Urban Environmental Education

Examples from the Denver Metropolitan Area

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Student Report 2013-2

October 15, 2013

Photo Credit: Candice Hilliard
Introduction

The concept of urban environmental education is difficult to define. This obscurity of definition is partly due to the fact that many different types of urban environmental education are in practice. These programs and the organizations they belong to can be grouped into several categories each falling under the heading of urban environmental education. Alex Kudryavtsev and Marianne Krasny, in their paper *Urban Environmental Education*¹, break urban environmental education practices into five trends. The first trend, *city as a classroom* uses outdoor activities to connect students to nature in the city. The second trend, *problem solving*, has a goal of addressing environmental problems that are important in urban areas. *Youth and community development* is the third trend discussed by Kudryavtsev and Krasny, with the goal of contributing positively to youth becoming better citizens and thus benefitting the community. A fourth trend is *city as a social-ecological system* which pays attention to social, cultural, and economic factors of cities and their connection to the ecology of the city. *Environmental stewardship* is the fifth trend discussed by Kudryavtsev and Krasny, which uses education as a tool for fostering hands-on environmental stewardship and restoration in cities. Although Kudryavtsev and Krasny have proposed these categories based on the literature, a need exists to supplement this work by providing real life examples of current programs that illustrate the trends.

In order to shed light on the diversity of urban environmental education and how it is currently being practiced, I traveled to Denver CO, in January 2013, to visit environmental education organizations and the programs they run. Since I am not a native Denver resident, I corresponded with Malinda Mochizuki, the Diversity Outreach Coordinator for the Colorado Alliance for Environmental Education. Malinda provided me with a list of organizations that were part of the EECapacity² Colorado State Consortium, and that would be excellent places to visit. The organizations I visited were the Cottonwood Institute, Bluff Lake Nature Center, Butterfly Pavilion, Earth Force, SPREE, and GrowHaus. During visits to each organization, I participated in programs and helped with the educational activities. I also conducted interviews with staff members to provide me with a better understanding of individual organizations and programs, how they run, and how they differ from one another.

This report will look specifically at environmental education organizations located in and around the city of Denver that I visited during this trip. It will use Kudryavtsev and Krasny’s urban environmental education categories as a template for demonstrating the diversity of the types of programs in practice. The goals, audiences, and how programs remain effective will also be discussed. In short, this report will provide concrete examples of urban environmental education.

¹ Kudryavtsev, A. and ME Krasny. Urban environmental education. under review at *Journal of Environmental Education.*

² EECapacity is the US Environmental Protection Agency’s National Environmental Education Training Program, and is housed in the Cornell University Civic Ecology Lab. [http://www.eecapacity.net/](http://www.eecapacity.net/)
education in order to aid the environmental education community in understanding, creating, and evaluating urban environmental education programs.

**Programs Included**

1. Community Adventure Program
2. Earth Task Force
3. Winter Wonders
4. Senior Group On-Site Class
5. Butterfly Encounter
6. Keep It Clean Denver
7. SPREE programs overview
8. GrowHaus programs overview
Community Adventure Program (CAP)

Through outdoor education, environmental education, and service learning, CAP seeks to inspire high school students. It seeks to encourage students to change the world through civic engagement and community involvement, develop camping and wilderness survival skills, increase awareness of environmental stewardship and sustainability, and develop life skills such as leadership, teamwork, and communication.

Urban Environmental Education Trends

Environmental Stewardship: This program meets Urban EE goals of fostering hands-on engagement in environmental stewardship through the students creating and implementing action projects as part of a high school course.

Youth and Community Development: CAP focuses on enhancing the skill set and abilities of youth so they may become successful citizens.

http://www.cottonwoodinstitute.org/courses/community-adventure-program/
Program Description

CAP is a unique class offered at New Vista High School located in Boulder, Colorado. In this course, students learn essential camping and wilderness survival skills through field trips and weekend overnight camping trips in the Rocky Mountains. In addition, students learn about pressing environmental issues that affect their community and how these issues are linked to social justice, wealth inequities, and peoples’ personal choices. This course is a ten step program that begins with students engaging in their environment by taking field trips, playing games, and learning nature awareness skills. Throughout the duration of the class, students plan and implement an action project to address a local environmental issue. Students begin by researching and learning about environmental issues in the community. They collaborate with community members to expand their knowledge of and learn all sides of an issue. Students then have the opportunity to take on a project and implement it in the community. A post action plan is also created by students to allow them to assess and celebrate the project. This class provides a comfortable environment for students where they can learn about nature and become civically engaged while growing and becoming more confident individuals.

Program Visit

The program director for the Cottonwood Institute, Madeline Bachner, and I visited the first day of the CAP class for winter quarter to participate in the program. This year, ten students are enrolled in the class which begins fresh with new students quarterly. Each quarter, the students choose an environmental issue within the community to tackle in the form of their community action project. Because I arrived on the first day of class, I was able to get to know the students for the first time alongside the CAP educator, Katie Craig. Consistent with the class philosophy of going outside every day, the students were taken outside for introductions. The students, Katie, Madeline, and I learned each other’s names and backgrounds through several games that we played outside. Once we returned inside, the students read the syllabus aloud and learned what the class would entail in more detail. Students were given assignments such as their CAP journal in which they document their experience with CAP. At the end of the class, the students and Katie made a hand contract for their new CAP community that they had now formed. The hand contract depicts what the students and instructor want their classroom community to be like. It is created on the first day of class by every new group of students, and the hand contracts of those groups who came before hang on the classroom walls. Everyone traces the outline of their hand on a large sheet of paper in the shape of a circle. Inside the circle of hands they write what they would like to see in their community such as listening to each other, and outside the circle, they put what should be kept out of their community such as bullying and negativity. Inside each of their hands, the students and Katie wrote what positive attributes they as individuals will bring to the community.
The first day of class allowed the students to have fun while also getting to know one another. After playing introductory and name learning games, students were more involved and less timid about asking and answering questions once we returned inside and read the course syllabus. The fact that the class is taken for credit and requires students to follow a syllabus reminded me that this class is one of formal education and that the students are graded on their performance. The instructor of CAP has to be a person who can manage a high school level class while still ensuring that the students are engaged, having fun, and feeling comfortable. This is accomplished through activities such as the hand contract. It was a fun activity with a great deal of laughter, but it also made the students think about what will make them comfortable and attain the highest level of enjoyment in the class. By sharing what they wrote, the students appeared to gain confidence in their own ideas. When the class period ended, I could already see a change in how the students interacted with each other. At the start of the class, those who did not already know anyone were quiet and a bit on edge, but after creating the hand contract, all students were talking and laughing with one another.
Earth Task Force (ETF)

ETF is a voluntary club at New Vista High School which engages students in tackling the mission of creating solutions to reduce the school’s environmental footprint.4

Urban Environmental Education Trends

*Environmental Stewardship:* Through ETF, students are engaged in hands-on group projects which focus on reducing the school’s environmental footprint.

*Youth and Community Development:* Student’s involved in ETF show improvements in confidence, communication, and leadership after participating. They also become more inspired to tackle environmental issues in their community as well as at school.

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Program Description

The Earth Task Force is a Cottonwood Institute-supported program at New Vista High School in Boulder, CO, designed to give students an opportunity to take the lead to implement sustainability initiatives at their school. This program is overseen by a mentor from the Cottonwood Institute; however, the club meetings are student directed. ETF acts as a refuge where students can be comfortable and interact in meaningful ways with each other and their mentor. They are actively working on communication and leadership skills in many ways. Club meetings are run by a student leadership team, and many students make announcements in front of the high school about the projects that ETF is conducting. Students also take initiative and complete a great of work outside of club meetings. In addition to developing life skills, students, with support from their mentors, create and implement quarterly projects to help the school to become “greener”. Each quarter multiple projects are undertaken by small groups of students who feel strongly about certain issues. Students involved in ETF see themselves as stewards for the environment and dress as superheroes when trying to get the general student population involved in projects such as local lunch, which aims at obtaining local food in the cafeterias to reduce the school’s carbon footprint, and recycling projects to reduce waste sent to landfills.

Program Visit

While at New Vista High School, I visited the ETF club which met during the student’s lunch hour. This small group of about twelve students meets twice a week to organize, plan, and implement their projects. During the lunch period that I visited, students were figuring out the logistics of their projects. The meeting was run by the students who kept to an agenda they had written on the board. They went through all of the activities they had planned to see what was or was not working and ways they were going to fix these issues. Students then checked in with their individual project groups to see if they were on task. At this point club mentors played a critical role because many groups were trying to deal with issues and figure out what the next step for their projects would be. Mentors asked the students questions to encourage them to think methodically through issues. One of the ETF mentors, Paige Doughty, stated that it is the mentor’s job to lead the students and keep them on task, but to allow them to have their own ideas and figure out the answers to problems on their own. The approach she uses in order to do so is to lead from behind, helping where it is necessary but allowing most of the project to be designed solely by the students. After the small project groups met, the students reported back to the club about what stage they were at. At the close of the meeting, the students decided to play a game. This showed me that in addition to being concerned about the environment, social justice, and their community, these are students who enjoy spending time together and having fun. Playing a game was an enjoyable way to for those who may not have been in the same project group to connect. When talking with the students I learned that most had become involved in the club through word of mouth and because they were interested in creating a more environmentally friendly school. Due to this, they were all very dedicated to the projects at hand and all students
actively participated with the group. Many of the students in ETF remain in the club until they graduate, and some even stated that this club would be a way to help them to get into college.
The Bluff Lake Nature Center provides an outdoor place for children who do not have the means to experience nature in any other setting. Its classes revolve around the meaning of habitats, why they are important, and how humans impact them. They are designed to address the needs of the urban community.  

Urban Environmental Education Trends

City as a Classroom: Outdoor programs through Bluff Lake allow students to connect to nature that exists right in their backyard as opposed to only thinking of nature as the wilderness of the Rocky Mountains.

City as a Social-Ecological System: This program teaches students that even urban areas can support a diverse array of habitats. It also shows that the built and natural elements of the environment are connected through explanations and demonstrations of the areas that were man-made.

5 http://www.blufflake.org/wordpress/programs/school-programs/
Program Description

This program was designed to allow students to understand the difficulty of winter survival for animals that spend their lives outdoors. It demonstrates that different species have diverse mechanisms for coping with the cold weather, which has an effect on their behavior and physiology. When children visit the nature center they split into three groups and visit three stations, learning about different winter survival mechanisms at each. Students are led around the nature center by chaperones and teachers, and stations are taught by volunteer educators who have been trained by the center. The three stations students visit are Hibernation Celebration where students learn the requirements of hibernation such as gaining weight, the Active Station where students are taught the difficulties facing animals in the winter such as staying warm and how they avoid and deal with these difficulties, and Migration Exploration which teaches the students about the distances birds must travel during their migratory journey. Each of the educators at the stations is equipped with a script and necessary materials. These stations are designed for elementary aged children, so they are interactive involving many questions and hands on activities. Each station can also be altered depending on the grade of the students on the half-day field trip. At the end of the day, educators ask follow-up questions to the students to help them re-evaluate what they have learned.

Program Visit

While on site at the Bluff Lake Nature Center, I was able to talk with the executive director, Jeff Lamontagne, about the nature center and why he became involved there. Like most of the staff at Bluff Lake, Jeff is a believer in spending time outdoors. He thinks that children should and need to get outside and experience nature, and Bluff Lake provides this. The nature center provides an outdoor place to learn about and explore nature for children who would otherwise not be able to travel to other natural areas because of economic barriers. The programs at Bluff Lake were originally created to convince the city to preserve the land and have since been changed to meet curriculum standards and audience preference. Programs have also been changed as needed and are now designed around urban needs. They revolve around the meaning of habitats, why they are important, and what the human impact is on these habitats. With such a large nature center located very close to many schools, it’s no surprise that Jeff said the classes offered are in high demand. When asked how Bluff Lake is able to make people return often, Jeff said that it is convenient for schools, they offer age appropriate programs, and the programs meet state and school district science standards. In addition to the academic benefits that Bluff Lake has to offer, the staff are trusted and familiar, which keeps people coming back. Jeff also stressed again that it is also a great place for low income kids who otherwise may not have an outdoor place to play and learn in. On our walk around the site I also asked Jeff what he thought was the most important quality in teachers. His answer was that teachers need to be able to relate to kids in a way that makes it easy to get information and education across without being overly
complicated and while being enthusiastic about what they are teaching. Reliability is also an important quality, which he stated can be difficult when working with volunteer educators as is the case at Bluff Lake.

After talking with Jeff, I thought I should talk with his education staff as well. Luckily I visited on a day when they had their educator training. After the training I was able to speak with Keith Wood, the education director, and Ashley Millman, the education and communications coordinator, about their thoughts on environmental education. They both had many great insights into education, but a couple things they said that they try to bring into their programs and foster in their educators stood out to me. One thing that they mentioned was that education and the educators should be relatable to the children. Teachers need to ask questions and compare the education to similar situations. Keith and Ashley also stated that hands on, exploratory learning is key in education. They made the comparison of two parts of learning. There is the experience of being in a new place and being able to wander, and at the same time they need to bring in content and science to their programs. Both parts are important to succeeding. When asked why hands-on experience is so important they stated that seeing things happen and being in action makes information sink in and creates realization of what is going on around you. It also creates an intimate relation to a place and strengthens student’s relationship to and interest in ecology.
Senior Group On-site Class:

Butterfly Pavilion (BP) Basics

The Butterfly Pavilion’s adult and senior education classes seek to appeal to the lifelong learner. These classes are meant to facilitate education in a relaxed, social atmosphere which acts as an escape from daily routines.6

Urban Environmental Education Trend

City as a Classroom: Through museum tours, the Butterfly Pavilion uses indoor exhibits to stimulate interest in environmental learning.

6 http://www.butterflies.org/education/adult-senior-groups.php
Program Description

The Butterfly Pavilion provides classes for adults and seniors, which consist of a presentation and a tour. The presentation is a PowerPoint given by a Butterfly Pavilion staff member that lasts about half an hour. This is a very informal presentation with plenty of discussion and interaction. It begins with the history and mission of the Butterfly Pavilion and what exactly the Pavilion is, and continues with information about butterflies such as their feeding habits, diversity of behaviors, and lifecycle. The class also discusses where the butterflies at the Butterfly Pavilion come from and the impacts of butterfly farming in comparison with other harmful farming practices and deforestation in the rainforest. This presentation is very straightforward and consists mainly of photographs. The bulk of the information is told directly to the class by the educator who takes time to relate the information to the level and interests of the audience and answer any questions. The next half hour of the class is spent taking a tour of the many exhibits offered at the facility. These include butterfly, terrestrial invertebrate, and aquatic invertebrate exhibits.

Program Visit

Upon my arrival to the Butterfly Pavilion I was greeted in the administrative part of the museum by the teacher of the adult class that day, Dorothy. She was excited about the class and that I had come to visit. The class that day was being given to senior citizens who had not yet arrived on the bus from Juniper Village. While we waited for the class to arrive, Dorothy showed me where the class would be held and then gave me a quick tour of the museum as we wound our way to the front entrance where we could then greet the group. It was very nice to see that even though this group would only be here for one day, and she sees many people come through the museum, this teacher was still warm and really wanted to connect with the students. During the entire slide presentation, Dorothy made jokes and gave the information to the group in a way that related to them. Her body language was also very engaging because she faced the group and made eye contact with individuals. This made for a very interactive presentation with the class asking questions and making comments. It felt more like a group coming together to discuss a particular interest than just a class.
Butterfly Encounter

The Butterfly Pavilion uses its Butterfly Encounters as a way to promote education in its Wings of the Tropics exhibit. This program seeks to provide education about invertebrates in order to bring about appreciation, awareness, and preservation of invertebrate species. Through this program and others, the Butterfly Pavilion works to promote citizen conservation and research projects such as growing a butterfly garden and composting.  

Urban Environmental Education Trend

City as a Classroom: The Wings of the Tropics exhibit of this invertebrate zoo allows Butterfly Pavilion staff to interact with the public and teach them about butterflies in an indoor setting.

7 http://www.butterflies.org/animals-plants/exhibits/tropical-conservatory.php
Program Description

Twice daily the Butterfly Pavilion releases newly metamorphosed butterflies into their exhibit. These butterfly releases, lasting about 20 minutes, are open for public viewing and provide a great opportunity for education. The audiences of the butterfly encounters are diverse, so these are a way for the Butterfly Pavilion to reach and provide education to a variety of individuals. Before the release of the butterflies, a staff member stands on a stage and talks to the audience about the natural history of the butterflies and their origin. This staff member provides the audience with information on deforestation and the importance of preserving the rainforest. As each butterfly is released, information is told to the audience about that specific butterfly in terms of its natural habitat, feeding and behavioral actions. While butterflies are being released, they land on the audience members providing enjoyment for all ages. Butterfly encounters are a fun, interactive way to learn about the importance of invertebrates, why people should care about them, and ways in which humans can help to protect their habitat.

Photo credit: Butterfly Pavilion

Program Visit

When I first arrived in Denver and told people the reason for my trip, nearly all of them said that I needed to visit the Butterfly Pavilion. At first I was not so sure why this place was so highly recommended, but when I stepped into the Tropical Conservatory called “Wings of the Tropics” I understood why it would stand out in the minds of so many people. The tropical vegetation and butterflies flitting all around are a sight to see. I wound my way through the exhibit along with others who had come to partake in the Butterfly Encounter. The Butterfly Encounter took place at the back corner of the exhibit where a path winding through the trees and shrubs opened up to a large circle and a crowd had started to gather. This crowd was filled with people of all ages -- families, class groups, and friends. This activity is family friendly and is a spectacular sight, which is why it continues to be so popular. As the butterflies were being released, they landed on little kids near the front of the stage who shrieked and laughed with enjoyment. Once more butterflies were released from the cage, they were landing on almost everyone. Of course as this was happening, the staff member who was talking and releasing the butterflies told us information on how to handle butterflies because they are extremely sensitive.
She also asked questions to the audience, such as who needs to breathe oxygen and where does it come from, to make people see the importance of the rainforest and its protection. After the last butterfly was released, the crowd dispersed and walked around to observe the butterflies in their new home.
Earth Force partners with the City of Denver Public Works department to aid them in their mission to provide water education in order to increase awareness and stewardship for Denver’s water supply.\(^8\)

**Urban Environmental Education Trends**

*Youth and Community Development:* KIC fosters independent thought in young students and pushes them to ask questions and become more engaged in learning.

*Environmental Stewardship:* Through the development of year-long service projects, the KIC program meets the goals of environmental stewardship.

*Problem Solving:* KIC focuses on the conservation issues surrounding the South Platte River and the importance of restoring its health.

\(^8\) [http://www.earthforce.org/community/DenverCO](http://www.earthforce.org/community/DenverCO)

Program Description

Denver’s Public Works department developed this program with partners Earth Force and South Platte River Environmental Education (SPREE) in order to create a deeper, more holistic model of water awareness. This program works with eighteen Denver metro area public and private schools developing semester or yearlong projects that revolve around service learning. Through this program, Denver Public Works creates a deeper, more intimate connection between its educators and students. An educator who works with both Denver Public Works and Earth Force goes on visits to the schools periodically to help the students with their project and engage them in environmental learning. This educator teaches the students about aquatic ecology, why wetlands are important, and what the students can do to protect them. Students also learn about social justice issues dealing with water such as the effects that polluting water in one area of the city can have on other areas and how this is unfair to those who are not polluting or do not have the means to clean up pollution. These classroom sessions are interactive and are developed to make students question their surroundings and how they can maintain healthy waterways.

Program Visit

The Logan School for Creative Learning, a private school for gifted children, participates in the KIC program. This is an experiential elementary school where the students pick a unit that they want to focus on and teachers then weave the curriculum (math, grammar, etc.) into this unit. Based on the unit, service learning is also woven into the curriculum, which engages the students in multi-layer service projects. The class that I visited chose water/geology for their unit, and decided to take on a project to improve the wetland area located behind the school. Denver Public Works and Earth Force educator, Donny Roush, chose this class as one of the KIC participants and took me with him on his first visit to the class. When Donny began the class by sitting in a circle on the floor with all of the children, I could tell that he had worked with kids before and that this was going to be a great example of how to interact with different audiences. During the time with the students, Donny asked multiple questions encouraging the class to think about what a wetland is and why wetlands should be studied. He used many analogies to help students learn about the science behind wetlands on a level that they could understand. For example, when discussing what wetlands are, he explained that a wetland is like a sponge and the students immediately understood what he was saying because they could relate to the information. After explaining a bit about where he works and what a wetland is, Donny showed the students a Power Point presentation on the wetland they were going to study and the creek that flows through it. During this presentation, the idea of social injustice was touched upon. The pictures in the presentation showed places where the creek was healthy and flowed freely and those where it did not. The students were asked which areas of the creek they would rather live near and why it is unfair that not all people can have access to a healthy water body. Students asked many questions during this visit and were beginning to think about what they wanted to do as their service project with the help of their teachers and Donny. These classroom visits happen
frequently over the course of the year allowing the students to gain in depth knowledge about waterways, which are of great importance in Denver where water is less plentiful.
South Platte River Environmental Education (SPREE)

One of the primary objectives of the Greenway Foundation has been education since it first began its efforts to clean and revitalize the South Platte River. The SPREE program has grown out of an integration of education with stewardship. It strives to provide opportunities for children to experience the South Platte River hands on, to learn about the River’s role in the birth of Denver, and to experience nature in the city while ensuring that the South Platte is preserved and taken care of for years to come.⁹

Urban Environmental Education Trends

City as a Classroom: SPREE provides outdoor classes and camps where children can explore the South Platte as it runs directly past downtown Denver.

Youth and Community Development: Through programs such as KIC, this organization contributes positively to Denver’s youth and inspires sense of place among children.

⁹ [http://www.spreeweb.org/web/](http://www.spreeweb.org/web/)
Program Description

SPREE is the educational arm of the Greenway Foundation, which is charged with restoring the South Platte River of Denver. SPREE provides service learning programs for youth of Denver with a strong focus on the South Platte. This organization engages youth by way of excursions, weekend events, field trips, and after-school clubs. The activities are open to kindergarten through fifth grade students. SPREE also provides programs for days when school is not in session. Additionally, SPREE has recently reached out to high school students, certifying five students in 2011 as environmental educators. All programs are also aligned with Colorado’s newest State Education Standards ensuring a strong curriculum and helping teachers to better connect classroom material to SPREE outdoor experiences. Finally, SPREE offers summer camp to first through sixth grade students where children engage in activities such as outdoor exploration, nature games, and recycled crafts.

Program Visit

While spending time with Earth Force staff, I had the opportunity to make a brief visit to SPREE during one of the Denver Public School’s off days. On days when school is not in session, children are able to come to SPREE and take mini excursions of the river around the SPREE facility. They also have a lesson for the day. On the day I visited, children learned about three different animals located on the South Platte and their habitats. Children went to three stations creating projects about each animal’s habitat and learning why they must live in these places. At one station, children were learning about beavers, so they created beaver dams out of clay, sticks, and paper plates. In a second project, kids were making paper mache bee hives. When I walked over to the last station, children were running around and making high pitched noises while going in and out from under a fort made of chairs and sheets. I was soon told by the SPREE staff that the children had learned about prairie dogs and were acting out prairie dog behavior in their natural habitat of burrows.
The GrowHaus seeks to create a community-driven, neighborhood-based food system by serving as a hub for urban agriculture, education, business development and job training. It aims to achieve this mission through core values: security, teamwork, accountability, stewardship, and wellness.\(^\text{10}\)

**Urban Environmental Education Trends**

*City as a Social-Ecological System:* The GrowHaus has a strong focus on the community that it is located in and the cultural and economic factors that make this community different from others in Denver. Because of this, it is able to create a space that not only benefits the environment, but also benefits the local residents and strives to create a healthier, happier community.

*Youth and Community Development:* Through provision of education and fresh produce the GrowHaus promotes community health and wellbeing.

*Problem Solving:* The Elyria-Swansea community struggles with gaining access to healthy foods, so the GrowHaus has become a response to this common urban issue. It trains local residents so that they can provide healthy food for themselves and neighbors.

\(^{10}\) [http://www.thegrowhaus.com/](http://www.thegrowhaus.com/)
Organization Description

The GrowHaus is an interactive urban farm and food hub located in the Elyria-Swansea neighborhood of Denver, Colorado. This community is rich in culture but lacks many basic services including access to healthy food. The GrowHaus acts as a partner to the Elyria-Swansea community by providing education, access to healthy food, and economic opportunity. Those who run the GrowHaus envision it as a catalyst for a sustainable, community-driven revitalization of the community. This vision is being achieved through three primary efforts: food production, food education, and food distribution. In addition to providing access to and education about healthy food, the GrowHaus is in the process of training community members who will eventually take over management. This will allow the GrowHaus to become a socially sustainable, resident-driven organization.

The GrowHaus facility consists of commercial hydrofarm and aquaponics greenhouses, a Growasis or hands on demonstration farm, and a multipurpose space for classes, community events, and food distribution. Each of these facilities is primarily an educational space where public classes are given. They allow for hands-on learning and providing the community with demonstrations of the different ways to farm. The GrowHaus also offers a variety of educational programs in addition to public classes. Seed to Seed is an eight-week summer leadership program for teens focused on healthy diet, healthy soil, and healthy communities. Over the course of eight weeks, Seed to Seed participants learn about the essentials of nutrition, growing food, social justice, and entrepreneurship, all the while creating cross-cultural connections with other teens from across Denver. Also offered are the farmers-in-training program, which is a vocational program that hires local youth to work for a day, and customized service learning workshops for ages 6-adult. The educational programs at the GrowHaus provide a diverse audience with the knowledge and technology to pursue healthy, goal-oriented lives.

Organization Visit

On my visit to the GrowHaus, I was able to talk with the director of operations, Adam Brock, about the urban farm and how it is run. The GrowHaus began as an abandoned industrial building which was purchased with the hopes of positively utilizing the space. Adam met with Paul, the then owner, and together with outside help, the idea of using the buildings for an urban farm came into being. Adam, a Denver native, studied at New York University where he became interested in sustainability and learned about permaculture design. In working with the GrowHaus, he is now able to put this knowledge into practice and spread that knowledge through programs. At the GrowHaus, the staff listen to audience demand in deciding what programs to offer. For instance, their service learning program arose naturally through many teachers inquiring about whether such a program existed. These inquires led to field trips which, in turn, led the service learning program to become a standard program. Most of what the GrowHaus
offers in terms of programs has been passed on through word of mouth, events, and on the ground organizing in neighborhoods. The impact of the GrowHaus can be seen through the amazing change in many of the youth in the Seed to Seed program. They demonstrate changed eating habits, strive toward different career paths, have new found passion, and build a stronger relationship to the community. According to Adam, the GrowHaus is succeeding in having a positive influence on the community and providing healthy food to the Denver area. There is, however, still plenty of room for growth as the GrowHaus strives to bring in more resident involvement and launch food production.

Acknowledgements

I would like to thank the following for their time spent helping me to organize and carry out the trip to Denver and the creation of this report: Malinda Mochizuki, CO Alliance for Environmental Education; Ford Church, Madeline Bachner, Katie Craig, and Paige Doughty, Cottonwood Institute; Jeff Lamontagne, Ashley Millman, and Keith Wood, Bluff Lake Nature Center; Cara Lynch and Donny Roush, Earth Force; Adam Brock, The GrowHaus; Beverly Grant, Mo’ Betta Green; Sarah Folkzenlogen, Butterfly Pavilion; and Akiima Price. Funding for this work was contributed by the EPA National Environmental Education Training Program, EECapacity.