentees, to understand their perceptions of the OLEEP program. The goals of these interviews were to:

- obtain suggestions for improvement in OLEEP's efforts to provide environmental education
- hear mentees' assessments of different facets of the program
- determine the level of student awareness and appreciation of local environments and environmental issues
- gain a sense of the effective learning styles of the participants

The format and style of the interviews were very similar to that of the semi-formal mentor interviews. The final interview protocol was a series of sixteen mostly open-ended questions, and **eleven interviews** were conducted during the month of November 2001. (*To see the finalized protocol, see Appendix 4*). They were given the same analysis as the mentor interviews.

In sum, a combination of research methods were used to analyze the experiences of ALL the potential populations involved. It will now be appropriate to discuss relevant findings from this research pertaining to the interaction of urban youth with the environments around them.

Findings

These findings were developed from:

1. 94 written surveys by Met freshman, sophomores, and juniors
2. 3 focus groups of 4-6 Met students
3. 11 OLEEP mentee interviews
4. 15 OLEEP mentor interviews

Less emphasis was placed on mentor interviews, because they are indirectly linked to student perception. However, their comments are nonetheless extremely important. The word mentor has been put in bold to note when their comments are recorded.

This chapter will be divided into two sections, concerning student perceptions of:

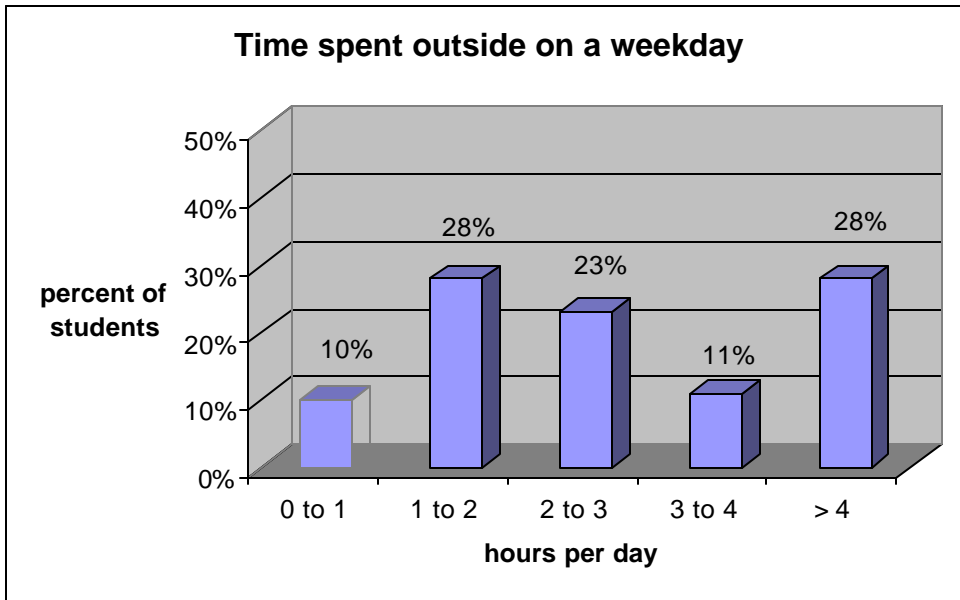
- **physical environments**
- **environmental issues**

I. Student interactions with the physical environment

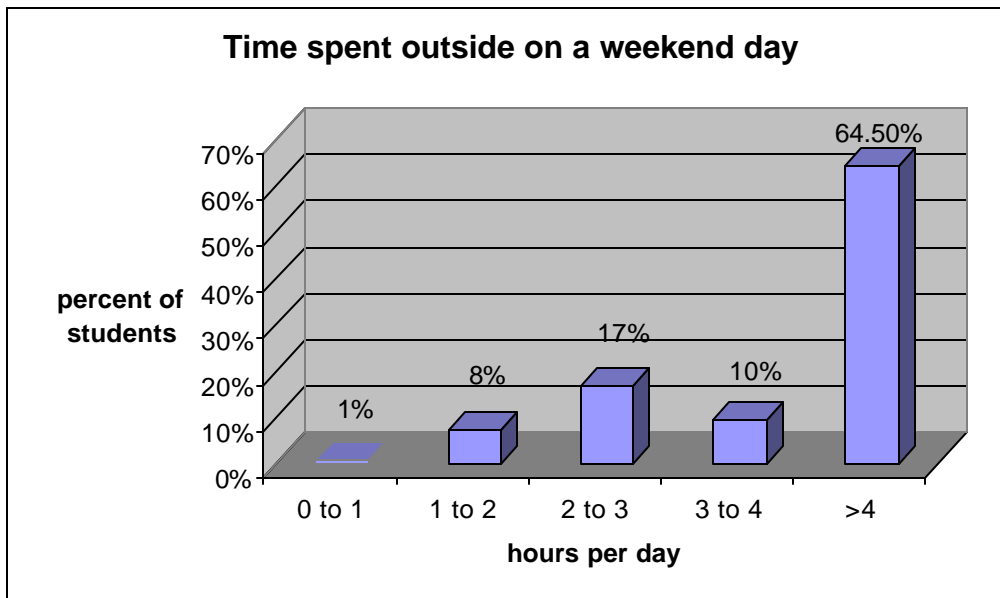
A. Do students spend time outside?

The majority of students at the Met are spending a significant amount (at least 2 hours) of their days outside. The second survey question asked: “How much time do you spend outside on a **school day**?”. Combining the data from each campus, the results showed that almost one-third (28%) of students spent more than 4 hours, almost two-thirds (62%) spent at

least two hours, and 90% spent at least one hour per day outside.



In addition, the amount of time spent outside increases significantly on weekends. When asked, “How much time do you spend outside on a **weekend day**?”, almost two-thirds (65%) of respondents replied that they spent more than four hours, 93% stated that they spent at least two hours, and an overwhelming 99% said that they spent at least one hour outside.



Of course, seasonal variations must be taken into account – the survey was conducted in the springtime, and amount of time spent outside decreases as the weather gets colder for all population groups.

B. What do students actually do outside?

This population of high school students participates in a variety of outdoor activities. The fourth question of the survey asked, “When you are outside, what activities do you like to and offered the options to a)swim, b)walk, c)bike, d)play a sport, e)spend time with friends, f)spend time with family, g)go hiking, and h)go camping. A majority (80%) of the students checked more than one activity. Students named a variety of additional activities including: “*break dancing*,” “*meditating*,” “*taking pictures*,” “*rollerblading*,” and, “*skateboarding*.”

C. Do students have access to “natural” environments?

The fact that a large percentage of students spend at least a couple of hours each day outside in their urban environment, doing a number of outdoor activities, does not necessarily mean that students spend time in more “natural” environments. The term “natural” here refers to substantial elements of nature, such as trees, mountains, and water, that are relatively free of human impact in comparison to urban environments. Analysis of the survey question, “How many times have you gone ‘hiking’ in the last year?,” revealed that 65% of students had gone hiking at least once in the past year. Additionally, 72% of students have gone camping at least once in the past year. Although these results indicate that the majority of students have had some initial level of exposure to activities done in natural environments, further evidence shows

that this exposure is limited. A minority, 32% and 27% at the different campuses, of students answered that they went hiking and camping, respectively, more than once in the past year.

Students report that they are prevented from frequently engaging in such activities because they do not have **access** to these environments. A multitude of comments from **mentors** revealed a perception that many Met students have barriers which prevent them from doing anything in natural environments. One **mentor**, Allison, states in the context of her mentee, *“...she doesn’t have access, it’s access, period, like she has no one to take her in a car and drive her to a place – the summers, she doesn’t have anywhere to go that she can get outside.”* Another **mentor**, Jim, asserts that, *“My perception is that he (my mentee) sees the outdoors as something that he wouldn’t have access to if it wasn’t for programs like OLEEP...and because of that, he sees a lot of value in them, and I think he takes advantage of the kinds of opportunities OLEEP gives.”* This perception by **mentors** is qualified by the comments of mentees in the program. Mike, one such mentee, tells the story, *“When I was a kid, I always wanted to go camping, and my father didn’t want to bring me.”* This perception of familial barriers has also been seen to have the opposite effect, where familial accompaniment on camping and hiking excursions increases access. This was seen in the high percentage of Hispanic respondents that indicated the importance of family in doing activities such as camping (20 out of 33 respondents indicated that they would go camping more often if accompanied by family members, a high percentage which did not correlate to the overall response to that option). This was substantiated in the focus groups, as when one Hispanic participant, Jackie, after seeing a photograph of Lincoln Woods, a park encompassing a large lake and a surrounding forest, stated, *“I would love to spend a weekend there, like*

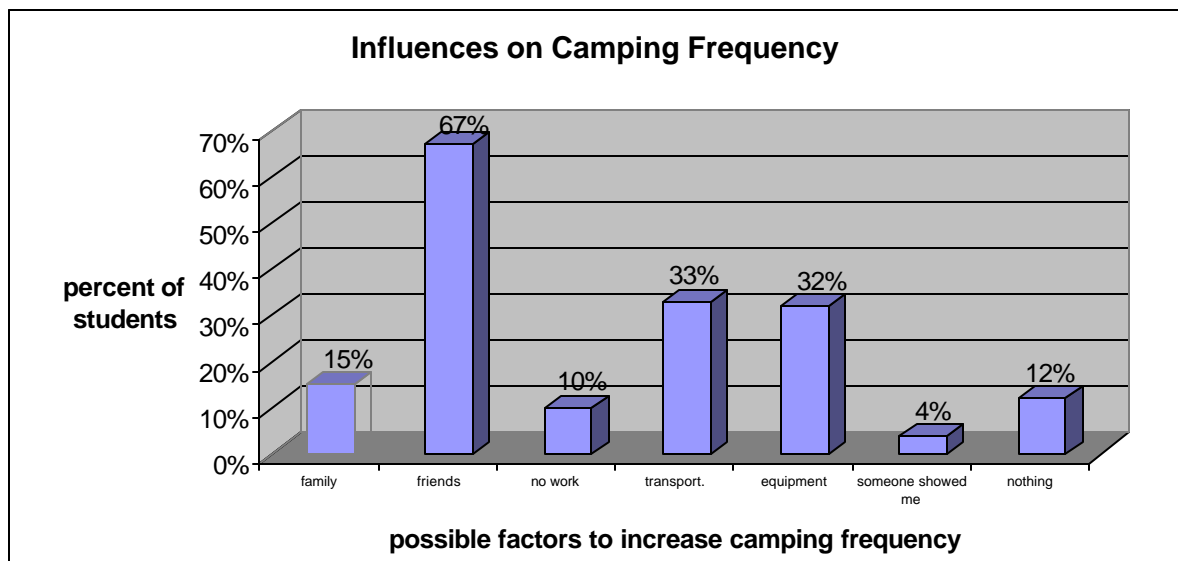
with family.” An Hispanic participant in another group, upon seeing the same photo, declared that, “I used to go there a couple times a week, my family and I used to go and we’d have barbecues there.”

Additional obstacles include perceptions of friends, transportation, equipment, and time.

The survey question which asked:

- “I would go camping more often if...”
- ___ my family was coming with me
 - ___ my friends were coming with me
 - ___ I did not have to go to work on the weekends
 - ___ I had transportation to where I wanted to go
 - ___ I had the equipment I needed
 - ___ someone showed me how to go camping
 - ___ nothing. I would not go camping

revealed that two-thirds (67%) of students were influenced by the presence of their friends on such a venture, and that one-third (33%) of students wished that they had sufficient access to transportation and equipment in order to go camping more often.



In addition, many students responded throughout the survey that they lacked the time to go to ‘natural’ environments. Firstly, 38 of the 94 respondents revealed that they work at least 20

- *“I like being away from the city.”*
- *“Camping is a very awesome experience for some people, it’s better than being in the*

This information is further substantiated by descriptions of downtown Providence as:

- *“It sucks.”*
- *“I don’t like it there.”*
- *“I don’t like chilling downtown.”*
- *“It’s not the choice place and it’s kind of run-down.”*

This negative attitude of the heart of the city was expressed in open-ended “other” category responses to the question of, “I do not spend more time in downtown Providence because...”.

Narratives such as this must not be trivialized, because they can often translate into real actions.

question, which reinforce this perception include:

- *“I rather stay in the city than get dirty and not shower for a month.”*
- *“I do not like going hiking. I like camping but sometimes I don’t because I like being clean on a camping trip and people always get dirty for nothing.”*
- *“Camping is ok! But I hate bugs.”*
- *“Camping is fun but there’s too many bugs.”*
- *“(in reference to camping) Too many bugs, and the smell...”*
- *“I like going camping and hiking but the bugs get to me...”*

The simple concept of natural environments as dirt-covered, bug-infested places may seem silly to some, but the frequency of the word “*bugs*” alone in survey responses (at least 12 respondents used the term at various points in the survey) validates the widespread perception of natural environments as lacking in comfort, and this too can have a strong impact on actual use of such environments.

3. **‘Outdoors’ vs. ‘City’ Folk**

A sizable number (18) of students perceived themselves as either an “outdoors” or a “city” person. The majority of this group classified themselves in the latter category.

Examples of this classification, taken again from the last survey question, include:

- *“I’m not a camping girl.”*
- *“I am not an outdoor person.”*
- *“I’m a city girl.”*
- *“I’m not a hiking person.”*

Like the previous narratives of ‘nature as a haven’ or ‘nature as bothersome’, this idea assumes that, in order for one environment to be inviting, the other environment must be awful.

However, this and other narratives, although seemingly dualistic, are in fact often much more complex in students’ minds. Christine, a former mentee in OLEEP, offers a great contradiction of this last narrative with her statement, *“Well, I went to probably two camping trips and I liked them, we did a lot of fun things, and I experienced things that I didn’t do before, so that was good. And I hadn’t camped before, so that was my first time. Yeah, I’m not like an outdoors person, but that time that we went I liked it.”* Even though this student does not consider herself to be an “outdoors person,” she still enjoys and appreciates spending time in natural environments.

E. Do students like nature in a city?

Natural features, such as wildlife, parks, and trees are important to students’ appreciation and use of physical environments. The survey question, “Do you spend time at any parks near where you live?,” led over half of respondents (53%) to state that they did indeed use local parks. (The top two reasons of why students who replied, “No,” to the above question were a lack of time (38%) and the fact that there were no parks near where

they lived (25%). That 53 percent cited the most common reason of their use of local parks as, “I like spending time outside,” with 55% percent of this group giving this response, affirms the first theme of use of the outdoor environment. A focus group participant, Valeria, responds to the question of, “What descriptions and thoughts come to mind when you think of the physical environment where you live?,” with a quick affirmation of her appreciation for the local park of Roger Williams Park. She explains, “*The park’s right near, so there’s a lot of trees...there’s like mad trees and flowers...it’s real cleaner than where I used to live...I like the park, I think they organize it good, it’s more organized, it’s cleaner the pond where the ducks are, you never used to see the ducks, but now the ducks are there because the pond is more clean.*” A similar level of appreciation for trees was supported in the other focus groups. When asked to describe the physical environment around them, half of the participants mentioned the presence of trees. Moreover, trees in a city are considered a valuable asset to local environments. In discussing images of different local environments, such a conversation spontaneously began in one focus group:

Clark: “I think it’s more peaceful, if it’s with a bunch of your friends, to hang out in a place that’s wooded, like more trees and everything, no there’s something about trees that makes places a lot more comfortable...”

Jim: “Where I used to live, just to see a tree, one tree, you’d have to walk like two

Me: “Is that something you guys agree on, that trees are

Jim: “Yeah, trees are really important to the neighborhood...”

Alexis: “They bring shade...”

Jim: “It makes a place look better...”

Matt: “See when people do those tree plantings on the sidewalk, it never works, because

This excerpt illustrates the importance of such natural aspects in students’ lives.

F. Do human impacts affect appreciation of place?

The above excerpt hints at another factor in appreciation and use of physical environments – the effects of **people** on a place. Matt makes this point when he realizes the value of trees, but also highlights the need for them to be taken care of by people. A similar attitude can be seen in the discussion of the Providence river in the second focus group. When shown an image of the river,



participants had the following discussion:

Celia: "That water is nasty..."

Andy: "It's disgusting..."

Sally: "If it were clean, I'd spend some time there..."

Jim: "The place can actually look nice if people take care of it..."

Bob: "I got in a canoe one time and rode up the river. There were rats swimming across, real nasty, just trash everywhere..."

This excerpt provides a strong example of the realization by students of the effects of human activity on both appreciation AND use of physical environments, especially natural environments within a city. In some cases, the effects of human activity have come to completely dominate student perceptions of seemingly-attractive physical environments. One

focus group participant, Kelly offers a personal example of her neighborhood when she explains,

“When you first go, it looks like, oh, this is a nice neighborhood, but when you actually live in it, it’s weird because it’s not...there’s a lot of drunk people and old people, they walk around, and kids cannot play there because it’s dangerous...and you know, in the front, you have a lawn, and sometimes there’s like a little tree – people throw their garbage there, and it’s all messed up, and they don’t take care, and it looks ugly. When you first go through it, you’re like, ‘Wow, this neighborhood’s nice,’ but when you live in it and you see what happens in it, it’s disgusting.”

Kelly’s example of the deceptive nature of and the result of human neglect on her neighborhood does not stand alone. Another example occurred when students were shown a photograph of a more natural environment.



In examining this photograph, both groups recognized it as Lincoln Woods, and commented on their interactions with that physical environment. Jim, a participant in one group, states,

“Lincoln Woods is also a place which is really polluted...The water got so nasty...it got really, really disgusting.” Kelly, a participant in another group mentioned above, says, “See,

that looks nice, but I wouldn't want to swim there...that water is dirty." In this case, the natural aspects of the physical environment are overshadowed by the human neglect of such an area.

Evidence of the power of human impact on place is given with Sally's comment that, *"If it (the river) were clean, I'd spend more time there."* Further evidence of this attitude is given by Bob, who writes that, *"My neighborhood is kind of messy and dangerous...I pretty much consider the whole city my neighborhood, I don't spend too much time in that portion of it."* Jim, a participant in the same group, voices a similar opinion when shown the photograph of a dirty neighborhood street.



He declares, *"I lived for a long time in a place like that, but I never spent time there...I'd only go there to eat and sleep."* It must be acknowledged that issues of crime and safety play a role in student interaction with physical environments. However, due to the fact that the theme

of cleanliness arises in all three of these statements, it is clear that the human disregard for the natural physical environment is affecting some students' appreciation and use of their local environments. Further studies should be conducted to determine the extent to which such human neglect can influence students' interactions with the physical environment.

II. Student perceptions of environmental issues

A. A. Awareness of and Interest in Environmental Issues

I will now examine students' attitudes on and perceptions of *specific environmental issues* in order to gain a complete perspective of the relationship of these students to their environments.

1. How aware are students of environmental issues?

It became clear from the focus groups that a number of students were not aware of certain environmental issues in Providence. When asked if they were familiar with the environmental issue of vacant lots, all participants in two of the three focus groups shook their heads in denial. One student, Bill, asked, “*What about vacant lots?*”. Vacant lots were not the only issue of which students were unaware, though. Focus group participants were given a list of ten environmental issues in Providence (air pollution, vacant lots, water pollution, open space & green space, transportation, soil pollution, environmental justice & racism, brownfields, noise pollution, and other), and were asked which issues were familiar. Students responded that they were unaware of a number of these issues, namely open space, environmental justice,

- *“What is open space and green space?”*

Mentor perception of student awareness of environmental issues through OLEEP varied, although all respondents felt that Met students were given at least a basic knowledge of environmental issues in the program. When asked if her mentee was learning about environmental issues in OLEEP, Jane, a **mentor**, responded, *“Yeah, he’s becoming aware of different issues that are out there.”* Another mentor, Bob, asserted, *“I definitely think that, in the program, she learns about environmental issues, she becomes more aware of them.”* In this sense, **mentors** viewed OLEEP as a means of introducing environmental issues to Met students.

2. Are students concerned about environmental issues?

A number of students in the focus groups and mentee interviews expressed a level of concern for issues affecting their physical environments. In discussing levels of interest in

This sentiment was affirmed by other members in the group.

Given the findings of a lack of awareness, a concern, and an interest in relevancy, of environmental issues, it will now be appropriate to examine student perceptions of *learning* about environmental issues.

B. Learning about Environmental Issues

1. Do students like to learn in ways that will connect to their lives?

Just as relevance was a factor in student interest in environmental issues, students indicated that they would like to *learn* about environmental issues in ways that are relevant to their lives. When given the task of planning an OLEEP workshop around an environmental issue, Clark, a focus group participant, gave the example of, “*Find out if you can get like a measure of how much pollution is in, say, one square mile in Providence, and then tell people how it affects them.*” A participant in a different focus group, Jennifer, said concerning

I just think finding how it affects me on a daily basis, so it hits home.”

A mentee in the program, Bob, said of the workshops, “*Some of them I can get into, ones that relate to the city, ones that are practical.*”

A need for relevance in student learning about environmental issues was expressed by OLEEP **mentors** as well. Jim, one such **mentor**, when asked what part of the program he feels his mentee enjoys the most, replied, “*I think he likes it when he feels likes something is relevant to him.*” Danielle, another **mentor**, mentions the issue of relevance when talking about the learning experience of her mentee, saying, “*I know the lead (paint workshop) went over really well because it was directly relevant – if we could grab more issues that are directly relevant to the urban environment, so if we did stuff like localized water pollution and that kind of stuff, like what’s the deal with these Providence rivers and why is there*

so much stuff in them, and why do we care – I think that’s something that should be a primary question in all of our environmental lesson plans – why do we care?”. In discussing the same workshop, another **mentor**, Thomas, mentions his beliefs on making workshops relevant, stating:

“He’s (my mentee) not going to forget about it (the lead workshop)...they (the mentees) know that lead poisoning is a really big problem, they’ve had relatives and friends be affected by it. When you’re addressing the issue, they’re going to listen up, they’re going to see how they can make a difference – the one example that sticks in my mind, when we were doing the lead poisoning workshop, there were a couple of comments, one was, ‘Oh, I just saw a big bulletin on the bus today,’ and there was another kid who didn’t realize that the landlord had to fix that problem, that it was part of the law in Rhode Island – so even if it’s just increasing their awareness to what it actually is and to what they can do, it’s good that it pertains to them.

2. Do students like to learn experientially?

In addition to learning about environmental issues that are relevant, students indicated a desire to learn through experience. Nine of the eleven mentees mentioned the words “hands-on” in their interviews as a way in which they would like to learn. Examples of this include when John said that the teaching methods which worked well for him in OLEEP were, “*a little more general, like hands-on stuff, that’s the way I learn well with everything, as long as my hands are involved, because it’s the best way to stay focused,*” or when Christine replied on the same topic, “*The interactive ones (teaching methods), instead of ones where you just have to sit there and listen to somebody speak...or working all together, using our hands to do something.*” When asked to state their favorite workshop of the past year, seven of the eleven interviewees mentioned the same workshop – an experiential workshop in which they found old scraps of paper and other types of “trash,” and used these items to actually make new paper. One mentee, Bob, explained his appreciation of this

workshop in saying, *“It was more hands-on, and we picked up trash, put it in a blender, and actually made something out of it.”* Another mentee, Danielle, says of that workshop, *“Oh, I remember the one where we made paper, I liked that one – it was actually doing things, we weren’t just sitting there.”*

Mentees were not the only ones to raise the issue of learning through doing – this idea arose in the focus groups as well. In discussing the planning of a workshop, Alexis stated, *“I think it should be hands-on.”* John, also a focus group participant, said that students should

“Vacant lots, because you can actually do something about that.” Another focus group conversation, concerning the same activity, was such:

Clark: “It should involve getting them outside...”

Matt: “I agree, giving them real experience outside...”

This student interest in experiential learning was supported in **mentor** comments. An example of this is seen in Scott’s comment that, *“I think if we did a project that was more hands-on, work related, then that would lead to a greater leadership role for each of the students.”* Learning about environmental issues in a hands-on way was echoed by other **mentors** as well.

3. Do students like to learn by involving the community?

Students expressed a desire to learn about environmental issues through community involvement. A mentee comment which expresses this desire is Michelle’s statement that, *“If I was going to teach a workshop, I guess community service, we’ve been talking a lot about green spaces and polluted areas and justice a lot, so I guess not talking about it and actually bringing them somewhere where they want it to be clean and then clean it up.”* A focus group participant, Celia, in attempting to plan an OLEEP workshop, states, *“You*

shouldn't have a class, but a meeting, talk about what's been going on in the last couple of years, talk about why we need to take care of it (water)...and then they can do community service...something so that they're aware of it and they'll take it into their own hands." Both of these comments focus on the integration of community service into learning about environmental issues. A third example of support for community involvement is found in the comments of Ellen, a **mentor**, who says, *"I think OLEEP should do something that's a little more long term, which would be a better opportunity for leadership, like having them (mentees) design environmental projects that mattered to their local community over a longer period of time."* This opportunity for community involvement combines with the first two findings, as it would be of relevance to students, and would offer experiential learning opportunities.

Discussion

Based on this study, it has been shown that students:

- spend time outside and participate in a variety of outdoor activities
- do not always have access to more natural environments
- exhibit cultural narratives which stereotype urban and natural environments
- appreciate natural elements in an urban setting
- recognize the effects of human impact on a physical environment

A majority of students not only spend at least two hours outside each day, but also like to do things outside, such as spend time in parks. In addition, students appreciate elements of nature, like these parks, in an urban environment. However, there are barriers which are preventing students from feeling more connected to their environments. As evidenced in the case of the Providence river, students realize that elements of their environments are being damaged by humans. Appreciation for natural elements within an urban environment collides with the impact of people on the appreciation and use of this environment. This collision is also witnessed in the case of the Providence river, as students did not fully appreciate the area because of the human impact on it.

Learning that students indeed appreciate elements of nature in urban environments, but may be prevented from a true appreciation by perception of human impact, one can relate this to what else was learned about OLEEP students, that:

- many students are not aware of certain specific urban environmental issues
- students have a concern for issues affecting their physical environment

- students are interested in environmental issues relevant to their lives

I would like to suggest that a lack of awareness of certain environmental issues worsens the fact that human impacts are affecting student appreciation and use of environments. If students are not aware of the ways in which their environments are being damaged, how can they possibly seek to reverse this damage and become more connected to those environments? Certainly, more research should be conducted to see whether student knowledge of specific environmental issues may play a role in student connection to place. Luckily, it is clear that students are interested in knowing about environmental issues which affect them, and which are particularly relevant to their lives. As evidenced by the numerous creative student examples of learning about environmental issues, many students want to transform their local environments.

This is where a program such as OLEEP contributes, in offering students the ability to learn about the environmental issues affecting their lives, so as to develop more of a stake in the environments in which they live. In addition to determining student levels of awareness and appreciation of local environments and environmental issues, one of my main research goals was to understand *how* OLEEP can increase these levels. One way in which OLEEP can increase awareness and appreciation is by offering students the ability to transform neglected local environments. In empowering this transformation, OLEEP can offer students the opportunity to truly interact with their environments. Given the knowledge that students:

- want to *learn* about environmental issues of relevance
- seek to learn through action
- are interested in community involvement,

OLEEP has the potential to truly **involve** its students in a collaborative learning process.

In focusing on local environmental issues which students can not only act on, but in which they can involve the community, OLEEP can offer the students a personal stake in their own education. Furthermore, by making students more aware of local environmental issues and by taking action on them, the program comes to avoid the paradox trap into which so many other programs have fallen: the “beautiful country versus the decaying city.”

Through the implementation of a semester-long **environmental action project**, students would be given the tools to beautify their own communities rather than to hopelessly persist in the belief that the urban environment is beyond repair. In the next chapter, mentors in the OLEEP program will be given an introduction to the planning of such a project, through the example of vacant lots.

Why Vacant Lots?

I have selected the example of vacant lots as an environmental action project for a number of reasons. Firstly, it is an important environmental issue which involves much of the Providence population – currently, there are over 2,000 privately owned lots throughout the city.²⁰ These neglected parcels of land, and the environmental problems associated with them, play an important role in the physical urban environment. Subsequently, they have the power to play a strong role in perception of this environment. Related to this first reason is the fact that vacant lots are relevant to students’ lives, as evidenced by a student’s previously mentioned remarks on growing up and playing in these lots. Thirdly, vacant lots were an issue of which some students were unaware, and thus such a project can increase student awareness of this

²⁰ Ana Baptista, “Strategies for the Equitable Redevelopment of Vacant Lots in Providence, RI,” Center for Environmental Studies, Brown University, 2000.

environmental issue. In addition, vacant lots are an important aspect of the physical environment and have immediate connections to soil and water pollution, issues for which students expressed concern. Also, the transformation of a vacant lot is a great case in experiential learning, a method for which students expressed vast support. Moreover, action taken on a vacant lot has the potential for community service and involvement from additional members of the community. Even more importantly, the vacant lot example is a perfect case of the mission of OLEEP, to make connections between environments. Rather than disconnecting themselves from the urban environment, students can understand the importance of the natural environment in **all** settings through the vacant lot example.

One final reason for which a vacant lot action project provides a good example is that there is *student interest* in the issue. Vacant lots received the second highest ranking of environmental issues which would be liked to learn among focus group participants, only behind air pollution. Students would like to learn about this issue, as shown by the previously mentioned words of a mentee in OLEEP, who stated that she would like to learn about, “*Vacant lots, because you can actually do something about that.*”

The implementation of an environmental action project, and the possibility of vacant lot transformation as such a project, follow the important educational model of ARCPS, or Action Research Community Problem Solving. The goals of this educational model are:

- “To involve students in the planning of their own education, and, as a result, shift more responsibility for education to the students themselves
- To place education in a meaningful context for students
- To provide students with opportunities to apply acquired knowledge in improving a local problem that they themselves have identified and recognized to be important

- To develop skills needed in environmental problem-solving, including working in groups; gathering, analyzing, synthesizing, and interpreting information; clarifying norms and values; designing, implementing, and evaluating a plan of action; and joint critical decision-making
- To identify and utilize sources of information within the school's own surroundings for educational purposes
- To link disciplines through focusing on a real-world issue
- To substitute feelings of apathy and powerlessness with the feeling that one, be it as an individual or in a group, can indeed make a difference."²¹

The educational validity of such an environmental action project is clear. In addition, it offers answers to the central question of how student perception can be used to design curricula for and advance the mission of OLEEP. It will now be useful to discuss the *information* OLEEP mentors will need to successfully carry out an environmental action project, through the example of vacant lots, in order to foster an increased awareness and appreciation of local environments among Met students.

²¹ Wals and Stapp 1989, p. 238, in Wals, Beringer, and Stapp, "Education in Action: A Community Problem-Solving Program for Schools," *Journal of Environmental Education* (Madison, WI) 1990, Vol. 21, No. 4, p. 15.

Information Packet

This information packet on how to carry out an environmental action project for vacant lots in

Providence consists of the following:

1. a list of **curriculum questions** based on research findings
2. an **introduction** to the **vacant lot** situation in Providence, with useful websites
3. a list of possible **student exploration projects** about vacant lots, aligned with Met learning goals
4. a list of **resources** in the city that would be helpful to vacant lot projects, with an explanation of the role each resource could play, and relevant contact information

Part 1: Curriculum questions

Below is a list of questions that mentors should attempt to answer when conducting activities centered around the environmental action project. This list was developed based on the findings that arose from my research. Certainly, it will be difficult for a single activity to satisfy all of these goals, but efforts should be made to complete as many as possible.

- Will the activity conducted allow students to make connections between natural and urban environments? How?
- Will the activity advocate the idea that the urban environment can be transformed? How?
- Will the activity involve elements of nature in an urban setting? In what way(s)?
- How will the activity attempt to break down negative stereotypes of urban vs. natural environments?
- Will the activity give students an opportunity to spend time outside?
- How will the activity explain the effects of humans on surrounding environments? How will the activity offer solutions to change and/or reverse these effects?
- Will the activity increase awareness of urban environmental issues? How?

- Will the activity offer an opportunity for students to take *action* on urban environmental issues in the future? In what ways?
- Will the activity address an issue that is relevant to the students' lives?
- How will the activity enable students to use their hands, and *do* things rather than passively listening? How will the activity engage the students?
- How will the activity involve participation by the Met and greater Providence community?
- Will the activity allow each student to pursue his or her own educational interests? How?
- How will the activity give students the opportunity to become leaders?
- How will the activity be made fun and enjoyable?

Part 2: Vacant Lot Basic Information

In the case of educating about vacant lots or other environmental issues, a certain background is necessary. Here is a brief introduction to the state of vacant lots in Providence.

What is a vacant lot and how does it relate to the Providence environment?

A vacant lot is neglected piece of property with no buildings on it. Vacant lots are problematic in any situation because they can contain: illegal dumping and solid waste, hazardous waste contamination such as lead, cadmium, arsenic and asbestos, rats, unsafe conditions for children who choose to play there, and crime. In addition, vacant lots are visually unpleasant wasted resources on the urban landscape, they destroy a sense of community, and they lower neighborhood property values.²² Vacant lots are a particular problem in Providence because there are over 2,000 neglected vacant lots, and they are disproportionately distributed throughout the city, which connects to issues of environmental justice, as the majority of lots are located in the city's poorer neighborhoods. In addition, a resident may buy a lot, and then relocate, which will result in the considerable buildup of unpaid taxes on the lot. Upon foreclosure of the property, the city will hold tax sales, but, in many cases, the expense of the accumulated taxes will leave properties undesirable, and the lots will never be bought.

What is the city of Providence doing to abate the vacant lot problem?

The city of Providence, since the 1997 Vacant Land Task Force Report, has taken some steps to abate the neglect of vacant lots in Providence. Firstly, the **Tax Sale Realty Law** has enabled the Providence Redevelopment Agency (the intermediary organization which

²² Ana Baptista, "How can vacant lots be used to strengthen neighborhoods?," Senior Thesis, Center for Environmental Studies, Providence, RI, May 2000.

can transfer lots to residents) to pick selective properties and use them for neighborhood development. The PRA has a program called the “**\$1/Vacant Lot**” Program, by which adjacent landowners, non-profits, and community residents can purchase a lot for a dollar. *(The necessary steps to complete this program are detailed in Appendix 5).* In addition to transferring lots to residents, the city has also taken steps to punish those who do not clean their lots. The **Default Law** enabled the Environmental Court to fine offenders who have been ordered to go to court, but who have failed to appear. Also, the **Super Lien Law** established a “**Clean and Lien**” program. This program allows the DPW to clean up a lot if an owner does not respond to a violation within 3 days. The owner will also have to pay a lien, which is a sum of money that is owed on a property and that must be paid back before the property can be sold.²³ These disincentives attempt to save existing lots from becoming neglected.

Overall, the city’s attempts to control the vacant lot problem in Providence have lacked organization. There is no one group within the city which oversees the citywide upkeep and transformation of the lots, and sufficient funding is not often given to existing programs.

Why should someone transform a vacant lot, and how could OLEEP be involved in this process?

There are many benefits of transforming a vacant lot, and some of the possibilities include: maintained side yards, community gardens, parks, playgrounds, off-street parking, new housing, and new businesses.²⁴ OLEEP has a very strong potential as an environmental

²³ Ibid.

²⁴ Ibid.

education program to explore the city's relationship to vacant lots, and to involve students in acting to transform one or more of these lots.

If the program seeks to transform a lot near the new Met campus on the South Side of the city, which has many adjacent lots, sufficient time must be given to ensure the purchase of the lot through the PRA. In addition, the heads of OLEEP and the MET School must convince the Providence Planning Department that they will maintain the appearance of the lot. This will require thoughtful coordination between OLEEP and the Met. In addition, the program must have selected a specific lot. A list of available lots can be obtained through DARE, or the Direct Action for Rights and Equality Organization (mentioned later in this chapter).

Another option is to obtain a plat/lot map from the upstairs library of the Center for Environmental Studies, and to use that map to find the address of a specific lot. Attempts should be made to find a lot without evidence of a foundation, as it will take more time to remove a lot with remnants of a property. *(An example of a plat/lot map, of the new Met campus area, with highlighted vacant lots, can be seen in Appendix 6).* With the lot number and the exact address, it is possible to go to the Tax Assessor's Office and determine if the lot is owned, and who the owner is. In going to the Tax Assessor's Office, one should make sure that the lot is **city-owned**, that the title is "clean," and that there is a limited amount of back-taxes. All this will speed up the approval of the application for a lot. From there, one should set up an appointment with the Planning Department (NOT the PRA, as contacts at the Planning Department will make the purchase of a lot much more quick and effective), and fill out an application for the \$1/lot program. After the application is filed, it will take anywhere from 4-6 months to receive the lot, and it will help to be persistent with the Planning Department

throughout this process. If any questions arise during this process, it is best to contact Ana Baptista at the DEM (contact information is given later in this chapter).

In the case that the program would like to transform but not purchase a lot, it could attempt to encourage a current owner of a neglected lot to let it clean the lot, or could encourage an adjacent landowner to apply for the \$1/lot program, and again, let the OLEEP program transform the lot. In addition to the direct purchase and transformation of a lot, there are many diverse opportunities for students to learn and act on the subject of vacant lots, which will subsequently be examined.

Additional Resources

If you would like to learn more about vacant lots, these **websites** may be helpful:

1. http://www.brown.edu/Research/EnvStudies_Theses/Summit/Briefing_Papers/Vacant_Lots/. Former Brown student Ana Baptista's document provides an excellent introduction to the issue of vacant lots in Providence.
2. <http://envstudies.brown.edu/Dept/thesis/ugrad9798/athomas.html>. Former Brown student Anna Thomas's 1998 thesis abstract explaining problems with vacant lots in Providence.
3. <http://www.openlands.org/urbangreening.asp?pgid=108>. The Chicago-based Openlands Project's step-by-step guidelines on how to turn a vacant lot into a community garden.

4. <http://www.epa.gov/region01/pr/files/092398a.html>. An EPA press release on coordination between the mayor's office and USEPA to test vacant lots for lead sampling.

Part 3: Potential Areas of Student Exploration of Vacant Lots

Below is a list of some different activities for possible OLEEP student involvement related to the environmental issue of vacant lots. For each option, a list of possible tasks associated with the activity will be given, and this will be correlated with the five learning goals of the Met – empirical reasoning, quantitative reasoning, communication, social reasoning, and personal qualities. (*For a complete explanation of the Met learning goals, see Appendix 7*). These options are only an introduction to available areas of participation, and the ways in which they can connect to the learning goals.

- **The planning of the physical cleanup of a vacant lot.**
 1. Estimating how much manpower, tools, and money will be needed to clean the lot. (Empirical reasoning).
 2. Measuring the area of the lot, and attempting to determine the amount of monthly waste that the lot accumulates. (Quantitative reasoning).
 3. Communicating with the Met School and the community to determine how the lot can be cleaned. (Communication).
 4. Determining who will benefit from the cleanup. (Social reasoning).
 5. Working cooperatively with others to clean the lot. (Personal qualities).

- **Soil testing for lead and other potential toxic substances.**
 1. Proposing a hypothesis about what substances may be in the soil, and then testing the hypothesis. (Empirical).
 2. Using numerical data to evaluate the hypothesis. (Quantitative).
 3. Listening to the expert discuss the results. (Communication).
 4. Figuring out how the results affect the community. (Social).
 5. Determining how to play more of a leadership role in this issue. (Personal).

- **Examining the legal history and current problems with vacant lots.**
 1. Studying research of the legal history of lots, and proposing a hypothesis about how this history affects the current situation of lots. (Empirical).
 2. Learning how to use plat/lot maps and addresses to find out about the ownership of vacant lots. (Quantitative).
 3. Writing to an audience about the history information learned. (Communication).
 4. Finding out what social systems have been implemented to deal with the issue of vacant lots. (Social).
 5. Organizing the range of information that is obtained. (Personal).

- **Designing and producing an art project at a lot.**

1. Testing to see if trash from a vacant lot can be used as a social and artistic statement at a vacant lot. (Empirical).
 2. Measuring the shape and structure of the lot and the materials inside of it to determine the type of artwork to be produced. (Quantitative).
 3. Determining the main idea to be expressed to the audience through the artwork. (Communicative).
 4. Examining the ethical questions around vacant lots and including those in the artwork goals. (Social).
 5. Increasing self-awareness through the art. (Personal).
- **Writing prose/poetry about the human impacts of vacant lots and their effects on communities.**
 1. Creating a list of beliefs about community attitudes toward vacant lot, and then examining the accuracy of those beliefs through talking to community members. (Empirical).
 2. Representing one's beliefs about community attitudes, combined with actual attitudes, as a diagram or table. (Quantitative).
 3. Talking to community members and writing prose/poetry. (Communication).
 4. Using community attitudes in the writing of prose/poetry. (Social).
 5. Increasing self-awareness. (Personal).
 - **Examining the relationship between environmental justice and vacant lots.**
 1. Developing and testing an idea about how many lots there are in different areas of the city. (Empirical).
 2. Examining maps and calculating numbers of lots in different areas. (Quantitative).
 3. Creating an advocacy campaign, and spreading the results throughout the community. (Communication).
 4. Examining the effects of the number of lots on the communities. (Social).
 5. Demonstrating respect for the communities involved. (Personal).
 - **Planting plants for a garden in a vacant lot.**
 1. Testing which plants will grow well in a Providence climate. (Empirical).
 2. Interpreting the growth of different plants graphically. (Quantitative).
 3. Talking to local gardeners about local plants and growth strategies. (Communication).
 4. Examining how residents view community gardens. (Social).
 5. Developing a good trial-and-error method to grow healthy plants. (Personal).

- **Developing and implementing a communications campaign to increase local awareness of this environmental issue.**
 1. Creating a hypothesis about how much residents know about vacant lots. (Empirical).
 2. Estimating the amount of money needed to communicate to residents about vacant lots. (Quantitative).
 3. Developing communication products to inform the community. (Communication).
 4. Reviewing existing non-profit community organizations' communications. (Social).
 5. Learning to communicate honestly to others about the issue. (Personal).

- **Educating students in lower-level schools about the issue of vacant lots.**
 1. Generating information to teach, and assessing how accurate the information is and whether the students are retaining the information. (Empirical).
 2. Finding numerical information to teach students about vacant lots. (Quantitative).
 3. Learning how to speak to younger students in a classroom. (Communication).
 4. Demonstrating to students how vacant lots affect them. (Social).
 5. Managing time well in order to get lessons across in the amount of time expected. (Personal).

- **Contacting local beautification organizations in the hopes of collaborating with their efforts.**
 1. Finding information from such organizations on what they do, and proposing an idea for how their mission can connect to vacant lots. (Empirical).
 2. Finding trends in the actions of beautification organizations. (Quantitative).
 3. Contacting organizations, and expressing beliefs on why they should help with a vacant lot project. (Communication).
 4. Determining the benefits of this collaboration for the organizations. (Social).
 5. Trying to enhance the community through beautification. (Personal).

- **Conducting a campaign to increase political action on the transformation of vacant lots.**
 1. Drawing conclusions from research done on why the city does or does not help in cleaning vacant lots. (Empirical).
 2. Collecting numerical data from the city on how many lots they clean, how much it costs, etc...(Quantitative).

3. Contacting political officials with a plan to get the city more involved in cleaning lots. (Communication).
 4. Explaining to political officials why residents feel the city needs to take action. (Personal).
 5. Taking on a leadership role in trying to effect community change. (Personal).
- **Researching the transformation of vacant lots in other cities.**
 1. Developing a hypothesis about Providence's vacant lot relations compared with other cities. (Empirical).
 2. Researching numbers of vacant lots in other cities. (Quantitative).
 3. Communicating with other cities' political agencies to find out why they have many or few vacant lots. (Communication).
 4. Finding the social systems which exist in other cities to deal with vacant lots. (Social).
 5. Organizing the different data from a number of cities across the country. (Personal).
 - **Developing strategies to raise money for the redevelopment of a lot.**
 1. Collecting information on the costs involved in redeveloping a lot, and developing an estimate of the cost. (Empirical and Quantitative).
 2. Expressing the costs to a community audience in an understandable manner. (Communication).
 3. Examining how different social systems could aid in the raising of money. (Social).
 4. Working cooperatively with community groups and members to raise money. (Personal).
 - **The scheduling and implementation of community events designed around or at vacant lots.**
 1. Examining research done on how to successfully organize community events, and determining how to present the end results. (Empirical).
 2. Making predictions about the number of people attending a community event, and how that will affect the costs involved. (Quantitative).
 3. Working with different community groups to advertise the event planned. (Communication).
 4. Finding out who will benefit the most from such an event, and finding ways to make it important to them. (Social).
 5. Being responsible for organizing a community event. (Personal).

Part 4: Community Resources for a Vacant Lot Environmental Action Project

Below is a list of resources to aid the implementation of this project. Again, these resources are only the beginning of community participation prospects. Some organizations which may be of use in the future which are not mentioned here in detail are the Parks and Public Works Department, the OMNI Corporation, SWAP (Stop Wasting Abandoned Properties), and the Woonasquatucket River Greenway Project.

For each entity, a description is given of who it is, how it can contribute to the project, and how it can be contacted.

- **Brown University Center for Environmental Studies.**

Who: Professor Caroline Karp has done much research on the issue of vacant lots in

Providence, and can provide helpful leads on the risks and benefits of such a project. Ana

Baptista '00 and Anna Thomas '98 have written theses on the Providence vacant lot system.

Baptista's thesis provides a great introduction to the complexities of the city's relation to vacant

lots. Thomas's work provides maps of distribution of vacant lots throughout the city. In

addition, Dave Murray in the environmental science department does water and soil quality

testing, and can facilitate student involvement in soil testing vacant lots for lead.

How: The resources here are invaluable on a number of levels, from basic information, to environmental justice connections (with Thomas's maps), to actual testing of vacant lot soil.

Contact Info: Caroline Karp has an office in the UEL and Dave Murray has an office in

MacMillan – both can be contacted by email as well. To read Baptista's or Thomas's theses,

ask Patti Caton in the UEL for the key to the thesis cabinet, where you will find the theses.

Baptista has created a web thesis, so hers is on a CD in the cabinet.

- **CleanScape.**

Who: CleanScape is mainly a recycling organization started by the South Providence Development Corporation. However, it also cleans roughly 20 vacant lots a year based on the city budget.

How: If a lot is purchased through the \$1/lot program, then CleanScape can grade and clean the lot. However, they may need to be paid for the cleanup they do, as they are moving into the for-profit sector.

Contact Info: email – info@cleanscape.com. address – 150 Colfax St. phone – (401) 461-1766 (ask for Jeremy Knapp).

- **DARE (Direct Action for Rights and Equality).**

Who: DARE is a Providence community organization hoping to “organize low income families in communities of color to win economic, social, and political justice.”²⁵

How: Has a Land Reform Project which transforms vacant lots, so there is potential to partner with them, seek advice, or research the connection to environmental justice. May also have a list of available vacant lots in the area.

Contact Info: email -- DARE@ids.net. address – 340 Lockwood St. phone – (401) 351-6960 (ask for Patti Horton).

- **DEM (Department of Environmental Management).**

Who: The DEM is the state regulating environmental agency.

How: This organization may be able to provide technical assistance on evaluating vacant lot sites, or may be able to help with some of the administrative logistical issues. Ana Baptista,

²⁵ DARE, <http://www.providence.edu/polisci/projects/dare/welcome.htm>. Accessed Nov. 1, 2001.

who, as mentioned above, wrote her thesis on vacant lots, now works for the DEM and is more than willing to offer suggestions, assistance, and information on different aspects of the project. She is *the first* person who should be contacted, as she can simply explain the steps that OLEEP should go through in acquiring a lot. In addition, DEM has the potential to provide such opportunities as employees from the Hazardous Waste division discussing the protocol for soil sampling, or urban foresters within the organization giving seeds to grow and discussing how to grow certain plants.

Contact Info: email – abaptist@dem.state.ri.us. address – 235 Promenade St. phone – (401) 222-6800, ext. 4440.

- **Environmental Lead Action Project.**

Who: This organization works with families with lead-poisoned children, and examines environmental factors in lead poisoning.

How: This group has a list of places that will do soil sampling for \$8-\$12 a sample. In addition, it has many educational pamphlets on the dangers of lead, and has offered to put an informational packet which could be of use to the group.

Contact Info: address – 3 Capitol Hill, Room 206. phone – (401) 222-7740 (ask for Rosemary).

- **Groundwork Providence.**

Who: This is a non-profit beautification agency in Providence.

How: There are two ways in which Groundwork Providence can assist this project. First, it has an education outreach staff member who works with high school students to train them to teach in lower level after-school programs, so there is potential to facilitate a teaching connection.

Secondly, it organizes seasonal cleanups in Providence, so the project could gain contact information, advertising and community outreach information, and physical tools from them. One particular option would be to coordinate the cleaning of a lot with one of their seasonal community cleanups.

Contact Info: email -- keli@groundworkprovidence.org (Keli Yeats, Education Coordinator), and adamboretz@hotmail.com (Adam Boretz, contact person for other connections). address – 69 Washington St. phone – (401) 351-6440.

- **The Providence Plan.**

Who: This organization states that its mission is, “to restore hope and create new opportunity for the people of Providence through a comprehensive initiative designed to address the fundamental causes of poverty and urban decline.”²⁶

How: The Plan is creating a GIS database of vacant lot maps of the city, and there is potential for students to learn about the use of technology in solving the vacant lot problem in Providence.

Contact Info: email – info@providenceplan.org. address – 56 Pine Street, 3rd floor. phone – (401) 455-8880 (ask for Jim Lucht).

- **Providence Redevelopment Agency.**

Who: The PRA authorizes the purchase and transformation of vacant lots in the city. **How:**

The PRA offers a \$1/lot program, which means that unowned vacant lots can be purchased for \$1 by adjacent land owners, non-profits, or community residents. This is *the* organization that one must go through in transforming a vacant lot.

²⁶ The Providence Plan, <http://www.provplan.org>. Accessed Nov. 23, 2001.

Contact Info: email – planning@providenceri.com. address – 400 Westminster St. phone – (401) 351-4300 extension 511 (ask for William Flouriani).

- **South Side Community Land Trust.**

Who: The SCLT is a community garden based in the South Side of Providence.

How: There are three ways in which the project could connect with the SCLT. Firstly, the Environmental Education Coordinator could use high school and college age facilitators to lead activities for visiting school groups. Secondly, the Garden Coordinator and the City Farm Garden Manager would appreciate assistance with garden cleanups, work days, and planting. This could offer a useful introduction to the physical labor involved in creating and maintaining a garden.

Contact Info: email – SCLT@ids.net. address – 109 Somerset St. phone – (401) 273-9419.

WORKS CITED

B. Books

- Coates, Peter. Nature. Berkeley: University of California Press, 1998. pp. 1-23.
- Cronon, William. "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in Uncommon Ground, William Cronon, ed. New York: W.W. Norton, 1996. pp. 69-90.
- Ewert, Alan W., Chavez, Deborah J., & Magill, Arthur W., eds. Culture, Conflict, and Communication in the Wildland-Urban Interface. Boulder: Westview Press, 1993. pp. 3-17, 33-69, 109-119, 147-161, 209-221, 375-389.
- Fetterman, David M. Ethnography. Thousand Oaks, Ca.: Sage Publications, 1998. pp. 1-110.
- Freire, Paulo. Pedagogy of the Opressed. New York: Continuum Publishing Co., 1997. pp. 42-85.
- Greenbaum, Thomas L. Moderating Focus Groups. Thousand Oaks, Ca.: Sage Publications, 2000. pp. 1-49, 85-101, 125-175, 182-184.
- Harmin, Merrill. Inspiring Active Learning. Alexandria, Va.: Association for Supervision and Curriculum Development Publications, 1994. pp. 1-130, 161-181.
- Horwood, Beth. Experiential Education in High School. Association for Experiential Education, 1987. pp. 1-50.
- Kerjean, Alain. Hors Limites. Paris: Editions Albin Michel, 1990. pp. 1-150. (French).
- Korn, Claire V. Alternative American Schools. Albany, NY: State University of N.Y. Press, 1991. pp. 35-80.
- Krueger, Richard A. Focus Groups. Thousand Oaks, Ca.: Sage Publications, 1994. pp. 1-183.
- Levine, Eliot. One Kid at a Time: Big Lessons from a Small School. New York: Teachers College Press, 2002. pp. 1-162.
- Lofland, John, & Lofland, Lyn H. Analyzing Social Settings. Belmont, Ca.: Wadsworth Publishing Company, 1995. pp. 9-203.

Miner, Joshua L., & Boldt, Joe. Outward Bound U.S.A. New York: William Morrow & Company, Inc., 1981. pp. 9-35, 139-147, 264-276, 319-322.

Nagel, Nancy G. Learning Through Real-World Problem Solving. Thousand Oaks, Ca.: Corwin Press, Inc., 1996. pp. 16-75.

Nash, Roderick. The Nervous Generation: American Thought, 1917-1930. Chicago: Rand McNally College Publishing Company, 1970. pp. 80-90.

Schmitt, Peter J. Back to Nature. New York: Oxford University Press, 1969. pp. 1-175.

Shanahan, James & McComas, Katherine. "Introduction," in Nature Stories. Cresskill, NJ: Hampton Press, 1999. pp. 1-18.

C. Other Print Materials

Baptista, Ana. "How Can Vacant Lots Be Used to Strengthen Neighborhoods?". Senior Thesis. Providence, RI: Center for Environmental Studies, 2000.

The Big Picture Company, Inc. "The Met 1999-2000 Portfolio," & "Make It Work for You". Providence, RI: The Big Picture Company, Inc., 2001. pp. 1-24 & 1-40.

Direct Action for Rights and Equality (DARE). "Guide to the PRA Vacant Lots for \$1 Program". Providence, RI: DARE, 2000. p. 1.

Fallis, John. "Moving Beyond Apathy to Environmental Action". Madison, WI: Journal of Environmental Education, 1991. Vol. 14, No. 1.

Lewis, Susan & James, Kathy. "Whose Voice Sets the Agenda for Environmental Education? Misconceptions Inhibiting Racial and Cultural Diversity". Madison, WI: Journal of Environmental Education, 1995. pp. 5-10.

National Environmental Education Advisory Council. "Report Assessing Environmental Education in the United States and the Implementation of the National Environmental Education Act of 1990". Washington, DC: USEPA Env. Ed. Division, 1996. pp. 2-28.

Providence Youth Opportunities Guide. Providence, RI: Howard R. Swearer Center for Public Service, 2001. pp. 3-56.

Roberts, Nina S. & Rodriguez, Donald A. "Multicultural Issues in Outdoor Education". ERIC Database, 1999. pp. 1-3.

Thomas, Anna. "From Vacant to Valuable: Moving Providence's Vacant Lots into Providence Use". Senior Thesis. Providence, RI: Center for Environmental Studies, 1998.

Wals, Arjen E., Beringer, Almut, & Stapp, William B. "Education in Action: A Community Problem-Solving Model for Schools". Madison, WI: Journal of Environmental Education, 1990. Vol. 21, No. 4, pp. 13-19.

Warren, Karen. "Educating Students for Social Justice in Service Learning". Madison, WI: Journal of Environmental Education, 1998. Vol. 21, No. 3.

Zodda, David. "NYC Outward Bound Center Outdoor Leadership and Environmental Service Program". Long Island, NY: NYCOBC, 2001. pp. 1-6.

D. Websites

http://www.brown.edu/Research/EnvStudies_Theses/Summit/Briefing_Papers/Vacant_Lots/. Ana Baptista's Web Thesis, accessed 8/2001.

<http://www.epa.gov>. USEPA website, accessed 7/2001.

<http://www.openlands.org/urbangreening.asp?pgid=108>. Openlands Project Steps to Turn a Vacant Lot into a Community Garden, accessed 10/2001.

<http://www.outwardbound.org>. USA Outward Bound, accessed 4/2001.

<http://www.execpc.com/~uec/>. Milwaukee Urban Ecology Center, accessed 5/2001.

LIST OF APPENDICES

APPENDIX 1: Mentor Interview Protocol

APPENDIX 2: Written Survey

APPENDIX 3: Focus Group Moderator's Guide

APPENDIX 4: Mentee Interview Protocol

APPENDIX 5: DARE Guide to the PRA's Vacant Lots for \$1 Program, Providence, RI, September 7, 2000.

APPENDIX 6: Sample plat/lot sheet with circled vacant lots at new Met campus area. Plat/lot maps compiled by Miriam Pfisterer, CES, Providence, RI, December 2001.

APPENDIX 7: The Met High School Learning Goals, in "Make It Work for You," The Big Picture Company, Providence, RI, 2001.

APPENDIX 1

Doug Costello
Semi-Formal Mentor Interview Protocol

Fall 2001

1. I've discussed this idea of a framework as a mentor, would you find such a framework to be a useful tool?
2. I was hoping you could talk for a minute about your general experiences as a mentor. What sticks out in your mind about OLEEP?
3. Now I was hoping you could talk about your view of your mentee's experience in OLEEP.
4. Do you think your mentee would feel more comfortable in a) downtown Providence or b) Lincoln Woods? Do you think this is because of a) his or her cultural background, b) his or her familiarity with the landscape, or c) his or her subjective judgments of the landscape?
5. How does your mentee approach the outdoors? Does his or her interaction with the outdoors affect his or her attitude? (Is this significant?)
6. Do you feel that your mentee is developing leadership skills through the OLEEP program? What other opportunities for leadership skills can OLEEP offer mentees?
7. Do you feel that your mentee is learning about the environment through OLEEP? What specific environmental issues should OLEEP try to make aware to mentees (e.g. lead poisoning, solid waste, etc...)?
8. Do you have suggestions for how your mentee's experience in OLEEP can be improved in general?
9. One of the things OLEEP has been struggling with lately is participation – if you were going to design a campaign for OLEEP to increase participation, what would it look like?
10. Do you think workshops can and/or should happen during the school day?
11. If you were going to design a single workshop for OLEEP, what would it be?
12. What do you get out of OLEEP? What facets of it are most important to you?
13. What, in your opinion, are the biggest problems of OLEEP? Would you say that they are more a) theoretical, or b) logistical?
14. Are there any other issues which we haven't discussed today that you would like to bring up or feel are important?
15. I'm looking for your help in finding resources for workshop planning. If you have any ideas,

APPENDIX 2

Consent Form

Dear Participant,

Thank you for agreeing to complete this survey. I am studying what people think about the outdoors and cities, and this will be a useful step in my efforts to strengthen OLEEP (Outdoor Leadership Environmental Education Program).

I appreciate your time in completing this survey, and it should take no more than 20 minutes. The results of this survey will remain confidential. In addition, your comments will remain anonymous, and your names will not be used in my studies at any stage. Your advisor, as well as all other Met School employees, will not see your comments from this survey at any point.

Your participation in this survey is completely voluntary, and you may decline to participate at any time, including now.

If you have any questions about this survey before you begin, do not hesitate to ask me. If you think of any further questions after you have completed the survey, please contact me at 401-831-3897, or at Douglas_Costello@brown.edu.

Signature _____ Date _____

The first series of questions will be about outdoor activities.

1. What's the first WORD you think of when you see the words "great outdoors"?

2. How much time do you spend outside on a **school day**?

- 0-1 hours
- 1-2 hours
- 2-3 hours
- 3-4 hours
- more than 4 hours

3. How much time do you spend outside on a **weekend day**?

- 0-1 hours
- 1-2 hours
- 2-3 hours
- 3-4 hours
- more than 4 hours

4. When you are outside, what activities do you like to do? (You can check **more than one** – if you do something not on the list, write in what you do in the **OTHER** category)

- Swim
- Walk
- Bike
- Play a sport
- Spend time with friends
- Spend time with family
- Go hiking
- Go camping

_____ OTHER ACTIVITIES

5. How many times have you gone "hiking" in the last year?

- None
- Once
- 2-4 times
- 4-6 times
- more than 6 times

6. Which of these statements best completes this sentence for you? (You can check **more than one**)

"I do not go hiking more because..."

- I do not know anyone who likes to go hiking
- I do not feel comfortable being in the outdoors
- I do not have the time to go hiking
- I do not know where I could go hiking
- I have never gone hiking before
- I can't get to anywhere where I could go hiking
- I am not interested in hiking

_____ OTHER REASON

7. How many times have you gone camping in the last year?

- None
- Once
- 2-4 times
- 4-6 times
- more than 6 times

8. For this statement, which of these answers would you most agree with? (You can check **more than one**)

"I would go camping more often if..."

- my family was coming with me
- my friends were coming with me
- I did not have to go to work on the weekends
- I had transportation to where I wanted to go
- I had the equipment I needed
- someone showed me how to go camping
- nothing. I would not go camping

_____ OTHER REASON

9a. Do you spend time at any parks near where you live?

YES NO

(if you answered YES, go to 9b; if you answered NO, go to 9c)

9b. If YES, why: (you can check **more than one**)

- "My friends like to spend time there."
- "I like how the park looks."
- "I can play a sport or do some other exercise there."
- "I like spending time outside."

_____ OTHER REASON

9c. If NO, why: (you can check **more than one**)

- "There are no parks near where I live."
- "The parks near me are not safe to hang out at."
- "I do not have the time."
- "My friends don't like to spend time there."
- "I would rather be inside."

_____ OTHER REASON

10. From looking at these pictures, can you rank them in order of where you would most like to spend time at? **1** = I would like to spend time there **the most**
5 = I would like to spend time there **the least**



11. If you had a free day to spend time with your family, could you rank on a scale of 1-5 what you would most like to do with them? **1** = I would **most** like to do this
5 = I would **least** like to do this

- Spend time inside at home
- Spend time outside at home
- Go to the mall
- Go to the beach
- Go to a park

12. If you had a free day to spend time with your friends, could you rank on a scale of 1-5 what you would most like to do with them? **1** = **most**; **5** = **least**

- Watch TV
- Play a sport
- Spend time at someone's home outside
- Go to the mall
- Go swimming

The next series of questions will be about cities.

13. What's the first WORD you think of when you see the word "city"? (besides Providence)

14. How much time do you spend in downtown Providence outside of school?

- 0-1 hours (**per day**)
- 1-2 hours
- 2-3 hours
- 3-4 hours
- more than 4 hours

15. What do you do when you are in downtown Providence (besides school)?

(you can check **more than one**)

- Spend time on a street
- Spend time in a park
- Go shopping
- Go to work
- Walk around to where I have to go

_____ OTHER REASON

16. Which of these statements best completes this sentence for you? (you can check **more than one**)

"I do not spend more time in downtown Providence because..."

- I do not have the time
- It's not safe to spend time there
- My friends don't like to spend time there
- I spend too much time there already

_____ OTHER REASON

17. Which of these pictures most reminds you of city life? (you can check **more than one**)



The last series of questions will list a number of statements. If you agree with the statement, please check next to True. If you disagree, please check next to False.

18. People who grow up in a city can not appreciate the outdoors.

True

False

19. People who live in cities feel safer in a city than in another environment.

True

False

20. To spend time in the outdoors, you need a lot of time and money.

True

False

21. Is there anything else you'd like to say? (Examples = "I think camping is not fun because there are lots of bugs around...", "I like to go hiking in the woods near where I live...")

*Please take one more minute to fill out the biographical information on the last page.
Thanks again for completing this survey!*

1. First Name _____
2. Year in school (Freshman, sophomore, etc...) _____
3. Are you:
Male ___ Female ___
4. What ethnicity do you consider yourself?
___ African American
___ Anglo American (Caucasian)
___ Asian/Pacific Islander
___ Hispanic/Latino
___ Native American
___ Other
- 5a. Were you born in this country? ___ Yes ___ No
- 5b. If no, how long have you lived in the U.S.? _____
6. In what town, city, or community do you currently live? (If Providence, please indicate what part) _____
7. What language(s) do you speak at home? _____
- 8a. Do you have a job outside of school? ___ Yes ___ No
- 8b. If Yes, how many hours do you work each week? _____
9. Whose advisory are you in? _____
- 10a. Have you participated in OLEEP before? ___ Yes ___ No
- 10b. If yes, in what year did you participate? _____

APPENDIX 3

E. Doug Costello

Oct. 9, 2001

FOCUS GROUP MODERATOR'S GUIDE

GOALS:

1. DETERMINE STUDENT AWARENESS AND APPRECIATION LEVELS OF ENVIRONMENTS AND ENVIRONMENTAL ISSUES
2. DETERMINE REASONS FOR AND BARRIERS FROM LEARNING ABOUT CERTAIN ENVIRONMENTAL ISSUES
3. UNDERSTAND HOW OLEEP CAN HELP INCREASE AWARENESS AND APPRECIATION LEVELS, AND WHAT TEACHING STRATEGIES WORK WELL FOR A HIGH SCHOOL STUDENT POPULATION

4. **Introduction:** Hi, I want to thank you all for coming to this focus group. For those of you who have not had a chance to meet me, my name is Doug Costello. I am a college student at Brown, focusing on environmental studies. I am studying the OLEEP program, which is a program between Brown students and Met students involving mentoring, environmental workshops, and camping trips. In researching this program, I want to make sure that I talk to you about the issues involved. However, it is difficult for me to talk to all of the students at the Met, so that is why you and I are here for what is called a focus group. You all indicated from a survey that you filled out at the end of last year that you might be interested in talking about some of the themes brought up. Hopefully, from talking to you guys, I will be able to get an idea of what are some important issues for students at the Met. To give you an idea of what a focus group is like, I have a number of ideas that I would like to talk to you about to hear your ideas, opinions, and thoughts. We will be talking today about your opinions of different environments, and also about a range of environmental issues. There are no right or wrong answers. The purpose of this group is for me to hear a number of different points of view, so I would really appreciate it if you could share your thoughts, even if they might be different from somebody else's in the group. There is really no wrong thing to talk about feel free to bring up whatever you feel is relevant or appropriate. Before we start, I want to explain a little bit about the logistics of the group. I am the only one who will be studying whatever information comes out of this group – parents, advisors, fellow students will have NO idea what we have talked about. I have a video camera and a tape recorder here so I will be able to look back at and not miss any of your ideas or comments. I will be the only person to listen to or look at this information. I would like it if you could focus on what we are talking about, and not be scared or distracted by this equipment – again, it is only there because I can't be talking and writing at the same time. I also hope that you can listen to one another and not speak all at the same time, so everyone can enjoy this and I can understand what each person in the group has to say. I know that some of you may know each

other, but this does not apply to everyone, and I certainly do not know everyone's name, so I have made name tags. We'll be on a first name basis and again, as this information is private and confidential, I will change names on any reports I write about this later. This session will last no more than one hour, so let's get started! One thing before we start, this should be FUN, don't get too worried about the questions, just have FUN with them!

5. **Intro. Question:** Say your name and one thing you like to do on the weekend. (*Follow up question if necessary to further break the ice.*)

6. **Warm up to environmental issues – general environmental perceptions**
 - a. What thoughts, descriptions come to mind when you think of the physical area where you live? Your street? Your neighborhood? Providence? (*Write down exercise and share*).
 - b. (*Show powerpoint slides of different environments – for each slide, ask:*
 - i. How familiar are you with this environment?
 - ii. How likely are you to spend time here or visit here? What kinds of things would you say you know about this environment?
 - c) What would make you want to go to this environment often?

7. **Environmental Issues**
 - a. (*I introduce an example of an “environmental issue” with vacant lots, show previous image, ask:*
 - i. What is it about this issue that makes it interesting or not interesting to learn about? Why?
 - ii. Let's say you were talking to friends and/or family about this I know they might be completely different situations – picture talking to either friends or family or both, what kinds of questions would come up about this issue?
 - b. (*Hand out list of environmental issues in Providence, ask:*
 - i. Which of these issues have you heard of before? How?
 - ii. (*Do ranking exercise*) Which sound exciting to learn more about or do something about? Why? What is it about one issue that makes it more or less interesting than another?
 - iii. Are there any other issues that come to mind either in RI or elsewhere that interest you?

8. **Learning about Environmental Issues in OLEEP**
 - a. Think about a teacher you had whom you especially remember and who you learned a lot from? What about this person made them cool/ good to learn from? (*write down exercise and share, or go around one by one*)
 - b. *Group activity.* I want you to imagine that you're going to learn about one of these issues, or another one you have in mind, in the context of OLEEP. (*Explain*

how OLEEP can let you learn freely). As a group, you get to plan how you're going to learn about it. (**Should I pick one or should I have them pick one – afraid of indecisiveness, and/or them not caring about the same issue**). In this scenario, other people can help you learn about the issue. You can learn it over a series of weeks, too – you do not have to learn about it in an hour.

- i. How would you start going about learning this? On your own, with others, on the internet, in books, with people outside of school?
- ii. How would you try to make it interesting?
- iii. How could you all benefit in learning as a group?
- iv. How involved would friends, mentors, advisors, be in learning this issue?
- v. How involved would people outside of school be involved in learning about this issue? How much help could an organization in Providence provide?
- vi. How active would you become in learning about it? How much “doing,” “thinking,” and “talking” would be done?

VI. Summary and Conclusions

APPENDIX 4

Doug Costello
16, 2001
Mentee Interview Protocol

Oct.

1. I was hoping you could talk for a minute about your general experiences as a participant in the OLEEP program – what sticks out in your mind about OLEEP?
2. Why did you choose to participate in the program?
3. Could you discuss how you felt about your relationship with your mentor?
4. How comfortable have you felt among fellow mentees in OLEEP? How comfortable have you felt among the mentors in the program? Can you think of ways in which OLEEP could have made/can make you feel more comfortable in this group?
5. What does OLEEP stand for in your mind? Are you familiar with the different letters?
6. Do you think that OLEEP has affected your relationship with the outdoor environment, and if so, how?
7. Do you feel that you learned leadership skills through OLEEP? If yes, in what ways, or can you give an example? Do you have any ideas for how you and other participants can learn more about leadership in OLEEP?
8. Have you learned about environmental issues in OLEEP? Are there any in particular you remember, or any you especially liked learning about? *Possibly hand out list and ask:* How familiar are you with some of these issues? Which interest you most and what is it about them that interest you? Can you think of ways in which OLEEP could do a better job of teaching about environmental issues?
9. If you were a mentor, and you got the chance to plan or teach one workshop, what would that look like? How would you teach it?
10. Is there one workshop from last year which you particularly liked? What about it interested you?

11. What teaching methods do you think worked well for you in OLEEP? (Learning with other mentees, learning with other mentors, learning on your own, field trips, etc...)
12. How do you think other students at the Met perceive OLEEP?
13. If you were going to talk to your friends about OLEEP, what would you say to them?
14. Do you feel that your personal goals or expectations were met in OLEEP? Did you have any expectations at all? Did your goals and/or expectations change at all throughout the year?
15. What do you feel that you gained the most from in OLEEP? What, would you say, were the three most important things in the program to you?
9. Are there any other issues which we haven't discussed today which you would like to bring up or feel are important?

APPENDIX 5

DARE Direct Action for Rights and Equality
9/7/00

Guide to the Providence Redevelopment Agency's (PRA) Vacant Lots for \$1 Program

1. **Decide what you want a lot for.**
 - You can apply for a lot to build a home on if you live anywhere in Providence, and don't own a home yet.
 - You can make a yard, garden, or parking area if you live next to the lot and own your home.
2. **Select a lot.**
 - Lists of lots are available from DARE or from the Department of Planning - Bill Floriani - 400 Westminister Street (next to Social Security), 351-4300
 - If it says "A" it means the lot is available for a yard or parking; "H" means it's available to build a house on.
3. **Check for lead levels in the soil**
 - The EPA has tested some lots. Contact DARE or Erin Heskett at the EPA (617) 918-1054 to see if the lot you want has been tested.
 - If your lot has not been tested, tell DARE so that we can ask the EPA to include it on the next round of tests they do.
 - If it has been tested, find out if the levels are safe for the way you want to use the lot. If the levels are too high, pick a different lot!
4. **Fill out the application**
 - Applications are available at DARE or from Bill Floriani at the Department of Planning - 400 Westminister Street (next to Social Security), 351-4300
 - Turn in the application to Bill Floriani at the Department of Planning - 400 Westminister Street (next to Social Security), 351-4300
5. **PRA votes to make you "designated developer"**
 - This will happen at their meeting - always the second Thursday of the month.
 - Call Bill Floriani at 351-4300 to find out if your lot is on the agenda.

6. Fill out the "offer to sell"

- Put down dates for when you will have a "site plan" (a drawing of how the lot will look) and a financing plan (how you will get the money if it is something that costs a lot, like building a house.)
- Call DARE or Bill Floriani at the Department of Planning - 400 Westminister Street (next to Social Security), 351-4300 if you need help filling it out.

7. PRA votes to sell you the lot

- This happens at another PRA meeting, after you get all your paperwork in.
- Call Bill Floriani at 351-4300 to make sure your lot is on the agenda.

8. The closing

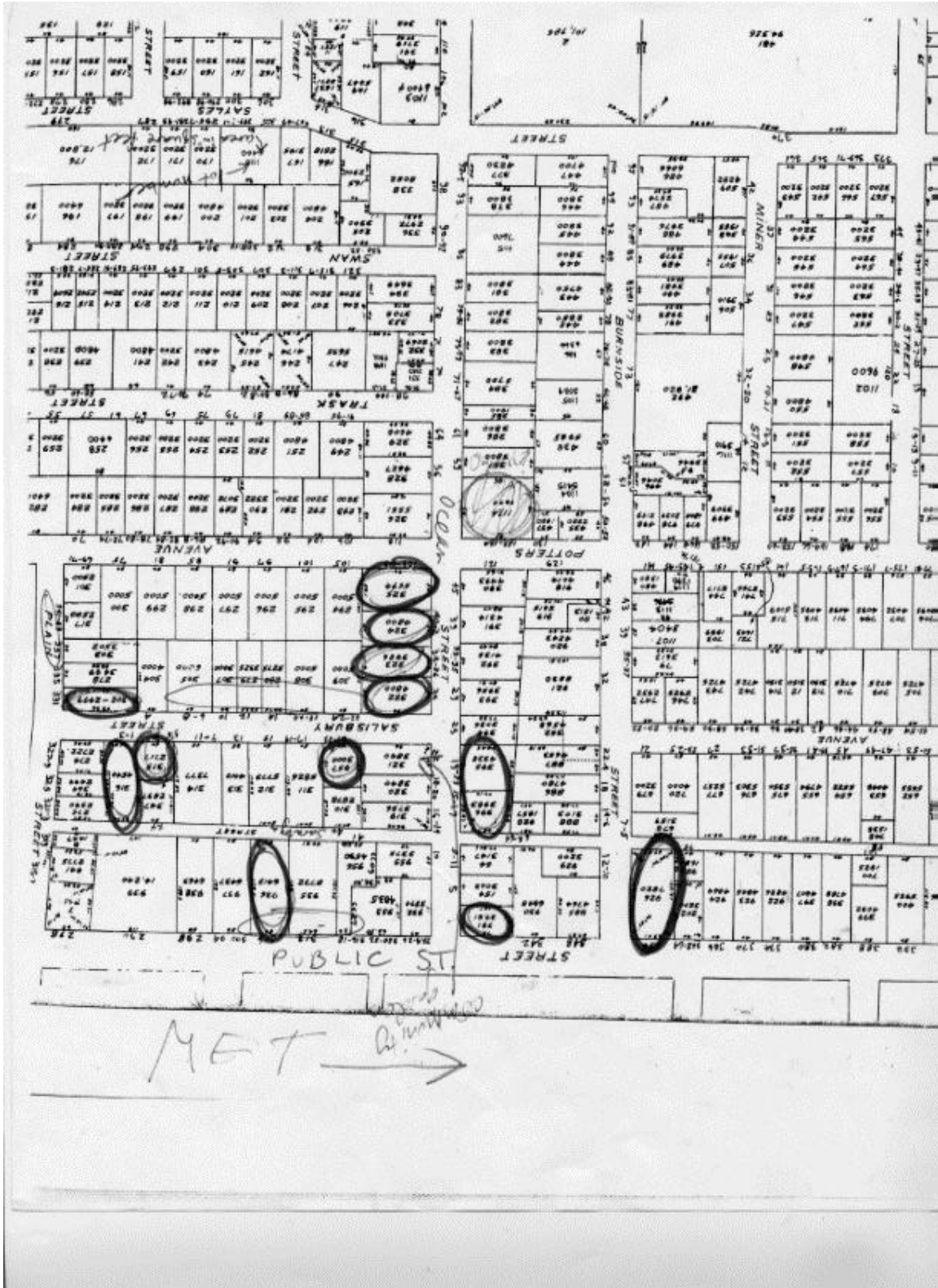
- This is when you fill out the paperwork to finally buy the lot.
- Make sure they clean it up before you sign the papers to buy it!
- Then you go down to City Hall to record the deed (costs about \$50.)

If you have any questions, call DARE at 351-6960

**or Call the Department of Planning
351-4300
400 Westminister Street
(next to Social Security office downtown)**

**- ask for Bill Floriani -
- if you can't reach Bill, call his boss, Tommy O'Connor -
- if you can't reach Tommy, call his boss, John Palmieri -**

APPENDIX 6



APPENDIX 7

I Made It Work for You • Big Picture Learning Goals

Big Picture Learning Goals

Use the Learning Goals to help you expand your project work and challenge yourself with new ideas. These are the five Learning Goals.

1. How do I **prove** it?

Empirical Reasoning

This goal is to think like a scientist: to use empirical evidence and a logical process to make decisions and to evaluate hypotheses. It does not reflect specific science content material, but instead can incorporate ideas from physics to sociology to art theory.

What *idea* do I want to test? (essential question)

What has other *research* shown?

What is my *hypothesis*? How can I test it?

What *information* (data) do I need to collect?

How will I *collect* the information?

What will I use as a *control* in my research?

How *good* is my information?

What are the *results* of my research?

What *error* do I have? How good is my information?

What *conclusions* can I draw from my research?

How will I *present* my results?

The Big Picture Learning Cycle

2. How do I **measure**, compare or represent it?

Quantitative Reasoning

This goal is to think like a mathematician: to understand numbers, to analyze uncertainty, to comprehend the properties of shapes, and to study how things change over time.

How can I use numbers to *evaluate* my hypothesis?

What *numerical* information can I collect about this?

Can I *estimate* this quantity?

How can I *represent* this information as a formula or diagram?

How can I *interpret* this formula or graph?

How can I *measure* its shape or structure?

What *trends* do I see? How does this change over time?

What *predictions* can I make?

Can I show a *correlation*?



Big Picture Learning Goals

3. How do I take in and **express** ideas?
Communication
 This goal is to be a great communicator: to understand your audience, to write, read, speak and listen well, to use technology and artistic expression to communicate, and to be exposed to another language.

How can I write about it?

What is the main idea I want to get across (thesis)?

Who is my audience?

What can I read about it?

Who can I listen to about it?

How can I speak about it?

How can technology help me to express it?

How can I express it creatively?

How can I express it in another language?

4. What are **other** people's perspectives on this?
Social Reasoning
 This goal is to think like an historian or anthropologist: to see diverse perspectives, to understand social issues, to explore ethics, and to look at issues historically.

How do diverse communities view this?

How does this issue affect different communities?

Who cares about this? To whom is it important?

What is the history of this?

How has this issue changed over time?

Who benefits and who is harmed through this issue?

What do people believe about this?

What social systems are in place around this?

What are the ethical questions behind this?

What do I think should be done about this?

What can I do?



Big Picture Learning Goals

5. What do I bring to this process? Personal Qualities

This goal is to be the best you can be: to demonstrate respect, responsibility, organization, leadership, time management and to reflect on your abilities and strive for improvement.

How can I demonstrate respect?

How can I empathize more with others?

How can I strengthen my health and well-being?

How can I communicate honestly about this?

How can I be responsible for this?

How can I persevere at this?

How can I better organize my work?

How can I better manage my time?

How can I be more self-aware?

How can I take on more of a leadership role?

How can I work cooperatively with others?

How can I enhance my community through this?

