Understanding Cultural Competency in Experiential Environmental Education Programs:

A Report from the Cultural Competency Assessment Project

Winter 2006
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OVERVIEW OF ORGANIZATIONS

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ANTIOCH NEW ENGLAND INSTITUTE, Community-based School Environmental Project (CO-SEED Program)
Community-based School Environmental Project (CO-SEED) is a seven-year old project of the Antioch New England Institute, a consulting branch of the Antioch New England Graduate School in Keene, N.H. Its purpose is to help schools and communities work together to develop community- and place-based approaches to education while increasing social capital and preserving the environment. It currently has school sites in New Hampshire, Vermont, Massachusetts and Maine. Its place-based educational approach seeks to create an ongoing connection in student learning between the school and the community. It focuses on the local natural or schoolyard environment, and also on the “community environment” comprised of local culture, history, and the social/political situation.

URBAN ECOLOGY INSTITUTE
The mission of the Urban Ecology Institute (UEI) is to promote the community stewardship of healthy urban ecosystems by improving science and civic education for middle and high school youth. Through its Field Studies Program, UEI works in the Boston Public Schools and out-of-school time programs to help educators and students design and conduct urban ecology field studies in their own neighborhoods and schoolyards. It also works with urban community residents to improve natural resources in their neighborhoods.

MASSACHUSETTS AUDUBON’S BOSTON NATURE CENTER
Boston Nature Center (BNC) is an urban wildlife sanctuary and nature center of the Massachusetts Audubon Society. BNC’s mission is to engage its diverse communities in understanding their role as human beings within the natural world and creating a sense of connection among all living creatures. It offers a comprehensive range of environmental educational programs and center-based activities including: environmental education programs in collaboration with Boston Public Schools, Out of School Time Science and Nature Enrichment Program, Teen Ambassador Program, summer day camp and community gardens.
Introduction

The quality of life in a city is inextricably linked to its natural and built environment. Without care, nurturing and advocacy, this environment is highly susceptible to a host of threats. Individuals living in a city can contribute to the environment’s well-being by simple acts such as cleaning up litter or planting trees. They can take these actions even further by getting their neighbors involved or testifying at public meetings. But these actions, small or large, can only happen when city residents are aware of and are encouraged to explore and enjoy their environment, have a strong sense of belonging and ownership of their communities, gain an understanding of how their individual actions affect the environment, and are equipped with the skills to make informed decisions and take action if necessary.

Since 1997, the Barr Foundation, a Boston-based private foundation committed to enhancing the quality of life for all of Boston’s citizens, has made significant investments in experiential environmental education (E3) programs for youth. With a belief that an educated, engaged and energized community is crucial to the health, protection and enhancement of the environment, the Barr Foundation is focused on ensuring that today’s youth, Boston’s next generation of stewards, have an understanding and appreciation of the beauty and fragility of their environment.

Increasingly, E3 programs are taking place in urban school and after school settings where the student population is highly diverse and comprised predominantly of young people of color from multiple racial, ethnic and national backgrounds and learning levels. The environmental education programs that reach these students have two main goals: engaging youth in science and the environment, and stimulating youth to care about and become active stewards in protecting their local environment. Initially designed to simply develop an “appreciation for the environment,” environmental education programs typically brought urban youth outside of their local settings to rural and forest areas. Today, there is a shift to teach youth about the environment in their own community or school, using experiential learning approaches and activities that are connected to their lives. Just as urban school systems are grappling with diversity issues and the challenges that come with creating culturally responsive and competent curriculum and programming, so, too, are environmental education programs recognizing the need for cultural competence.

At the heart of the Barr Foundation’s theory of change and investment in E3 programs is a vision of environmental stewardship among Boston’s youth who have not been presented with opportunities to learn and experience their
local environments. The foundation's theory of change is that urban youth who are engaged in experiential learning opportunities from a young age will acquire knowledge, deep appreciation for the environment and the skills and self-efficacy to transform themselves into environmental stewards. This transformation from student to steward happens most quickly and most often when E3 programs are designed with a culturally competent foundation and succeed at reaching, engaging and drawing on these youth's own cultural diversity.

Beginning in May, 2005 three Boston environmental education programs who were participating in a Barr Foundation-sponsored Experiential Environmental Learning Cluster decided to deepen their understanding of cultural competency. Antioch New England Institute’s Community-based School Environmental project (CO-SEED), Urban Ecology Institute (UEI) and Mass Audubon’s Boston Nature Center (BNC) participated in the Cultural Competency Assessment Project. Through this project, consultants Judy Tso and Curdina Hill conducted individual cultural competency assessments at each organization. These assessments were aimed at capturing a snapshot of each organization’s current progress in cultural competency and creating sets of metrics to measure future progress around objectives of cultural competency. (See inside front cover for an overview of these organizations).

The Cultural Competency Assessment Project sought to answer this central question:

What are the structures, approaches and practices at each level (individual, interpersonal, program, organization, organization’s relationship to the community) that support and facilitate cultural competency for experiential environmental education organizations?

These approaches include but are not limited to:

• reaching and engaging urban youth and their communities to be environmental stewards
• increasing the development of environmental leadership skills and ultimately environmental stewardship.
• planning and developing new programs and improving existing programs
• recruiting and retaining diverse staff
• training staff to develop their skills at cultural competency

Definition of Cultural Competency
An ongoing process of developing awareness, behavior, structures and practices that allow an organization or program and its members to reach or engage diverse groups and communities in relating to the natural and built environment and in environmental stewardship.
The following assumptions were made at the beginning of the assessment phase and helped to guide the structure and format of the assessment.

- Each organization already has some culturally competent practices within its experiential environmental education approach.
- Cultural competency in E3 programs involves a range of dimensions of diversity including race, ethnicity, gender, class and learning style, to name a few. This assessment project considered and encompassed that range of diversity.
- Cultural competency must be assessed on multiple levels, including the levels of the 1) individual, 2) interpersonal, 3) program, 4) organization and 5) organization’s relationship with community. The results of a multi-level assessment will be the basis for creating a plan to address cultural competency at several levels.
Methodology

The assessments of the three organizations involved one-on-one interviews, focus groups, group interviews and observations and utilized an ethnographic approach derived from the field of anthropology. The consultants also reviewed website content and documents including strategic plans, manuals, evaluation reports, papers and brochures. The qualitative data was transcribed, coded and analyzed using HyperRESEARCH™ software.

Staff members at each of the organizations recruited participants for the interviews and focus groups with an effort to involve individuals who had knowledge of the program from varying points of views. Respondents varied across each program but included program staff, teachers, principals, parents, students, partners and committees. All respondents were given a definition of cultural competency and were asked a range of questions regarding their thoughts on what is culturally competent in their specific organizations.

For CO-SEED’s place-based education program, the assessment focused on its three Boston public school locations – the Haley, Young Achievers and Dearborn. For the Urban Ecology Institute, the assessment focused on the Field Studies Program, which utilizes VISTA volunteers in the school and out-of-school time programs at West Roxbury High School, Umana Barnes Middle School in East Boston and Charlestown Middle School. For the Boston Nature Center, the assessment focused on its summer camp program and relationships with the Haley and Philbrick schools, as well as observations of the general activities at the Nature Center.
Key Findings

During the assessment, several consistent themes or “findings” emerged from the three organizations. As summarized below, these findings help to reveal the meaning of cultural competency to individuals, how organizations promote cultural competency and environmental stewardship, the interplay between cultural competency and environmental justice and how these organizations affect the way in which youth perceive nature.

- Respondents had a range of responses to what cultural competency means to them:
  - Understanding, valuing and respecting culture and cultural differences and using this understanding in the teaching and learning process
  - Being able to expand one’s own worldview, transcend your filters
  - Treating people fairly and providing equity and equal access
  - Awareness and respect for the background, worldview, visions, and stories of others and affirming it through the content of the program
  - Awareness and sensitivity to using varied means for increasing student involvement and engagement
  - Creating an inclusive, welcoming environment
  - Reflecting, responding to, valuing and learning from the community served

- Use of place-based education concepts and hands-on learning relate to and support cultural competency

The three programs share a common emphasis on “place,” that is, the importance of engaging or empowering urban youth through an active experience in their immediate environment — a “place” close to home or school. While all three programs include some notion of “place” in their approach to E3, they each use different terminology and combine place-based education with other kinds of learning. See chart below.

<table>
<thead>
<tr>
<th>PROMOTING CULTURAL COMPETENCY: THREE APPROACHES TO PLACE</th>
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<tbody>
<tr>
<td><strong>Approach</strong></td>
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<tr>
<td>Hands-on, inquiry-based field projects, at Nature Center or school</td>
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<td>Uses hands-on field projects at the Nature Center or schoolyard to generate interest and enthusiasm among students and ultimately to deepen students’ critical thinking skills about nature and the environment. Implicit to this approach is recognition of the interest and prior knowledge (or lack thereof) that each student brings to the process based on his or her background.</td>
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Key behavioral practices that are important to cultural competency

In interviews and focus groups, respondents described key practices that are important for individuals and organizations that wish to be culturally competent. These included self-awareness, reaching people where they are, offering multiple points of access, and relating to youth with different backgrounds, addressing language differences and differences in socio-economic status.

- **Self-awareness**: Understanding the limitations of one's worldview and experience, being able to reflect on behaviors that need improvement, being able to confront mistakes and being open to continuous learning.

- **Reaching people where they are**: Acknowledging differences between individuals. Programs must recognize and assess participants' varying levels of development, skill or exposure in different areas and then engage them appropriately using that awareness. Regarding participants exposure to nature, programs must anticipate that there will be a wide range of experiences with nature and that, to be effective, their activities should accommodate this range.

- **Providing multiple points of access**: Offering activities in multiple forms will address the different needs and interests of individuals. This approach acknowledges that individuals come from varied backgrounds, have multiple learning styles, varied channels of communication and different interests.

- **Ability to relate to youths with different backgrounds**: Being adept at finding connections between youth with different cultural backgrounds from one’s self. Staff must be able to draw on information from the youth's background and cultural history and integrate this information into learning about the environment.

- **Addressing language differences**: Providing written materials in multiple languages and staff or translators who will help non-English speakers (youth and parents) participate in the program.

“Transportation is always one of the first things that people can look at to make things work better. I consider it a line of cultural competency to have the right resources, because it’s a local tie, it’s a matter of getting from one neighborhood to another and we’re not talking about long distances—we’re talking about five miles, at the most. But yet, it requires a vehicle.”

— Community Learning Center representative, CO-SEED

- **Addressing differences in socio-economic backgrounds and resources among program participants and families**.

  Programs cannot assume that participants have access to specific resources such as transportation, or the Internet. In order to be able to effectively engage all participants, programs must understand what resources participants currently have or may need to make that program successful. In some cases, making a resource like transportation available can mean the difference between being culturally competent or not.

- **Successful environmental stewardship projects are ones that are connected to local issues and are relevant to the lives of the youth**.

  When field and community-based projects are connected to local issues in the environment such as pollution or water quality that directly affect the quality of their lives or social reality, youth become very engaged as advocates for change. All three programs demonstrated a common focus on promoting environmental stewardship through action-oriented, hands-on activities. A program’s ability to enhance environmental stewardship is related to three factors:

  1. Connecting to the environment in their local place;
  2. Making environmental connections to local social action or justice issues; and
  3. Taking advantage of and building on parents’ interest in the environment, helping to promote an intergenerational commitment to environmental stewardship.

(See: “Vignette: Advancing Environmental Stewardship through Justice, Access, and Empowerment” on page 16)
Cultural competency increases when the activities are directed at acknowledging and addressing issues of social justice and fundamental inequities in the environment and lives of the youth.

By definition, experiential programs have a built-in action orientation. Youth may be involved in projects such as planting flowers to beautify the school grounds or researching the decline of area wildlife. Simply taking action to improve the local community or schoolyard environment is powerful in its own right towards building stewardship. However, when working with older youth, E3 organizations can significantly increase their impact by linking their activities to ones that have a clear social justice implication and focus youth on taking leadership to correct inequities found in their community. At the same time, cultural competency increases when the issues of inequity in the youth’s community are acknowledged and the interconnections between social justice and environmental justice are clearly delineated and addressed through action. For example, when students are made aware that lower income communities are targeted for labs dealing in toxins, they become energized to take action not only for the good of the environment but to correct the underlying injustice that affects their own communities.

Youth’s attitudes and perception of nature shifts after participating in culturally competent E3 programs

Many urban youth do not see the urban environment as being connected to nature. When youth have less exposure to the outdoors because they do not frequent parks, have a backyard or make trips to visit the natural environment in or near their neighborhood, they often can find the outdoors to be overwhelming, unfamiliar and, at times, scary. However, if an E3 organization has culturally competent practices which reach urban youth where they are, pay attention to their prior exposure to nature and their existing attitudes about nature then, as youth participate in E3 programs, their fear, dislike or disregard about nature shifts and they are likely to become more aware, appreciative and concerned about the environment. (See “Vignette: Changing Perceptions of Nature Among Urban Youth” on page 14)
Assessment Results: How Each Organization Demonstrates Cultural Competency

This section summarizes findings that are specific to each organization that participated in the assessments. For each level of cultural competency (individual, interpersonal, program, organization and organization’s relationship with the community), the assessments revealed where a program demonstrated cultural competency and where improvement was possible. It is noteworthy that while all organizations demonstrated cultural competency on multiple levels, none demonstrated examples of competency at all five levels and all can make improvements within this realm.

CO-SEED

Cultural competency at CO-SEED was observed primarily at the levels of program and relationship with the community.

DEMONSTRATIONS OF CULTURAL COMPETENCY

- **Working with the school’s agenda**
  CO-SEED staff work with the principals and teachers to understand what a particular school’s needs are with respect to the local environment, science education and the built environment. This ability to understand and then respond to the school’s needs ties closely to one key principle of cultural competency, which is to understand the cultural context and needs of those you are serving.

- **Facilitation approach allows for flexible implementation and supports cultural competency**
  CO-SEED staff act as facilitators both in a formal way at meetings as well as behind the scenes as coaches and consultants. Through skillful facilitation that helps participants see the connections between ideas, CO-SEED supports teachers to break out of the box, to think big and help teachers collaborate and translate curriculum ideas into actionable local projects. This flexibility allows CO-SEED to meet specific needs of the site including addressing particular cultural and other human diversity factors present. In effect, the facilitation approach allows the program to customize itself to any setting. That customization is vital to a culturally competent approach.

- **Designing place-based projects that engage community participation and connect to social justice issues that have an impact on the community**
  The CO-SEED model relies upon creating projects that are focused on the local environment in which youth live. As one example, teachers at the Dearborn School designed a project to create community awareness around the physical appearance of the neighborhood surrounding the school. The project began with students leading a clean-up of the school building. As the students became more aware of, and invested in caring for their local environment, they asked “How can we get the community to get involved to take care of its own neighborhood?” and began to take leadership to make this happen. One exciting project outcome has been the creation of several schoolyard gardens in partnership with local residents and community organizations.

![Dearborn School staff sailing in Boston Harbor as part of their E3 professional development – Photo by CO-SEED](image-url)
Engaging teachers whose background reflect the youth

CO-SEED works with teaching assistants or teacher aides who are parents or community members. These community teachers reflect the youth in their race, ethnicity and urban experience. Being trained in the experiential and hands-on methods used by CO-SEED, the community teachers are natural role models for the youth. Over the longer term, if supported, they represent a potential pool of diverse candidates who could take on leadership roles in the environmental education or k-12 education fields.

Summer Institute supports understanding of place-based education and showcases leadership from diverse communities

Each summer, CO-SEED runs a Summer Institute, a professional development program for teachers. Through the Summer Institute, CO-SEED helps familiarize the participating schools with place-based education and links the CO-SEED program into their existing curriculum. It serves an important role in bringing together diverse schools from urban and rural environments. It also allows a group of teachers from each school to coalesce as a team, have the time to bond and plan together and become stronger advocates for place-based education.

A program model that provides structure through community engagement, local coordination

CO-SEED’s program model emphasizes rigor through a set of structured planning activities that help the school create and realize a vision around environmental education and ultimately stewardship. Structures such as the Seed Team Steering Committee bring together teachers, principals, parents and community to plan together and create a shared vision through the Vision to Action Forum.

A partnership with a local organization, known by CO-SEED as the “Community Learning Center,” helps build connections with the school and community

A Community Learning Center (CLC) representative works closely with teachers to help them design projects and to assist in logistical arrangements, making it possible for interesting, place-based projects to take place. The effectiveness and cultural competency of the CLC representative is related to his/her depth of knowledge and experience in the community. The presence of the CLC and the work of the CLC representative allows CO-SEED to have a tie to local issues and knowledge of the community.

Urban Ecology Institute

Cultural competency at the Urban Ecology Institute was observed primarily at the level of program.

Demonstrations of cultural competency

Using Universal Design Learning (UDL) principles in developing data sheets for field projects

One aspect of cultural competency is acknowledging the different learning styles, languages spoken and developmental levels of youth. UEI worked with the Center for Applied...
Special Technology (CAST) to use UDL principles to provide special needs teachers and student learners with multiple means of understanding educational materials. By utilizing principles of universal design, UEI is able to meet the needs of diverse youth, including helping to address language barriers by using visual and verbal information. As an example, for their field projects, UEI designed data sheets for bird and insect identification that rely entirely on pictures rather than words.

Engaging the school in the design and development of science curricula which demonstrate relevancy to students’ lives

UEI develops curricula that incorporate students in action projects through which they learn about the connection between science and stewardship issues. In one example, students were involved in educating environmental leaders and legislators about drinking water safety issues: researching and writing letters to the EPA, creating environmental justice maps of their neighborhood and the neighborhood surrounding the school.

Using the schoolyard as a lab for teaching science and ecology

UEI staff and VISTA volunteers work with teachers to use the schoolyard as a field site to help students learn about the urban ecosystem and to see the possibilities for exploring nature in their immediate environment.

VISTA volunteers who provide teacher support on environmental projects, show adaptability and flexibility in building relationships with students

UEI utilizes Americorp VISTA volunteers in its Field Studies program. These VISTA volunteers assist teachers in the classroom and organize the field activities. Although the volunteers may come from different experiences and backgrounds than the students, they demonstrate the ability to find commonalities. They lead project activities that raise issues relating to students’ lives, and demonstrate the ability to adapt and solicit students’ input in designing projects.

Boston Nature Center

BNC demonstrates evidence of cultural competency at the level of program, organization and relationship to community.

DEMONSTRATIONS OF CULTURAL COMPETENCY

Multi-faceted approach to program design

BNC’s multi-faceted, hands-on/minds-on learning approach creates expanded access and builds capacity in culturally competent environmental education. The program design revolves around using scientific inquiry to engage youth and adults in forming their own questions for understanding nature and the environment. These questions guide the programming BNC delivers to its audience. In the context of youth programs, BNC adheres to state and local educational standards while combining interactive engaging activities and cooperative games during out-of-school time programs to promote thinking and learning about their environment. BNC provides multiple ways to pique curiosity and communicate environmental messages such as annotated maps, interactive exhibits, structured educational programs and direct observation through nature explorations.

Welcoming, inclusive environment

BNC creates a welcoming environment through personal treatment offered by the BNC staff and Teen Ambassadors (young people of diverse backgrounds who live in the neighborhoods served by the Center) who accept the responsibilities of junior staff members. Additionally, the signage, publications, exhibits and displays at BNC are in multiple languages, typically English and Spanish.

“\text{I think that [UDL]}\text{ is very similar to multiple intelligences. You can have one student create a song about a lesson and another one drawing pictures and another one writing an essay on it – it connects with all the different learning types.”}  
— Teacher

Codman Academy Charter Public School students birding on Blue Hill Avenue – Photo by Regan Brooks
Organizational commitment to cultural competency is reflected in key documents

The commitment to cultural competency is clearly defined in key documents such as the 2004 strategic plan where it is identified as a core value and goal of BNC’s mission as well as the Land Disposition Agreement (1997) and Original Master Plan (1995).

Diversifying staff through tiered approach to staffing and intergenerational learning

BNC’s staffing for its out-of-school time programs allows for greater staff diversity, mentorship and intergenerational learning. The staffing pattern includes a lead teacher who is a skilled experiential environmental educator, assistants who are college or graduate students, interns who may be college or high school students and Teen Ambassadors, high school students from local neighborhoods.

Using its Center to create multiple access points for community engagement

BNC’s strategies provide access to a multicultural, all-inclusive audience through its engagement of people in the environment through multiple avenues. Examples include seasonal open houses, school programs, out-of-school time programs, drop-off programs, camp and school vacation programs as well as exhibits, bird-watching activities, community theatre, interactive displays and involvement in the community garden. Each person can access environmental education in the way that is most compelling. BNC’s materials and programs acknowledge the multiple backgrounds and languages spoken by the visitors to the Center.

Long-term partnerships with schools

BNC has developed long-term partnerships with the Haley and most recently the Philbrick, Elementary Schools. Both of these schools are comprised of multicultural students and educators. The majority of students are African American and Latino and from families with low income. BNC provides the school with a dedicated teacher/naturalist who leads the school in learning about environmental education and developing place-based projects, and ultimately supports teachers to become self-sustaining environmental educators based in the classroom. The provision of a BNC teacher/naturalist, as a staff resource with expertise in hands-on/minds-on environmental learning and outdoor science education, provides schools with a mechanism to learn how to access and learn from local environmental resources. In addition, CO-SEED recently partnered with BNC at the Haley School to help to facilitate teachers’ collaborative planning efforts in the design of field projects and promoting stewardship for diverse student audiences.

A long-term partnership is evidence of cultural competency. When two organizations representing diverse individual and organizational cultures come together, there is always the potential for conflict. Cultural competency is necessary to negotiate conflict and create the conditions that allow for a successful, on-going partnership. At the same time, a long-term partnership promotes a deeper level of cultural competency through shared learning about how to reach diverse constituencies and understand their perspectives (in the case of the BNC School partnerships this includes teachers, students, and the community.)

Philbrick School teacher and students discussing butterflies and their habitats – Photo by BNC
Changing Perceptions of Nature among Urban Youth

INITIAL VIEWS OF NATURE

Initially, many urban youth don't see the connection between their urban environment and nature. They perceive the city as disconnected from the natural world; therefore, they pay little attention to the birds, animals and trees in their neighborhoods or near their schools and are likely to view nature as being somewhere else, far away, in a forest or the suburbs. They may find the outdoors overwhelming. As one CO-SEED teacher explained:

“... Being in an urban school setting, not a lot of [the students] got to explore green areas. They get to plant... [now]. I think it was new for some of them and I think they are really receptive to it... Some were squeamish, when we were doing [work with] snails. Some of them are still like that but most of them have settled down a little bit to it. They've become a little more environmentally friendly...”

A BNC staff member also shared:

“Going to the Arboretum and hiking through ...off trails was at first fairly scary. I think they had a hard time getting out of the structure of the city...”

However, students who feel a connection to nature because of the influence of their family and home environments are less likely to perceive nature negatively. Students whose families have backyards, who visit city parks or have the opportunity to leave their neighborhoods are more likely to see the outdoors as a more familiar, less overwhelming place. As a CO-SEED teacher pointed out,

“The kids with the backyards ... were much more able to put the snail in their hands right away, were able to identify things and were much more into walking around and exploring[ing] things. ... the kids without access to green spaces were the ones thinking we would see dinosaurs in the forest.”

In addition, students whose families maintain gardens or have an historical connection to agriculture are more likely to feel a connection with nature. These families demonstrate this affinity and the importance of passing on a love of nature to their children. Two parents shared their thoughts:

“...as I explain to my daughters, we grew up in the West Indies [where] everything was outdoors. I said, you need to know where the tomato came from...”

“I'm from the Southern part of the US - and ... the geography is very different. ... I grew up able to roam around, to go from house to house.... to go in the cow pasture with friends and ... race through the woods... My children, because we're in Boston, don't have that opportunity and what I see is them becoming more separate from the environment and not having a sense of the interrelation between who they are and the environment. ...[In] more traditional African American or African culture,... people view themselves as part of the environment... and I like your word, “steward...” We're stewards of the environment. ... I think those are important lessons for my kids...”

The students’ own comments reveal their unfamiliarity and discomfort with nature. Some describe the outdoors as dirty, a place where their clothes and shirts may get soiled. A UEI Vista volunteer noted,

“For a lot of students the environment is a whole other world, it has no bearing on their lives. ... Walking on grass is a hazard to their new sneakers. Our field studies program is an introduction to science and ... to the entire outside world.”

In addition, some are afraid of the bugs and other living things they see while others want to squash them. A CO-SEED principal pointed out,

“Typical city kids. I think you’d say they were afraid of spiders – afraid of bugs. If there were an ant or a spider in the closet, it was, “Oh, quick! Step on it! Oh, yuck!” Or they’d run the other way. Now they collect them for me at recess.”
“[I] was thinking that kids, in the beginning, felt like visitors … when walking around the forest[,] like they were out of their element and now they walk around … like it’s their forest. … It’s really amazing to me how they have gone from “This is somebody else’s space, this is not my space” to “this is my space, I know how to get around here, and I know what lives here…”  

Kids who start valuing birds, bugs and living animals can develop a sense of care and appreciation of them as living things. A CO-SEED teacher observed:

“….During the presentations about the [BNC] community activism work, one kid said that he used to walk home and throw things at birds and his job at the nature center is to feed and interact with the birds. …Now, he says “I sometimes have extra seeds in my pocket, I feed the pigeons.” He’s [going to] get the 8th grade award for community activism because he’s … changed the way he looks at other things as well.”  

Teachers’ attitudes about nature are also impacted by the programs. Teachers who come from an urban environment and have had less exposure to nature get the biggest benefit.  

As one CO-SEED teacher shared:

“I noticed that …in November I was going through what they were talking about with … “this isn’t my space” and … the kids were going on these …naturalist trips … and digging up compost heaps … so they could see all the stuff that was living there – and I show up and I was teaching and I had on my teacher clothes and teacher shoes and I didn’t expect it. I’m thinking “nature walk and observe nature” but it was hands on, … and I [thought], “Oh I’m gonna fall, I’m gonna mess my [clothes]” and what happened was I was just watching [the kids] and they knew what certain things were. They looked at certain plants and they knew that trees [were] dying because of a particular [disease]. …They saw how I was estranged [from nature]. And they were taking care of me, they said “Ms. X you stay down there, don't go where we’re going.” And I [said] “ok”. They went to the heap and they were so excited.. I realize that they're not going be the way that I am - even though we all grew up in the city. Their relationship with nature will be different than my relationship with nature because of CO-SEED.”
Advancing Environmental Stewardship through Justice, Access, and Empowerment

The Principles of Environmental Justice* mandate balanced and responsible uses of land and resources, and affirm a fundamental right to clean air, land, water and food. Access to urban green space and quality environmental education comparable to communities with more wealth and resources establishes progress toward environmental justice. When students are provided access and learning opportunities about the characteristics of their local environment, they often connect issues of fairness and the environment. It is the job of the environmental educator, and a mark of cultural competence, to be aware of the environmental resources (or lack thereof) and issues that are pertinent to a particular population of students, to create experiences for the students to explore those issues and raise questions, and to assist students in identifying opportunities and solutions. An environmental education program that incorporates this level of intellectual and active engagement is taking substantial steps toward addressing one important pillar of justice.

BNC, UEI and CO-SEED all provide students, and in many cases, the broader community, with opportunities to appreciate their environment, understand their local resources and issues and ultimately take action. This work involves a process of exposure to the environment, exploration of local environmental dynamics, identification of salient issues, researching solutions to these issues and finally taking action to address them.

Below are examples of how each of these three organizations and programs work with students, schools and communities to unearth underlying environmental injustices and empower individuals to take action on their own behalf. Earlier in this report it was discussed that engaging people at the place where they are ready is one element of cultural competence. The examples outline a continuum of strategies for engaging and addressing environmental issues.

**Boston Nature Center: Access to urban green space and environmental education**

Lack of access to green space and high quality environmental education is a fundamental environmental and environmental justice issue for the communities surrounding the BNC. Through the creation of BNC, Mass Audubon demonstrated its commitment to expanding access to green space and environmental education for Boston residents, in particular, residents of Dorchester, Hyde Park, Jamaica Plain, Mattapan, Roslindale, and Roxbury. In 1997 when Mass Audubon acquired a portion of the former Boston State Hospital campus, it worked with the broader community to determine how this 67-acre urban gem consisting of meadows, woods and wetlands could be made accessible to the public. This access would be accomplished through walking trails, recreational programs, social events and education. Embedded within BNC’s unique origins is a belief that access to local green spaces offering recreation and educational opportunities will lay the foundation for citizen engagement in environmental stewardship and justice activities. BNC believes that access to these areas begins to level the playing field and promotes social justice for its constituents. Access points are multifaceted and intended to reach BNC’s richly diverse surrounding neighborhoods.

As part of BNC’s founding (through the land disposition agreement) Mass Audubon agreed to take key action steps to increase access through its users and employment. Today, BNC provides affordable summer camp and after-school programs for local residents and consciously works to provide.

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* The Principles of Environmental Justice were drafted in 1991 by delegates to the First National People of Color Environmental Leadership Summit and now serve as a defining document for the growing grassroots movement for environmental justice.
employ a workforce that mirrors the demographics of the neighborhood. BNC also has established training programs in consultation with local school and educational agencies to assure a pool of qualified women, people of color and low-income workers at all levels of employment. Finally, BNC engages in long term partnerships with local schools and organizations to bring students from all backgrounds onto the BNC wildlife sanctuary and to bring BNC programming into the schools. Through each of these examples, BNC is expanding its capacity to provide increased access and education to all people.

**CO-SEED: Dearborn Water Bottle Project**

The Dearborn Middle School in Roxbury is a very old building that is in need of a major renovation. Students and staff are not permitted to drink from water fountains due to concerns of lead contamination. The only access to drinking water is through water served from “bubblers.”

Prior to the CO-SEED project described below, some teachers did not want the mess from liquid containers students brought into their classrooms.

In 2005 as part of a community-service learning project, one of the 8th grade classes chose to focus on the lack of access to drinking water in the classrooms and throughout the school. The students took action in two ways. First, they took an active part in advocating for the school’s renovation. The students presented their case for the urgent need for school renovations to the School Committee, City Council and directly to the Mayor when he visited the school. Partly as a result of this advocacy, the first two phases of building renovation have been completed, the building has a new roof and the outside walls have been repaired to eliminate leaking.

The second action the students took was to conduct a survey of their class to identify potential solutions to the challenge of access to drinking water. They came up with the idea to purchase water bottles with Dearborn logos for students at the school. Students addressed teacher concerns about management of the water bottles by requiring students to sign a “use contract” with basic guidelines for how students were to use the water bottles. This project succeeded in identifying a solution based on a common understanding of the problems. Today, all students have access to drinking water throughout the school day.

**Urban Ecology Institute: Environmental Youth Crews**

The Neighborhood of Affordable Housing’s (NOAH) Environmental Chelsea Creek Crew (E3C) and the Chelsea Environmental Youth Crew are environmental after school and summer programs for teenagers in East Boston and Chelsea. Both crews have worked closely with UEI for several years to identify issues of concern to the youth. E3C employs seven East Boston teens to work with the Chelsea Creek Action Group (CCAG) on projects/issues related to the Chelsea Creek Restoration Partnership. The youth learn how to be local leaders as they participate in the clean up and redevelopment of polluted sites and long-term scientific field studies in conjunction with UEI. They also help develop programs related to ecological, environmental, recreational, and health issues associated with the Chelsea Creek.

Through hands-on experience, as well as extensive training in environmental justice and community organizing, the youth have realized that they can, in fact, make a difference in their community. They determine which projects are important for the improvement of their urban environment and work towards achieving their goals in cooperation with the CCAG.

Achieving their goals requires experiential learning and working. The crew works on field studies with UEI once a week. This includes working with biologists and ecologists to monitor the water quality, catalogue the plant biodiversity, and identify wildlife present at the Condor Street Urban Wild. They also work with CCAG to organize recreational and educational programs at the Urban Wild such as nature walks, catch and release fishing, kite flying, Halloween parade, etc. Environmental clean ups are another vital component of E3C’s work. Empowering this diverse group of East Boston youth is a way NOAH ensures the long-term success of its community-based efforts.
Assessing and Promoting Progress Toward Greater Cultural Competency

One of the most important outcomes of this cultural competency research project was the development of a set of metrics, or a system for measuring cultural competency. This involved defining key principles of cultural competency, assessing the current state of cultural competency and then setting objectives for improving cultural competency in specific domains going forward. Domains include such areas as program design, hiring policy or decision-making. The metrics fall into five distinct levels: 1. individual 2. interpersonal 3. program 4. organization 5. organization’s relationship to the community. These metrics do not measure organizations against an existing “perfect standard” but are intended to help organizations measure progress against their own objectives for improvement.

These metrics recognize that true cultural competency in E3 organizations is multidimensional and that organizations need to be mindful of how well they are addressing cultural competency at each level. Ultimately, when used by an organization for internal assessment, these metrics can be a powerful tool for creating a culture of reflection within an organization that will support progress toward greater cultural competency at all levels.

As organizations choose to fully implement a cultural competency assessment similar to the one described in this report and to institutionalize a culture of cultural competency, it is likely they will need expertise and assistance in the main phases — design, assessment and evaluation. Appendix A (see page 23) includes the full set of metrics that were developed through the Cultural Competency Assessment Project. These metrics include each level of cultural competency and can be adapted by other organizations as starting points for measuring progress after a cultural competency assessment has been completed. What follows is a suggested process for using these metrics and one sample metric.

Process for Using Metrics

- Review and select a prioritized subset of metrics to assess your program and organization. (It is not feasible or strategically effective to try to address too many metrics at one time. Prioritize the metrics based on need and where you think your organization can make and measure progress.)
- Review the description of each domain of impact to ensure the wording accurately describes the desired behavior or practice.
- Review the suggested indicator(s) and refine or modify based on the measures you seek to use. Make sure it is measurable and can be tracked.
- Create a plan for how often you will track and document these indicators and at what times of the year you will review progress.
Sample metric: Interpersonal Level

**INTERPERSONAL**

<table>
<thead>
<tr>
<th>Domain of Cultural Competency Impact</th>
<th>Description and Objective</th>
<th>Indicators</th>
<th>Steps/Protocols/Procedures</th>
</tr>
</thead>
</table>
| Respectful and Inclusive Interactions | E3 staff interactions with organizational members (teachers, students, staff) demonstrates respect and appreciation of cultural differences and world-views; and an understanding of their power and privilege is used to support inclusion in day-to-day interactions. | • Percent of staff that perceive respectful interactions on the part of coworkers based on response to survey question  
• Percent of staff that perceive majority of coworker’s appreciate cultural differences and different worldviews based on response to survey question  
• Percent of number of staff that are respectful in their interactions with teachers, students, and staff based on observations or interviews with peers/managers/teachers.  
• Percent of staff that report having respectful interactions and being inclusive based on staff survey response. | • Decide whether you will measure through survey or manager observations or both  
• Decide whether survey questions can be added onto existing surveys or if it needs to new one  
• Key management staff to discuss how to operationalize these behaviors in form of survey questions  
• Assign people to draft survey questions  
• Test survey with several respondents, modify and revise  
• Administer survey |

> See Appendix A on page 23 for the complete set of Metrics
Addressing a Key Challenge: Strategies to Increase the Number of Environmental Educators from Diverse Backgrounds

The lack of diversity among the staff in the environmental education field creates barriers and challenges to maximizing cultural competency in E3 organizations. Understanding how to increase the numbers of people with racially/ethnically diverse backgrounds (as well as other dimensions of diversity) who enter the environmental education field is a key priority for the E3 field. A major challenge for the field is creating a pool of candidates who possess environmental expertise, have a diverse background and have experience working within a given community. Below are strategies, recommended during the course of the cultural competency assessment, to increase diversity.

- **Create a tiered staffing structure that includes more diverse people and community members.** For example, BNC has built a tiered structure that recruits community members and youth, and allows more experienced staff to teach and mentor less experienced staff and interns. This includes developing opportunities for college and high school students such as internships that typically involve a small stipend.

- **Build collaborative partnerships with community programs and/or include local community leaders who are people of color as role models in project activities.** UEI runs programs which are carried out in collaboration with multiple community-based organizations with out-of-school time programs. These out-of-school time programs involve neighborhood youth and teens who work cross-organizationally to serve as translators and mentors.

- **Challenge and examine the assumptions about what qualifies a person for a job.** Because the pool of diverse candidates with environmental experience is extremely small, alternative strategies must be adopted to bring in diverse individuals who are currently interested in the environmental field. It is important to define a broad set of competencies necessary for E3 positions so that factors beyond environmental experience are valued. For example, experience working with a specific community is an important qualification that should have similar weight as experience in the environmental field. Programs should implement strategies to provide on-the-job training to provide environmental knowledge and skill building in environmental education. This issue may require a larger discussion within an organization to ensure that members can evaluate what competencies are truly needed to effectively educate and engage youth around the environment and nature.

- **Broaden job searches.** Develop a personalized and wide-ranging approach to outreach for open job positions. Advertise jobs in a wide range of community sites and communication vehicles and allow more time for outreach, job search and hiring processes. More direct and personalized outreach, which often is a lengthier process, is necessary to recruit people of different backgrounds to the field.

- **Expose youth to the E3 field and the variety of job opportunities within it.** Run environmental career workshops, offer internships, or provide job-shadowing opportunities to high school and middle school students. Create a mentorship program that involves a diverse group of high school and/or college students and cultivates their interest while exposing them to the E3 field and career opportunities.

- **Increase compensation/salaries.** Relatively low salaries for community-based environmental educators are a deterrent to people of lower incomes who may be considering a career in the environmental field. Programs need to consider whether salaries will be competitive enough to attract diverse applicants.
Summary of Recommendations for the Environmental Education Field for Improving Cultural Competency at Each Level

Based on the findings of the assessments, there are a number of general recommendations relevant to environmental education organizations that wish to pursue increased cultural competency across multiple levels. These recommendations are described below.

**LEVEL OF INDIVIDUAL AND INTERPERSONAL**

- Develop these core skills in cultural competency:
  - Understanding the concepts and being able to use the language of cultural competency
  - Recognizing a situation involving cultural competency
  - Naming and articulating these issues/situations
  - Intervening to address inappropriate attitudes and/or behaviors
  - Acting as a cultural broker and code switcher. A cultural broker is able to translate between different groups of people and is able to communicate effectively with different audiences because they are attuned to backgrounds and needs of each audience. When an individuals can change their language and communication style to accommodate their audience they are successfully code switching.

- Incorporate formal “reflection time” into planning and decision-making processes to create opportunities for staff to reflect on the topic of cultural competency as it affects them personally and in their work with others.

- Incorporate issues of diversity and cultural competency into training and orientation for all staff and interns, as well as board and committees.

**LEVEL OF PROGRAM**

- Create consensus about what cultural competency means in the context of E3 and incorporate measures of cultural competency into program and evaluation goals.

- Integrate the concept of cultural competency into program design and logic models.

- Hire staff that have interest and experience dealing with issues of culture and diversity.

**LEVEL OF ORGANIZATION**

- Incorporate cultural competency into organization's mission, values and vision statements.

- Include discussion of cultural competency in key organizational planning sessions whether operational, long-range or strategic planning sessions.

- Create a formal process for regularly assessing progress on meeting stated objectives for cultural competency in E3.

**LEVEL OF ORGANIZATION’S RELATIONSHIP TO COMMUNITY**

- Design structures to incorporate community, youth and family participation, input and feedback on a regular basis.

- Reinforce efforts to engage youth in environmental stewardship by reaching out and educating their parents and the broader community about the same issues.

- Build on the environmental knowledge and experience that parents and grandparents may have regarding their relationship to nature or agriculture.

_BNC Teen Ambassador introducing a nature exhibit to summer camper – Photo by BNC_
Final Thoughts

Today in Boston a number of organizations are focusing on environmental education for urban youth. Antioch New England’s CO-SEED, the Urban Ecology Institute and Mass Audubon’s Boston Nature Center are just three.

In their work, these three organizations have recognized the potential and promise that culturally competent, experiential environmental programming holds as an effective way to engage urban youth as stewards of the environment. While only one of these organizations includes cultural competency in its mission statement, all of them are now making conscious efforts to expand their implementation of culturally competent structures and practices in their programming. As a result of participation in the cultural competency assessments, these three organizations are now on a journey that recognizes the potential and promise of culturally competent approaches to engaging urban youth as stewards of the environment.

Programs steeped in culturally competent emphases and techniques will help engage these young people, build them into environmental stewards and increase their knowledge, power and connections to science, their communities and the larger world. This focus on overcoming differences and biases about other cultures is not just a luxury; it is now an imperative as our urban areas and our country become more and more diverse.

Assessing cultural competence is not always easy. Defining a process to do effective assessment is new to the field. Embarking on such an assessment is both time consuming and resource intensive. The process also demands that organizations open themselves up to difficult conversations and moments of discovery about where change is needed. It requires organizations and programs to make a long-term commitment to cultural competency and to align their values and practices to their environmental educational goals for youth. By taking these challenging steps, the opportunity arises to develop urban young people into keepers of the environment and as advocates for social justice in all parts of their lives.

This report is designed as a starting point for environmental education programs as they pursue cultural competency. The report, including the Cultural Competency Metrics, will help environmental education organizations and programs define and assess cultural competency for themselves, consider why it is important and learn about related best practices. If we are willing to build on our strengths and address our weaknesses through culturally competent E3 programs, together we can protect the environment, engage all of our youth and create future environmental and societal leaders.

Dearborn Middle School student planting the 8th grade’s “legacy garden” – Photo by CO-SEED
Appendix A: Cultural Competency Metrics

<table>
<thead>
<tr>
<th>Domain of Cultural Competency Impact</th>
<th>Description and Objective</th>
<th>Indicators</th>
<th>Steps/Protocols/Procedures</th>
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</thead>
</table>
| **Self-awareness in Cultural Context** | E3 staff demonstrate understanding of cultures they are working with and can recognize and manage their own biases. | **Note:** for each indicator, an organization must decide what percent represents their target at any given time  
- Percent of E3 staff who demonstrate knowledge of other cultures based on self-report in survey assessment  
- Percent of staff who demonstrate awareness of their own cultural biases based on managers’ assessment | This column is being left blank because each organization will set protocols and steps according to their needs and situation. Goals or desired percentages will be set by each organization/program |
| **Awareness of Power and Privilege** | E3 staff are aware of their own power and privilege as represented by their rank, social status, and other dimensions of diversity or cultural capital. | - Percent or number of staff who complete a training on power and privilege, and demonstrate knowledge of concepts like rank, social status, and power relations that are constructed from class and other structural dimensions of diversity  
- Percent of staff who perceive their co-workers as understanding their power and privilege based on staff survey responses  
- Percent of staff who perceive their co-workers as being inclusive in their day-to-day interactions  
- Percent of staff who report being aware of their own power and privilege represented by rank based on a staff survey | |
| **Reflective Practice** | E3 staff demonstrate ability to reflect in public and private on issues of cultural competency (race, ethnicity, culture etc.) | - Percent or number of staff who show capacity to reflect on their own behavior and thinking based on observations and/or interviews with peers/manager  
- Percent or number of staff who report reflecting on issues of cultural competency or their own behavior and can give examples | |
## INTERPERSONAL

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<tr>
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| **Respectful and Inclusive Interactions** | E3 staff interactions with organizational members (teachers, students, staff) demonstrate respect and appreciation of cultural differences and worldviews; and an understanding of their power and privilege is used to support inclusion in day-to-day interactions | • Percent of staff that perceive respectful interactions with coworkers based on response to survey question  
• Percent of staff that perceive majority of coworkers appreciate cultural differences and different worldviews based on response to survey question  
• Percent of number of staff that are respectful in their interactions with teachers, students and staff based on observations or interviews with peers/managers/teachers  
• Percent of staff that report having respectful interactions and being inclusive based on staff survey response | **SAMPLE:**  
• Decide whether you will measure through survey or manager observations or both  
• Decide whether survey questions can be added onto existing surveys or if it needs to new one  
• Key management staff to discuss how to operationalize these behaviors in form of survey questions  
• Assign people to draft survey questions  
• Test survey with several respondents, modify and revise  
• Administer survey |
| **Teacher Relations** | E3 staff interactions acknowledge and integrate the diversity of teachers’ background, role, knowledge, choices and experience | • Percent or number of teachers who report that E3 staff treat them in a way that acknowledge and respect their background, role and experience  
• Percent or number of staff who report working with teachers in ways that respect the diversity of teachers’ backgrounds, role and experience based on staff survey responses | |
| **Race Talk/Cultural Brokering** | E3 staff can communicate about difficult issues related to race, ethnicity and other dimensions of diversity with different audiences, and translate between groups | • Number of meetings or events during which E3 staff facilitate cross-racial/cultural communication over the year based on log of these discussions  
• Percent or number of staff who report having participated in a discussion around issues of diversity based on survey response  
• Percent or number of staff who report having facilitated or initiated a discussion on race, ethnicity or other diversity dimension based on survey response | |
| **Community Relating** | E3 staff with community responsibilities reach out and build relations with parents and diverse members of the community | • Percentage of parents and community members that perceive E3 staff as reaching out and building relations with diverse parents and members of the community based on parent/community survey | |

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## INTERPERSONAL continued

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<tr>
<th>Domain of Cultural Competency Impact</th>
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<th>Steps/Protocols/Procedures</th>
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<tbody>
<tr>
<td>Community Relating continued</td>
<td></td>
<td><strong>continued from previous page</strong></td>
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</table>
|                                      |                           | • Percent of parents, community members that perceive E3 staff as reaching out and building relations with diverse parents and members of the community based on school staff survey  
• Percent of E3 staff with community responsibilities that list specific outreach activities with diverse members of community or parents based on log of community outreach activity | | |

## PROGRAM

<table>
<thead>
<tr>
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<th>Steps/Protocols/Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant composition</td>
<td>Program participants proportionally reflect the diversity of community</td>
<td>• Percent of participants in each racial/ethnic group mirrored in demographic composition of the defined community.</td>
<td></td>
</tr>
<tr>
<td>Professional Development</td>
<td>Professional development of teachers supports their teaching in a culturally competent manner</td>
<td>• Percent of teachers that grasp the concepts of culturally competent instructional practice – based on response to question on teacher survey</td>
<td></td>
</tr>
<tr>
<td>Project Design</td>
<td>Social justice focus is integrated into placed-based education school projects</td>
<td>• Percent of place-based education projects that includes an advocacy or social justice component</td>
<td></td>
</tr>
<tr>
<td>Participant Loyalty</td>
<td>Participants return for additional E3 experiences</td>
<td>• Percent or number of returning participants within a given period as seen in contact log for program(s)</td>
<td></td>
</tr>
</tbody>
</table>
| School Culture                       | E3 staff take into account the diverse dimensions of the school culture when designing and implementing key program activities | • Percent of staff that can identify diverse dimensions of the school culture  
• Principal reports E3 staff understand and utilize awareness of school culture in planning and implementing their program activities | | |

Program metrics continued on next page
### Domain of Cultural Competency Impact

#### Inclusive Design

**Description and Objective**

Design and concepts of program curriculum, content, activities reflect commitment to inclusion

- Program considers implications of different attitudes and beliefs about nature
- Program has multiple access points
- Instruction and assessment practices build on student’s prior knowledge

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>• Methodological considerations in curriculum demonstrate inclusiveness (includes different learning styles, level of development, language spoken, etc) based on use of checklist</td>
<td>• Curriculum materials that demonstrate evidence of multiple access points for students exists and is used as seen in checklist.</td>
</tr>
<tr>
<td>• Percent of activities in each curriculum unit that are hands-on-minds-on design etc.</td>
<td>• Percent of E3 staff who display multiple instructional techniques based on review of lesson plans or observation</td>
</tr>
<tr>
<td>• Percent of staff, volunteers, interns who are trained in UDL, PBE hands-on-minds on approaches</td>
<td>• E3 staff’s use of flexible methods and tools for assessing student progress exists and is used based on checklist</td>
</tr>
<tr>
<td>• Percent of activities that utilize student’s experience and prior knowledge</td>
<td></td>
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#### Teaching Practice

**Description and Objective**

E3 staff teaching practices provide multiple access: multiple learning styles, multicultural approaches, individual experiences. Assessments measure for a student’s progress against self

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</thead>
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<tr>
<td>• Curriculum materials that demonstrate evidence of multiple access points for students exists and is used as seen in checklist.</td>
<td>• Percent of E3 staff who display multiple instructional techniques based on review of lesson plans or observation</td>
</tr>
<tr>
<td>• Percent of E3 staff who display multiple instructional techniques based on review of lesson plans or observation</td>
<td>• E3 staff’s use of flexible methods and tools for assessing student progress exists and is used based on checklist</td>
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</table>
## ORGANIZATION

<table>
<thead>
<tr>
<th>Domain of Cultural Competency Impact</th>
<th>Description and Objective</th>
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<th>Steps/Protocols/Procedures</th>
</tr>
</thead>
</table>
| **Organizational Commitment to Cultural Competency** | Organization has created and adopted a definition of cultural competency. This definition is included in key documents such as vision statements, mission, logic models, strategic plans, multi-year plans, program plans | - Existence of written definition of cultural competency in key documents i.e. mission statement, strategic plan  
  - Percent of staff, board, volunteers who are aware of definition of cultural competency adopted by organization based on response to survey question  
  - Percent of residents, students, community members who participate in program design and decision-making |  |
| **Inclusive Climate and Behavior** | Organization creates a welcoming environment to diverse employees and groups | - Diverse images are present in publications and website  
  - Use of multiple languages in written materials and displays, signage, website  
  - Agenda and room setup for meetings levels power and creates safe circles for discussion  
  - Community and public assess organization as providing a welcoming environment based on community survey |  |
| **Inclusive Decision-making** | Organization has equitable and fair participation of diverse employees in decision-making processes and activities | - Percent of diverse employees that participate in key decision making activities (meets goal set by organization)  
  - Racial/ethnic mix of participants present in all decision making bodies/activities (organization sets standard for what constitutes a good racial-ethnic mix in decision-making activities or board makeup) |  |
| **Resource Commitment** | Organization allots specific funds and other resources to cultural competency | - Budget line item for cultural competency activities and reporting  
  - Planning time set aside for cultural competency assessment and ongoing review  
  - Cultural competency responsibilities integrated into job responsibilities/job descriptions as appropriate |  |
| **Hiring Policy and Practice** | Organization has a hiring policy to increase the diversity of its staff  
  Staffing reflects the diversity of the program participants  
  Required job qualifications are written to allow flexibility around environmental expertise and value community expertise | - Presence or number of staff hired reflects the diversity of program participants  
  - Criteria for hiring includes community expertise and job descriptions reflect this criteria |  |
### ORGANIZATION (continued)

<table>
<thead>
<tr>
<th>Domain of Cultural Competency Impact</th>
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<th>Steps/Protocols/Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salary</strong></td>
<td>Organization offers competitive salary to attract diverse candidates</td>
<td>• Salaries meet or exceed comparable positions in the field and geographic area</td>
<td></td>
</tr>
<tr>
<td><strong>Recruitment</strong></td>
<td>Recruitment activities broadly reach constituent groups (churches, non-profit groups, citizens groups etc) in the community</td>
<td>• Number of promotional contacts made to different community organizations • Number of face to face contacts made to each group</td>
<td></td>
</tr>
<tr>
<td><strong>Staff Retention</strong></td>
<td>Organization retains staff that reflect the diversity of the people served</td>
<td>• Length of employment of people of color or other defined minority group is similar to length of employment of Caucasians/white employees.</td>
<td></td>
</tr>
<tr>
<td><strong>Job Performance</strong></td>
<td>Criteria for job performance establishes expectations and standards for culturally sensitive and respectful interactions with students, teachers and others</td>
<td>• Job performance criteria includes cultural competency standards for the organization</td>
<td></td>
</tr>
<tr>
<td><strong>Leadership Staffing</strong></td>
<td>Leadership positions reflect the diversity of the people served</td>
<td>• Percent of people of color or other defined minority group in leadership positions</td>
<td></td>
</tr>
<tr>
<td><strong>Staff Development/Training</strong></td>
<td>Staff and volunteers have the understanding and skills to deal with diverse groups</td>
<td>• Percent of staff and volunteers who undergo training in diversity, cultural competency</td>
<td></td>
</tr>
<tr>
<td><strong>Board Development/Training</strong></td>
<td>Board has the understanding and skills to deal with diverse populations</td>
<td>• Percent of board who undergo training in diversity, cultural competency, and addressing cultural dynamics or conflicts</td>
<td></td>
</tr>
<tr>
<td><strong>Responsiveness to Cultural Incompetence/Conflict</strong></td>
<td>Organizational system is able to recognize and respond to situations of cultural incompetence or conflict in a timely fashion</td>
<td>• Incidents are documented and responses (or lack thereof) are documented • All staff are trained in recognizing and dealing with cultural incompetence or conflict situations</td>
<td></td>
</tr>
<tr>
<td><strong>Program and Service Planning</strong></td>
<td>Organization assesses consumer cultural needs, experiences and viewpoints in making decisions and planning educational programs</td>
<td>• Protocols are used for considering consumer cultural needs when planning programs or services</td>
<td></td>
</tr>
<tr>
<td><strong>Cultural Competency Assessment</strong></td>
<td>Organization annually evaluates progress in cultural competency</td>
<td>• Organization implements cultural competency assessment annually and creates a plan for on-going improvement</td>
<td></td>
</tr>
</tbody>
</table>
### ORGANIZATION

**Domain of Cultural Competency Impact**

<table>
<thead>
<tr>
<th>Program Evaluation</th>
<th>Description and Objective</th>
<th>Indicators</th>
<th>Steps/Protocols/Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program evaluation includes a component on assessing cultural competency. Program evaluation demonstrates improvement on cultural competency.</td>
<td>• Program evaluation includes goals and objectives for assessing cultural competency • Organization reports progress on cultural competency as described in Final Report of the program evaluation.</td>
<td>• Organization incorporates measures linking Cultural Competency and environmental stewardship in its evaluation plans. • Tracking long term changes in environmental stewardship • Survey instruments for self report of impact of culturally competent focus on environmental stewardship and achievement</td>
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**Evaluation Research**

<table>
<thead>
<tr>
<th>Evaluation Research</th>
<th>Description and Objective</th>
<th>Indicators</th>
<th>Steps/Protocols/Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization continually researches and tests links between Cultural Competency, environmental stewardship and achievement</td>
<td>• Organization incorporates measures linking Cultural Competency and environmental stewardship in its evaluation plans. • Tracking long term changes in environmental stewardship • Survey instruments for self report of impact of culturally competent focus on environmental stewardship and achievement</td>
<td></td>
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</tbody>
</table>

### ORGANIZATION’S RELATIONSHIP TO COMMUNITY

**Domain of Cultural Competency Impact**

<table>
<thead>
<tr>
<th>Community Involvement</th>
<th>Description and Objective</th>
<th>Indicators</th>
<th>Steps/Protocols/Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program reaches out and engages the diverse community</td>
<td>• Number of outreach activities to each constituent group per year meets goal set by organization • Number and percentage of parents/community members involved in project activities by constituent group meets goal set by organization • Number of collaborative or cooperative relationships or agreements with community groups or individuals by constituent group meets goal set by organization • Number and percentage of residents, students, community members participating in program design and decision making meets goal set by organization</td>
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</tbody>
</table>

*Organization’s Relationship to Community metrics continued on next page*
## ORGANIZATION’S RELATIONSHIP TO COMMUNITY continued

<table>
<thead>
<tr>
<th>Domain of Cultural Competency Impact</th>
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</table>
| Communication/ Cultural Brokering    | Organization produces promotional and marketing materials, reports and communicates public messages that reach diverse, multi-lingual audiences and demonstrate culturally competent language | • Percent of materials translated for each audience based on their needs and use of language and word choice best suited for that audience  
• Culturally competent concepts and images are incorporated in key public documents and promotional materials  
• Number of times that constituents are involved in planning and developing descriptions and language of the work  
• Number of media outlets routinely used includes those that target diverse or racial/ethnic specific audiences based on log of communications to media |  |
| Cross Organizational Learning        | E3 cluster regularly reflects on and explore Cultural Competency cross-learnings, challenges, and opportunities for collaboration | • Documentation of E3 cross-learnings, experiments, and changes due to cross learning |  |
| Influencing System                   | Organization influences larger system (parent organization, university, other partners) to become more culturally competent | • Number of communications, presentations, forums that convey experiences, knowledge and value of Cultural Competency to broader system  
• Members connected with different segments of the organization report being influenced by information-sharing on cultural competency based on interviews with organizational members |  |
| Diversifying field                   | Organization acts as a catalyst and facilitator to increase diversity of staffing and leadership within the field | • Number of workshops for students on environmental careers held per year  
• Survey instrument or interviews reveal students of color see E3 as welcoming and potential career choice |  |
| Influencing funders                  | Organization influences funders to value Cultural Competency and provide grant making to support it in E3 organizations | • Increased number of funding opportunities  
• Funding for sector wide training  
• Communications and reports to funders reflect value and accomplishments of cultural competency |  |
Appendix B: Glossary

**Code-switching**: Switching between two languages or dialects or when using one language, changing the terms or choices of phrases and words used. For example, changing choice of terms used for scientists versus non-scientists or young children versus adults or changing from African American vernacular to standard news anchor English.

**Culture**: There are over 200 definitions catalogued by anthropologists Kroeber and Kluckhohn. UNESCO defines culture as the “set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs.”

*Culture can include the following attributes:*

1. Culture describes the social system created by a group of people
2. Culture starts to form when a few people get together regularly and begin to establish norms, rules for how they will interact and communicate with each other and maintain order
3. Culture is about patterns of meaning
4. Culture is about shared beliefs, values, perspectives, worldviews
5. Culture is about shared behaviors, practices, rules and rituals
6. Culture is not limited to groupings by race or ethnicity but can describe a sub-culture within society such as designers
7. Culture is often associated with language and communication
8. Culture is viewed as a mental or cognitive construct, created in the mind of people
9. Culture is learned
10. Culture can be found in materials: objects, artifacts, clothing, artwork, etc.
11. Culture can emanate from social institutions and structures like government, economics, legal systems and can be shaped by geographic and environmental factors

**Cultural Competency**: A set of behaviors, attitudes, policies and practices that are developed in an organization, program or system that enables the organization, agency, program, and its members to work effectively with diverse groups or in culturally diverse situations. In this project, we have defined them as developing along a number of levels encompassing self, interpersonal relations, program/organization and community.

**Cultural Competency in E3**: An ongoing process of developing awareness, behavior, structures and practices that allow an organization or program and its members to inclusively reach or engage diverse individuals, groups and communities in relating to the environment (both natural and built) and in environmental stewardship.

**Cultural Knowledge**: Having information about the cultural characteristics, history, values, belief systems and behaviors of members of another or various ethnic or racial group(s).

**Cultural Awareness**: Developing an understanding of and sensitivity to the differing values, ways of seeing and being, and group norms existing in another ethnic or racial group.
Cultural Sensitivity: Knowing that cultural differences exist without assigning value i.e. right or wrong, good or bad.

Diversity or Cultural Dimension: Those aspects of a person’s social or group experience and background that conditions their perceptions, way of being and behavior. They include factors such as race, ethnicity, class, religion, gender, sexual orientation, etc.

Environmental Justice: The right to a safe, healthy, productive, and sustainable environment for all, where “environment” is considered in its totality to include the ecological (biological), physical (natural and built), social, political, aesthetic, and economic environments. Environmental justice refers to the conditions in which such a right can be freely exercised, whereby individual and group identities, needs, and dignities are preserved, fulfilled, and respected in a way that provides for self-actualization and personal and community empowerment. Delegates to the First National People of Color Environmental Leadership Summit held on October 24-27, 1991, in Washington DC, drafted and adopted 17 principles of Environmental Justice. Since then, The Principles have served as a defining document for the growing grassroots movement for environmental justice. The principles can be found at www.ejnet.org/ej/principles.html

Ethnicity: A social construct that defines membership in a group united across particular cultural traditions and set off by racial, territorial, economic, religious, cultural, aesthetic or linguistic uniqueness.

Experiential Environmental Education or E3: Any hands-on learning activity which helps youth gain a better understanding of nature and the impact of human activities on environmental quality, as well as developing their skills to be good stewards of the environment.

Hands-on Minds-on Environmental Education: Promotes critical inquiry and experimentation through experience with environmental projects.

Race: A social construct that artificially divides people into distinct groups based on characteristics such as physical appearance (particularly color), ancestral heritage, cultural affiliation, cultural history, ethnic classification, and the social, economic, and political needs of a society at a given period of time. Racial categories subsume ethnic groups.

Social Justice: The ideal condition in which all members of a society have the same basic rights, security, opportunities, obligations and social benefits.

Place-based Education (PBE): The process of using the local community and environment as a starting place to teach concepts in language arts, mathematics, social studies, science and other subjects across the curriculum. Place-based education focuses on all aspects of the local environment by including local culture, history, social/political issues and the built environment.

Universal Design for Learning (UDL): An approach to teaching, learning and assessment that recognizes the diversity of today’s classroom and provides a blueprint for creating flexible goals, methods, materials and assessments to accommodate learner differences. UDL underscores the need for multiple approaches to meet the needs of diverse learners.
Appendix C: Resources

National Center for Cultural Competence at Georgetown University: http://gucchd.georgetown.edu/nccc/index.html
Alliance for Non-profit Management: http://www.allianceonline.org/about/cc_resources.page

US Department of Health and Human Services, Office of Minority Health: http://www.omhrc.gov/clas/ds.htm
Center for Effective Collaboration and Practice http://cecp.air.org/cultural/Q_howdifferent.htm
US Department of Health and Human Services, Health Resources and Services Administration: http://www.hrsa.gov/culturalcompetence/indicators/default.htm#AssessmentProfile

OTHER RESOURCES

DIVERSITY MATTERS aims to make diversity and inclusion foundational assets of environmental and social change leaders and organizations. It provides education and training, organizational consulting, leadership networks, retention and recruitment support, and a resource hub. Its Diversity Learning Communities (DLCs) are place-based networks of individuals who seek learning opportunities and support to integrate diversity and inclusion throughout their lives and work. The Boston DLC includes 40 participants from a wide range of organizations.

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THIRD SECTOR NEW ENGLAND (TSNE) provides information and services to build the knowledge, power and effectiveness of nonprofit organizations that engage people in community and public life. The TSNE Diversity Initiative provides technical assistance and funding to nonprofit organizations in the Greater Boston area that are committed to creating greater racial, ethnic and cultural diversity within their staff and boards.

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ABOUT THE BARR FOUNDATION

The Barr Foundation is a private foundation committed to enhancing the quality of life for all of Boston’s citizens. The Foundation’s work focuses on three critical challenges to Boston:

Providing Quality Education. Building capacity and strengthening quality across the Boston Public School system, alternative educational approaches, early education, and out-of-school programs.

Making a More Livable City. Increasing the quality and quantity of open space and water resources, developing environmental citizenship, supporting environmental justice, as well as facilitating regional development planning and urban design.

Enhancing Cultural Vitality. Supporting cultural projects that complement the foundation’s educational or environmental goals, promote diversity, foster civic engagement and community cohesion, as well as funding major and mid-sized institutions.
(left) Boston Nature Center Summer Day Camp participant exploring salt marshes during a field trip – Photo by BNC; (right) BNC School Vacation Week program participant looking at an insect collected at the BNC for nature studies – Photo by BNC; (back cover) Young Achievers student showing off a mural depicting local neighborhood scenes – Photo by CO-SEED

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