All of a Place:

Connecting Schools, Youth and Community

A Project of the
Bay Area
School Reform
Collaborative
Funders Learning Community

With support from
The William and Flora
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Institute Report Prepared By
Jack Chin
Funders' Forum on
Environment and Education

About the Institute's Organizers:

The Bay Area School Reform Collaborative aims to firmly establish the Bay Area as a vital, innovative, and effective place to learn and teach. Across the region, it helps schools engage in a comprehensive transformation process to become thoughtful, caring communities with a common purpose and a commitment to the growth and learning of all children and adults.

Blueprint Research & Design, Inc. works with foundations, corporate grantmakers, and individuals to develop effective philanthropic programs that achieve both community results and organizational goals. It specializes in helping foundations implement strategies to capture, use, and share information in ways that will amplify the impact of grant funds.

The Funders' Forum on Environment and Education (F2E2) is a network of grantmakers interested in environment- and place-based approaches to K-12 and postsecondary education. F2E2's goal is to formalize opportunities in place-based education so that young people, duly educated and inspired, will contribute to solving social and environmental problems in their communities.

For further information about the *All of a Place* Institute, please contact Jack Chin at the Funders' Forum on Environment and Education:

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All of a Place:

A Funders' Institute on Connecting School s, Youth and Community

June 2001

Dear Colleague:

We are very pleased to share with you this report, "All of a Place: Connecting Schools, Youth and Community." This document encapsulates the presentations, discussions and site visits through which forty Bay Area grantmakers examined "sense of place" as an integrating framework for improving education, youth development, community building and environmental outcomes.

All too often, these various program interests are addressed through separate, unconnected institutional "silos." Focusing on schools as strategic community "hubs," the Institute explored how place-based education uses the local ecological and socio-cultural setting to re-establish the connections among schools, youth and communities that have rapidly dis-integrated in contemporary American life. This discourse is particularly timely in the context of the current debate over academic standards and high-stakes accountability – are standards-based and place-based curricula compatible?

Weaving together information from specialists in the field and case studies of local programs, this report provides grantmakers with insights into the multiple benefits of place-based education – better academic achievement, revitalized teaching, enhanced social development, stronger communities, and improved environmental stewardship. It concludes with some observations about the implications of these place-based approaches for grantmaking.

We look forward to hearing about your own observations.

Sincerely,

Ida Oberman Kate Godfrey
The William and Flora Hewlett Foundation The San Francisco Foundation

Acknowledgements

The All of a Place Institute was a collaborative effort among many talented and dedicated individuals and organizations.

Early conversations took place between Lucy Bernholz of Blueprint Research and Design, Jack Chin of the Funders' Forum on Environment and Education, Catherine Conway of the Bay Area School Reform Collaborative (BASRC), and Ida Oberman of the William and Flora Hewlett Foundation. Eleanor Clement-Glass, then with The San Francisco Foundation, soon joined the discussion. A concept paper written by Jack Chin and Lucy Bernholz turned into a grant proposal for the *All of a Place* Institute. BASRC's Funders Learning Community agreed to sponsor the Institute with support from the Hewlett and San Francisco Foundations. Kate Godfrey and Anuja Mendiratta of The San Francisco Foundation, Tracy Parent of BASRC, and Ray Bacchetti of the Hewlett Foundation helped shepherd the process along. The concept paper was further refined into a briefing paper and the Institute was launched on December 7, 2000! All mentioned above deserve credit for getting the Institute off the ground!

Thanks to BASRC and WestEd, the San Francisco Foundation, and the Shinnyo-En Foundation who provided meeting facilities and refreshments for the Institute sessions.

We are indebted to the many presenters and discussion leaders who shared their wisdom with us: Laura Critchfield of sfLEARNs, Don Jen and Sallyanne Wilson of the Marin Community Foundation, Gerald Lieberman of the State Education and Environment Roundtable, Kathy McHugh of the Jessie B. Cox Charitable Trust, Sandy Neumann of the Center for Ecoliteracy, Wendy Roberts with the North Coast Rural Challenge Network, Laurette Rogers of the Bay Institute, Gregory Smith of Lewis and Clark College, and Cristina Valdez of the Cross-Cultural Environmental Leadership program.

We also owe thanks to the staff of the programs we visited: Jane Binks, Michael Escamilla and Lynne Juarez at Tule Elk Park Child Development Center in San Francisco; Nicole Carter, Theron Cosgrove, Carol Eber, Sue Fox, Brad Katuna and Patti Vance at Drake High School in San Anselmo; and Esther Cook, Marcia Guerrero and Beth Sonnenberg at the Edible Schoolyard in Berkeley's Martin Luther King, Jr. Middle School.

Over the course of the three sessions and three site visits, forty different grantmakers engaged in numerous, rich discussions with the resource people and with one another, contributing to the learning of the entire group. These participants are listed in Appendix 1. Thank you one and all.

Finally, thanks to Jack Chin, who drafted this document, and to those who reviewed the draft: Lucy Bernholz, Hedy Chang, Kate Godfrey, and Ida Oberman. This resulting report will extend the value of the *All of a Place* Institute to the broader philanthropic community.

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All of a Place:

Connecting Schools, Youth and Community

"The waste of precious resources deprives youth of valuable opportunities to learn, practice and achieve. Schools are repositories of spaces and materials to support learning. Communities, on the other hand, offer fertile resources that can extend the classroom into the non-school lives of youth."

- Milbrey McLaughlin

What if schools, families and communities were addressed as the complex, interrelated and interdependent social systems that they are? Would the needs of children and communities be better served if addressed in a more integrated fashion?

These questions provided the basis for exploration among forty representatives of Bay Area foundations who participated in the *All of a Place* Institute sponsored by the Bay Area School Reform Collaborative (BASRC) Funders' Learning Community. Over the course of three discussion sessions and three site visits, these participants considered how a <u>sense of rootedness in place</u> can be used as a frame for integrating efforts to improve education, youth development, family support and sustainable community development.

Institute participants recognized that the current situation is generally one of separate, unconnected institutional systems. Educators tend to focus on the in-school issues such as curricular standards, professional development of teachers, accountability measures, class size reduction, etc. Youth development specialists work principally in the out-of-school context, providing enrichment activities to enhance academic and social skills development. Community building efforts emphasize economic development, housing and social services, frequently overlooking schools as a potential community focal point. Smart growth advocates work on policies to limit urban sprawl, not fully recognizing the importance of schools as focal points for more efficient land use planning.

The discourse among participants quickly focused on schools as the venue for integrating these separate systems. This makes good sense as noted architect Stephen Bingler observes, "A good starting point for the development of more harmonious community systems lies in the educational sector...Education impacts on all aspects of life and every person in the community is at some time a participant in the educational process. It is

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¹ McLaughlin, Milbrey W. (2000). Community Counts: How Youth Organizations Matter for Youth Development, Washington, DC: Public Education Network.

through this shared educational experience that the community can most easily find its common ground."²

Furthermore, participants identified place-based education, that is, the use of the local "place" (natural and socio-cultural setting) as the context for learning, as a topic for closer examination. How can place-based education coordinate and catalyze local community assets to support school change? How does place-based education integrate and not addon to an already crowded school reform agenda? Is place-based education asking too much of schools? How does place-based education play out in urban environments, across different student backgrounds? What motivates a community to come together and work together? What can funders do to promote more meaningful relationships among schools, families and their surrounding communities?³

This report weaves together information from the discussion sessions, site visits and related materials to provide a synopsis and review of emergent themes from the Institute. It begins with an overview of the current challenges facing school reform. Then it provides grantmakers with insights into the multiple benefits of place-based education – better academic achievement, revitalized teaching, enhanced social development, stronger communities, and improved environmental stewardship. The report concludes with some observations about the implications of these place-based approaches for grantmaking. The appendices provide more detailed accounts of the separate Institute components.

All of a Place Institute

Session One – All of a Place: Connecting Schools, Youth and Community (December 7, 2000)

Session Two – Place-based Education: A School Change Strategy (February 16, 2001)
Presenters: Gerald A. Lieberman, Director, State Education and Environment Roundtable
Gregory Smith, Associate Professor of Education, Graduate School of
Professional Studies, Lewis and Clark College

Site Visit One – Tule Elk Park in San Francisco (February 26, 2001)
Site Visit Two – Sir Francis Drake High School in San Anselmo (March 1, 2001)
Site Visit Three – Martin Luther King, Jr. Middle School in Berkeley (March 8, 2001)

Session Three – Place-Based Education: Implications for Grantmaking (March 16, 2001)

Presenters: Kathy McHugh, Program Director, Jessie B. Cox Charitable Trust

Don Jen and Sallyanne Wilson, Program Officers, Marin Community Foundation

² Bingler, Steven (1996). *E Pluribus Unum: The New American Community School* (www.concordia.com)

³ See Appendix 3 for a snapshot analysis of Alameda County grants by program area and geographic unit

RIPPLES OF DIS-ORDER: The Challenges of School Reform

"One result of [formal education] is that students graduate without learning how to think in whole systems, how to find connections, how to ask big questions, and how to separate the trivial from the important. Now more than ever, however, we need people who think broadly and who understand systems, connections, patterns and root causes."

- David Orr

UN-CONNECTED CHANGE

Much has been made of the crisis facing American public schools and the elusive nature of identifying and implementing lasting solutions to the crisis. Ned Miller, Assistant Director of the Heart of Missouri Regional Professional Development Center, describes the school reform movement as a swirling maelstrom of un-connected change.

The piecemeal approach that characterizes school reform has frequently resulted in initiatives working at cross-purposes. For instance, some argue that the current trend toward content standards, accountability and high-stakes testing leads to inadvertent side effects. Institute presenter Gerald A. Lieberman, Director of the State Education and Environment Roundtable, contends that the resulting increase in pressure on educators is leading to *de facto* changes in pedagogy and content matter, and is exacerbating the shortage of teachers and administrators. He asserts that these changes are depriving students of opportunities to:

- Develop deep understanding of content and skills through interdisciplinary studies;
- Acquire higher level problem-solving skills through real-world problem solving;
- Explore and understand the world around them through hands-on and minds-on experiences;
- Discover the complex interactions among natural and social systems;
- Build the teamwork skills needed to succeed in adulthood;
- Capitalize on diverse learning styles using individualized approaches to learning; and
- Learn to live in harmony with the world around them.

Another Institute presenter, Kathy McHugh, Program Director of the Jessie B. Cox Charitable Trust, conveys the perspective offered by Harvard education professor Pedro Noguera: "He said that children that are having fun are more likely to be ready to learn. A rich and varied learning environment connected to caring adults makes learning fun. Students that are excited and engaged are more likely to learn. He believes that the high-stakes testing environment in which we now find ourselves is prompting a misguided response that flies in the face of these truths. By focusing more and more on content that has measurable effects on test scores, we are eliminating the richness of our learning environments and sterilizing learning, making it no fun at all and defeating our overarching

⁴ Orr, David W. (1992). *Ecological Literacy*. Albany, NY: SUNY Press.

purpose to improve learning and create lifelong learners. This is particularly true in low-income disadvantaged areas."

Gregory A. Smith, education professor at Lewis and Clark College in Portland, Oregon, contends that the current problems in education reflect the fact that "schools are isolated from the rest of the community and society." Smith argued at the second Institute session that this fundamental dis-connect makes it hard for kids to draw on their own experience, and therefore they do not engage in learning, and do not contribute to the community. He cites as evidence of these "ripples of dis-order" John Goodlad's estimate that two-thirds of high school students are alienated by the education system. Smith's observations echo those of John Dewey who, in *School and Society* (1907), wrote:

"From the standpoint of the child, the great waste in the school comes from his inability to utilize the experiences he gets outside the school in any complete and free way within the school itself; while, on the other hand, he is unable to apply in daily life what he is learning at school. That is the isolation of the school – its isolation from life. When the child gets into the schoolroom, he has to put out of his mind a large part of the ideas, interests, and activities that predominate in his home and neighborhood. So the school, being unable to utilize this everyday experience, sets painfully to work, on another tack and by a variety of means, to arouse in the child an interest in school studies."

A more recent observation by University of Chicago scholars John Kretzman and John McKnight further supports this notion:

"Schools have tended to distance themselves from their local communities. The vital links between experience, work, and education have been weakened. As a result, schools in many urban and rural communities have lost their power as a valuable community resource."

MORE MEANINGFUL CONNECTIONS

To be sure, school reform efforts have sought to forge more meaningful connections among schools, youth and their communities. For instance, in its first five years, BASRC has joined "with school districts, parents, and school- and youth-supporting organizations to become thoughtful, caring, interconnected communities." The second five-year phase will encourage local collaboratives among schools, districts and community agencies to support each school's improvement.

Stanford education professor Milbrey McLaughlin, whose recent report *Community Counts:* How Youth Organizations Matter for Youth Development speaks to the importance of making these connections, argues that "youth development efforts are more effective when

⁵ Kretzman, J., & McKnight, J. (1993). *Building Communities from the Inside Out: A Path Toward Finding and Mobilizing a Community's Assets.*

they engage all youth-serving institutions, particularly schools." On the same token, schools should "include youth organizations as integral parts of strategies to improve learning."

It is perhaps within the Annenberg Rural Challenge that the connections between community and schools have been made most central to school reform efforts: "Among the dominant themes are that students should come to know their local communities well, that communities see the schools and students as critical assets and that communities and schools need to be more integrated."

By no means have these integrated efforts been limited to rural schools and communities. As the State Education and Environment Roundtable (SEER) study *Closing the Achievement Gap*⁹ documents, urban, suburban as well as rural schools are effectively using the local natural and socio-cultural setting as the context for teaching and learning.

Let us take a closer look at how this curriculum and pedagogy of place – place-based education – is connecting schools, youth and community.

⁶ McLaughlin, Milbrey (2000). Coummunity Counts: How Youth Organizations Matter for Youth Development (executive summary).

⁷ McLaughlin, Milbrey (2000). Coummunity Counts: How Youth Organizations Matter for Youth Development. Washington, DC: Public Education Network.

⁸ Living and Learning in Rural Schools and Communities: A Report to the Annenberg Rural Challenge. Cambridge, MA: Harvard Graduate School of Education
⁹ Lieberman, Gerald A. and Hoody, Linda L. (1998). Closing the Achievement Gap: Using the

⁹ Lieberman, Gerald A. and Hoody, Linda L. (1998). *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning.* San Diego: State Environment and Education Roundtable.

COMMON GROUND, UN-COMMON OUTCOMES: The Benefits of Place-based Education

"Getting to know home is the most human and necessary of occupations." To give that power of observation to students is to give them something of infinite value and importance – something to do for the rest of their lives."10

- Ann Zwinger

A FUNDAMENTALLY DIFFERENT APPROACH

Place-based education offers a fundamentally different approach to reforming public education. By using the local ecological and socio-cultural setting as the organizing focus, place-based education aims to re-establish the connections among schools, youth and communities that have disintegrated in conventional schooling.

Smith observes: "Over the past decade, educators from New England to Alaska have been relocating the curriculum away from generic texts to the particularities of their own communities and regions. This process has been accompanied by the adoption of instructional practices that draw heavily on student initiative and responsibility as well as the talent and expertise of adults outside the school. The results have included higher levels of student engagement. more commitment to public education, energized and excited teachers and principals, and a renewed sense of what there is to value in the local."11

Place-based education provides students with opportunities to connect with themselves, their community, and their local environment through hands-on, realworld learning experiences. It is rooted in the integrated core curricular activities of science, social studies, communication arts and fine arts, and is expanded upon and applied by extending the classroom into the schoolyard and the neighborhood. This approach enables students to see that their learning is relevant to their world, to take pride in the place in which they live, to connect with the rest of the world in a natural way, and to develop into concerned and contributing citizens.

Former elementary school principal Sandy Neumann describes how place-based learning occurred at Brookside School in San Anselmo: "Rather than add more layers of curriculum to study place, we incorporated a sense of place into the work we were doing. Through environmental project-based learning, we were able to combine intellectual growth with reallife experience. Learning took place both inside and outside the school. Students learned from the creek that flows through the school campus and the gardens on the school grounds...We invited members of the local community to share their knowledge and history of our place. They grew to understand the place where they lived."12

¹⁰ From Introduction to *Into the Field: A Guide to Locally Focused Teaching.* (1999) Great Barrington, MA: The Orion Society.

¹¹ Smith, Gregory A. (2000). Place-based Education. To be published in Funders' Forum on

Environment and Education newsletter.

12 Neumann, Sandy (1999). Ecoliteracy: Practicing a Systemic Approach to Education. *Ecoliteracy:* Mapping the Terrain. Berkeley, CA: Center for Ecoliteracy.

FROM THE PARTICULAR ATTRIBUTES OF A PLACE

Place-based education is a relatively new term¹³, appearing only recently in the education literature, particularly in association with education reform efforts in rural communities triggered by the Annenberg Rural Challenge. However, its core attributes¹⁴ can be traced to Dewey's progressive education philosophy:

- It emerges from the particular attributes of a place. The content is specific to the geography, ecology, sociology, politics, and other dynamics of that place.
- It is inherently multidisciplinary and often promotes team teaching among educators and community resource people.
- It is inherently experiential. In many programs, this includes a participatory action or service learning component.
- It is reflective of an educational philosophy that is broader than "learn to earn." Curricula and programs are designed for broader, life-long learning objectives.
- It connects place with self and community. Because of the ecological lens through which place-based curricula are envisioned, these connections are pervasive.

Place-based education can take various forms. It might mean learning history and language arts through interviews with community elders. Perhaps it is running a microenterprise that produces salad dressing from a school garden. Or a mapping project that plots accident and weather data on a local highway and recommends mitigation measures. As described by Smith, place-based education programs can be categorized into five types that can be utilized singly or in combination:

- Cultural studies: Students conduct investigations of local history and cultural phenomenon and identify themes that were important to the long-term viability of community.
- Nature studies: Students learn about unique features of their place through stream monitoring, restoration, gardening, often with emphasis on science and math.
- Real world problem-solving: Students determine an issue that they
 want to explore in greater depth, participate developing the
 curriculum, and work with the community to solve the problem.
- Microenterprises: Older students link with economic opportunities in their neighborhoods through real enterprise partnerships such a recording studio.
- Community regeneration: Students learn to be citizens by being citizens, investigating issues and making recommendations to policy makers.

¹³ Other terms that have been used in a similar fashion include: community-based environmental education; ecoliteracy; environment as an integrating context for learning, environment-based education

¹⁴ Cited in "Place-based Curriculum and Instruction: Outdoor and Environmental Education Approaches" by Janice L. Woodhouse and Clifford E. Knapp, available on the ERIC Clearinghouse on Rural Education and Small Schools, www.ael.org/eric/digests/edorc006.html.

8All of a Place

In whatever form, by incorporating a sense of place in instruction, teachers have developed programs that are professionally stimulating and that are engaging for students. With instruction based on students' experiences, learning is grounded in what they know and builds on actualities not abstractions. Students develop competencies that matter to them; the growing sense of doing things that are valued, in turn, help them learn better. And the sense of building community and rootedness beyond the "age-based ghetto" of the schoolhouse gives students an opportunity to address problems in the "real world," instilling a sense of stewardship and hope.

The following sections examine in greater detail the benefits of place-based education – academic achievement, revitalized teaching, social development, community building, and environmental stewardship. Each section draws on examples of Bay Area place-based education programs highlighted during the Institute.

A POWERFUL WAY TO LEARN: A "Place" for Academic Achievement

"The Edible Schoolyard...has helped change the culture of the school. It grabs kids' interest in school by giving them a hands-on experience with their peers and their teachers. It pulls kids into school, into learning. And it makes [them] realize that learning isn't just books, but that life is about learning."

15

- Principal Neil Smith

BRIDGE LEARNING WITH WHAT'S FAMILIAR

Place-based education grounds learning in something that is real, meaningful and accessible to students. It integrates curriculum content across multiple disciplines, offering a more efficient and effective way to meet standards. As *Closing the Achievement Gap* documents, use of the local environment and community setting as the context for learning leads to increased student engagement and revitalized teaching, resulting in improved academic achievement.

SEER, a consortium of 12 state education agencies, has conducted surveys of 60 schools in its research on environment-based education. The average age of programs in this sample is seven years; teachers in these schools averaged 16 years of tenure. Analysis of the data found students in these schools displayed better performance on standardized tests, reduced discipline problems, improved development of problem-solving, critical thinking and decision-making skills, and other superior results. For instance, in 137 out of 179 (77%) assessments, higher test scores and GPAs were reported when the local environment is used as a curriculum integrator. In a Dallas elementary school, reading scores increased 9%; writing scores increased 13% (statewide gain in writing was only 1% during the same period). One Minneapolis school reported a 16% increase in median math comprehension scores among low achievers, 13% among mid-level achievers, and 7% increase even among hi-level achievers. Among eight sets of California schools, students in schools using the local environment as integrator outperformed their traditional counterparts in language arts (in 76% of the compared assessments), math (63%), science (64%) and social studies (73%).

Penn State professor of education William Carlsen offers an explanation how the use of the local context can support academic achievement: "Investigations of local environments bridge the familiar with the novel. Even if the specific phenomena being investigated are unfamiliar – say the 'health' of a stream adjacent to a campus – students have knowledge about the local context that they can draw upon: knowledge about nearby businesses and industry, climate patterns, whether a mosquito is a problem in the spring, whether the stream dries up in the summer. Knowledge about these phenomena is a resource that can be used in learning relevant scientific concepts, such as species diversity and its relationship to habitat; more importantly, by focusing on a local problem and by considering its formulation in a social context, student's prior understandings (some of which are

¹⁵ Center for Ecoliteracy. (1999). *The Edible Schoolyard*. Berkeley, CA: Center for Ecoliteracy.

narrowly scientific, many of which are not) are acknowledged and legitimated as conceptual resources."¹⁶

LEARNING NOT JUST IN THE CLASSROOM

At Tule Elk Park in San Francisco, pre-school students come to understand that learning can happen everywhere (not just in the classroom) - the barrier between the school and the "real world" begin to fade. Using a project-based approach, teachers make use of a transformed outdoor learning environment, a neighboring restaurant and the local pet hospital as venues for these preschoolers to learn numeracy and literacy skills in the course of solving problems. For instance, when kids were asked to decide what to plant in the vegetable garden, they voted by writing their names on an open "ballot", employing counting and spelling skills (as well as citizenship skills).

Tule Elk Park is an SFUSD child development center in the Cow Hollow neighborhood of San Francisco. In 1992, a small group of committed individuals began working to transform the asphalt playground into a park. Today, 20,000 square feet of trees, flowers, a vegetable garden, sand and water activities, an art terrace, a bike path, play structures, a butterfly garden, an exploration grove and a grassy amphitheater provide kids with the opportunity to learn out of doors. The school ground at Tule Elk Park has become more than a recess yard; it in now a total learning environment in which kids learn in a safe and accessible area designed for experiential, indepth learning.

Contact: Lynne Juarez, Site Manager, 415.749.3551

Sir Francis Drake High School in

San Anselmo is a BASRC leadership school whose community-based integrated studies academy (DISC) enables students to utilize community resources to investigate complex issues through field studies, laboratory experiments, research and mentorships. Students' projects are drawn from the community context and emphasize developing workplace skills, conducting community service and pursuing internships within their area of interest, whether that is in communications, engineering, environment, business or government.

Contact: Carol Eber, Principal, 415.453.8770

At Sir Francis Drake High School, students in the Studies of the Environment Academy (SEA-DISC) study complex environmental problems through extensive projects that include field-based studies and service. They work with community-based organizations to restore native habitat, plant organic gardens, conserve energy, improve water quality, as well as other projects. These projects complement courses in science, chemistry, advanced algebra, trigonometry and government. Students found that the integrated approach helped them learn "tough" subjects; for instance, some of the female students said learning math was easier in this applied way than in the traditional way. SEER found that Drake's DISC students scored higher than Drake's traditional students in 20 of the 26 academic and attendance assessments analyzed. Though it's not an AP class, most students still score high on the AP Environmental Science exam. "We make sure the students learn the subject-area content they need to know, explains Sue Fox, a teacher in SEA DISC. "We just reorganize the information and teach it in a different style."

¹⁶ Carlsen, William. Presentation at the National Association for Research in Science Teaching, "The Sociological Context of Environmental Science and its Use in Rethinking Scientific Inquiry" (March 27, 2001), part of a panel "Relations between Science Education and Environmental (Science) Education".

DOING THINGS DIFFERENTLY

This sort of place-based education is challenging since it is dependent on the unique characteristics of the school and the community and, therefore, does not lend itself to replication or adoption at other sites. It is hard to do - it requires doing things differently, including broadening the base of support from the school district and the community. As Smith observed, the school system is inclined to reject anything that doesn't fit; these schools don't fit and have had to put up with flak for a number of years.

Through its experience in promoting and supporting place-based education, the Center for Ecoliteracy has identified certain readiness factors or threshold conditions that help facilitate development and adoption of place-based education:

- Principal support for risk taking among teachers.
- District and school board understanding and sanctioning of program.
- Teacher planning time, including time for reflection What has succeeded? What hasn't worked?
- Stipends for teacher leadership.
- Consensus on goals among program's multiple funders.

To justify the necessary changes in practice however, perhaps what is most needed is compelling proof of significant improvements in academic achievement that can be attributed to the use of place-based education. Lieberman argues that authentic assessment tools (as opposed to standardized tests) should be developed and implemented as an ongoing part of instruction and learning. Evidence of academic rigor, in addition to rich and relevant ways of learning, is critical to there being a place for place-based education. Such evidence will convincingly back up those students who, having themselves made the links between life and education, voice their wish that "everyone can learn this way."

TERRA FIRMA: A "Place" for Revitalizing Teaching

"The Shrimp Project was like a pebble thrown into the water. It did many things we did not know it would do. It touched many people we did not know it would touch...The learning continues to expand past all our imagined lesson plans." 17

- Laurette Rogers

FINDING COMMON GROUND

There is now a strong trend in classroom instruction toward scripted, "teacher proof" lessons that emphasize content standards over the student's learning style. This trend further "distances" teachers from their students since most teachers do not live in the communities in which they work. Furthermore, teachers are typically isolated from one another in separate classrooms. Place-based education offers a way for teachers to connect with students, with other teachers, and with the community, thereby linking instruction with the learner in a more authentic and engaging way.

Smith suggests that teaching in this way is so meaningful and revitalizing that focusing on local issues rather than solely on curriculum requirements actually liberates the teachers. Lieberman elaborates by noting that place-based education offers a locus to integrate across the curriculum. From the teachers' perspective, this integration allows the possibility to teach to all the subject standards more efficiently and effectively.

SEER finds "the vast majority of educators...report renewed enthusiasm for and engagement in their profession. Many teachers consider their [place-based education] endeavors the highlight of their professional careers. Working together closely with their students in real-world situations, these teachers feel deeply rewarded as they see students, some for the first time ever, respond enthusiastically to what they are learning. They also enjoy the improved rapport they build as they work side-by-side on projects and problems with their students and colleagues. Teachers explore new subject matter as they design interdisciplinary curricula. They enjoy the opportunities for continued learning as they sharpen their skills, expand their knowledge and dare to enter new instructional territory." 18

Among Drake High School's DISC teachers, most say they would never go back to the old way even though the new approach is more work. Perhaps this *esprit de corps* is derived from the stability that comes with place-based education. In the context of an educational system that is otherwise fluid, this metaphorical "grounding" in one's local place can be regenerative. Teachers at Tule Elk Park referred to the "common professional language" that was developed through the curriculum and professional development processes triggered by the new outdoor learning environment. At the Martin Luther King, Jr. Middle

¹⁷ Rogers, Laurette. The California Freshwater Shrimp Project: An Example of Environmental Project-based Learning. Berkeley, CA: Heyday Books.

¹⁸ Lieberman, Gerald A. and Hoody, Linda L. (1998). *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning.* San Diego: State Environment and Education Roundtable.

School in Berkeley, the Edible Schoolyard provides what teachers called "a common reference point" across classes and grades – teachers from the Spanish, drama, humanities, history, and geography classes all use the garden and kitchen to support their instruction.

Neumann recalls the situation at the Brookside School in San Anselmo in 1992, "There was a lot of fragmentation at the school when I came. I knew I needed to bring the staff together and build a community." Neumann set out to develop a strong sense of community both within the school and beyond the school grounds by using the local watershed as the focus for curriculum integration. Focusing initially on an endangered freshwater shrimp, the effort has grown over the years into a network called "Students and Teachers Restoring a Watershed" or STRAW. Teachers – as well as students, parents, and community members – have many opportunities for experiential learning through projects such as restoring habitat, testing water quality, researching riparian wildlife, implementing public awareness campaigns, etc. As the teachers are engaged in learning how to reinhabit the local place, context is restored to their professional lives as well.

The Students and Teachers Restoring a Watershed or STRAW Project represents an extraordinary network of over 30 elementary and secondary schools, comprising teachers, students, and community members who work cooperatively to plan and implement watershed restoration projects. Participating teachers receive training in environmental project-based learning and scientific field monitoring. An integrated curriculum uses the creeks as a context for teaching subject matter in the California state frameworks. Math, history, science, literature, writing, art, and music are enriched and anchored by the energy and excitement found in the watershed. By being involved in restoring the San Francisco Bay watershed, all STRAW participants rebuild a sense of place and belonging.

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WHAT DO TEACHERS NEED?

Revitalized teaching can help end teacher turnover and bring excitement back into the classroom. Re-energized teachers motivate students and are motivated in return by seeing students get excited. What are the conditions that get this virtuous cycle started? What do teachers need?

- Proof that this works. It would be good to hear from teachers about how
 place-based education influences their own beliefs about their students'
 capabilities and their ability to teach this population. How do teachers relate
 place-based education to curriculum integration and effective teaching?
- Time for planning and for professional development. Lieberman recommends starting with a <u>team</u> of teachers. At Tule Elk Park, "co-teaching" was emphasized to compensate for lack of prep time and to facilitate a community of learning among teachers.
- Networks of support. Learning networks are good, especially those where the
 teachers decide what they want to talk about and where there is a lot of
 reflection time. It is important to model in the professional development
 sessions the way you want teachers to teach the Center for Ecoliteracy
 makes sure that their teacher network sessions are conversational.
- Deft facilitation. It is essential that outside expertise be used to increase the teachers' own capacity to do place-based education, rather than provide the program. Technical assistance that results in teachers' saying "You helped"

- me do what I want to do", that helps them get at the root of why they want to teach and facilitates their being able to teach that way, is invaluable.
- Community connections. A coordinator (other than the teacher) helps make
 connections to community resources that can be plugged in and enrich the
 curriculum. Successful programs have used environmental learning center
 staff, Americorps interns, and resource teachers in the coordinator role.
- Attitudinal shift. Teachers are used to being in control of their own classrooms
 working with other teachers in the school and with community agencies and volunteers means they have to learn to be accessible.

GETTING ALONG: A "Place" for Social Development

"Solving a problem does not mean finding a solution that just suits you, but a number of alternatives that benefit a wide range of involved parties, and constant vigilance over the outcome of these solutions." 19

- XCELer Elena Tevez

WORKING TOGETHER

Place-based education provides students with the opportunity to collaborate on projects and problem-solving activities in the local setting. In the process, they learn to communicate with one another and work effectively in groups, picking up essential interpersonal competencies that will be useful lifelong skills. These skills are reinforced when students observe models of cooperation such as team-teaching among educators and community members that often are a feature of place-based, integrated approaches to instruction. As a result, students begin to venture into new working relationships with other students and adults at the same time as they achieve a greater understanding of the given subject matter. In this way, place-based education helps students to understand others, develop a sense of community, and comprehend their place in the world.

Educators in the 60 SEER schools observe improved behavior and greater civility among their students. 98% of the 171 respondents to the SEER survey reported that after beginning to use the environment as an integrating context for the curriculum, students had learned to work together more effectively.

Martin Luther King, Jr. Middle School in Berkeley is home to the Edible Schoolyard, an organic garden and landscape, that is wholly integrated into the school's curriculum and lunch program. It involves the students in all aspects of farming the garden – along with preparing, serving, and eating the food – as a means of awakening the senses and encouraging awareness and appreciation of the transformative values of nourishment, community and stewardship of the land. As a consequence, the program provides a pathway through which "every kid is buying into his or her education, is excited about learning, is treated well at school, and feels safe at school; and that every teacher is empowered to help design and create this learning community."

Contact: Marcia Guerrero, Adminstrative Coordinator, 510.558.7174 or marciaguerrero@edibleschoolyard.org At Martin Luther King, Jr. Middle School, teachers say that "Kids stay on task" when they participate in the Edible Schoolyard program because it's not contrived work. One teacher, Beth Sonnenberg, comments: "I remember once there were only two kids in my class who had never been tool librarians, but these two disliked each other and didn't really want to work together. I said to them. 'Well, you both want to do it, so why don't you go in there and see what you can do to work it out.' And when they came back to the circle at the end of that day, they said, 'You know what? We were an excellent team!' One was a better reader, so she filled out all the names and checked out the tools, and the other tidied up the tool shed and put everything away.

¹⁹ Cross Cultural Environmental Leadership Program December 1999 newsletter

"That opportunity to work together would never have worked academically because they were at opposite ends, but they actually had skills that worked beautifully for that situation. And they both felt really positive about the fact that they had made it work. That kind of thing is helpful because it breaks down what's between the two of them in the classroom. They now know that they can work together on a math assignment, even though they are on different levels."

Based at San Rafael High School. the Cross Cultural Environmental Leadership (XCEL) program fosters eco-literacy and leadership development among culturallydiverse youth. The fundamental premise - that ecological, social and economic systems are inextricably connected and affect the health and well-being of all living creatures – is woven through all of XCEL's programs. Students, many of whom are from urban areas impacted by environmental degradation, participate in nine-month, afterschool internships as well as a summer residential camp to examine the connections between natural science, urban ecology, environmental justice and cultural diversity.

Contact: Cristina Valdez, Program Director, 415.457.1394 or cvaldez@igc.org

A Sense of Belonging

With a place-based approach, the connections between the school and community are strengthened, and the separation between in-school and after-school programs is more easily bridged. The experience of the Cross Cultural Environmental (XCEL) program indicates that place-based learning facilitates the development of youth leadership skills that complement the academic achievement benefits. Culturally-diverse youth at San Rafael High School participate in after-school and summer activities that encourage their reflection on a range of local environmental concerns that are relevant to their lives. Through community service projects, XCELers learn to apply what they learn about urban ecology and environmental justice to their own local environments. XCEL Program Director Cristina Valdez notes that when young people develop a connection to their own community and environment, they feel a sense of belonging and self-confidence. Many of these XCELers are from San Rafael's Canal District; Valdez submits that for these young people, place-based learning becomes a violence prevention strategy.

²⁰ Center for Ecoliteracy. (1999). *The Edible Schoolyard*. Berkeley, CA: Center for Ecoliteracy.

GROWING ASSETS: A "Place" for Community-building

"Kids don't feel they have something to belong to anymore – something to be proud of... I want to share Laytonville's history with them, because even if they only came last week, they are part of who we are. They are creating our history every day they live here."

- Kate Mayo

BUILDING COMMUNITY CONNECTIONS

Place-based education lends itself to building partnerships with community members and organizations. By placing learning in the context of the local natural and social community, indigenous talent and expertise are more readily incorporated into instruction. Involvement of local community resources allows these place-based programs to grow in a more sustainable manner.

The benefits gained through place-based education become a source of pride for the community members – young and old alike. Through community-based service projects, students begin to realize that they can indeed "make a difference". Community members begin to see young people improving the quality of life, and adding to the social capital, of the community. Counteracting the negative image of small town and inner-city America, young people begin to see their community differently – that their place is special after all. This renewed sense of place has encouraged young people in rural areas to stay in their home communities rather than migrate to cities. ²² Urban areas dealing with similar issues of youth alienation and community despair are taking note – for instance, civic leaders in Pittsburgh are hoping that place-based education can also counter out-migration from that region. ²³

In the Bay Area, the creation of Tule Elk Park provides new green space in the urban center of San Francisco. Participation in the transformation of the schoolyard by nearby residents and small businesses created a sense of neighborhood investment in this SFUSD child development center. The project-based learning approach that utilizes the transformed and more intimate schoolyard has attracted greater parental involvement in the center's programs. The outdoor learning environment is available to the neighborhood on weekends for birthday parties and recreation. With the new park, children's educational and play spaces are placed at the center of a renewed urban neighborhood.

Also in San Francisco, the construction of what will become the Downtown High School native plant garden has also led to the development of community partnerships. Students, teachers, parents, and community members broke up and hauled away two and a half tons of asphalt from the parking lot in preparation for building the garden. Through the project, teachers have established a partnership with the Mission Science Workshop, which will

²¹ North Coast Rural Challenge Network. (2000) *Exploring Ecoliteracy: Growing a Network for Community-based Learning.* Berkeley, California: Center for Ecoliteracy.

²² Interview with Jane Wilson Eller, Kentucky Environmental Education Council.

²³ Interview with Scott Izzo, Richard King Mellon Foundation.

share the space. They are also working on developing relationships with the San Francisco League of Urban Gardeners (SLUG) and Friends of the Urban Forest, as well as aligning their garden work with their stewardship work at McLaren Park. With its special needs population, Downtown High School relies on community support to provide its students with opportunities that might not otherwise be available.

RE-WEAVING COMMUNITY

Within the four towns that are part of the North Coast Rural Challenge Network, students are becoming grounded in the local community by learning the stories of the people around them and the place where they live. Through oral history projects, students of all ages - newcomers and old-timers alike - are preserving their local history while using higher order thinking skills through interpretation of artifacts, stories and documents.

In Anderson Valley, students, many of whom are of Mexican descent, are interacting with the predominantly Anglo seniors to create CDs called Voices of the Valley. Remarkable "are the bonds that are created between young and old when students undertake this kind of work. Barriers dissolve and lasting friendships are created. Elders, who may have previously viewed high school students as loitering menaces, value their interest in local history and are impressed at the quality they can produce. Likewise, students, who may have previously viewed their interview subjects as out-of-touch old people lacking anything in common with themselves, find the stories interesting, realize that these people were once very similar to themselves, and come away with a renewed respect for their elders."24

The North Coast Rural Challenge

Network comprises small school districts in four rural Northern California towns that are collaborating to demonstrate how school reform can contribute to and even act as a catalyst for economic revitalization and stewardship of the environment, while keeping the needs of each student as the driving force for all activity. By combining school reform efforts, these communities are implementing a comprehensive multiyear strategy help students develop a sense of history and a sense of place that are the foundation for ecoliteracy. The approach is both high tech and high touch - built on a commitment to lasting relationships among the area's residents and woven together through the fiber of telecommunications that allows them to transcend the twisting mountain roads between rural towns. The result is an understanding of the interdependence in the place where they live and how their inter-connectedness can be for the mutual benefit of humans and the entire web of life in redwood forest, oak woodland, ocean life and river valley.

Contact: Ken Matheson, Project Director, 707.937.5868, ken@mcn.org

In these ways, place-based education is addressing many of the factors that have contributed to the unraveling of community – the disconnect of young people from older community members, from their local history, from a sense of place. Rather than violence and high drop-out rates, more positive outcomes result from this re-weaving of the community. And as the North Coast communities have come to understand, "Communities that know their history are more able to create the future they want to see happen."

²⁴ North Coast Rural Challenge Network.

IMPROVING QUALITY OF LIFE: A "Place" for Environmental Stewardship

"With both a kitchen and a garden, we are reminded of the reality that we are sustained by plant growth, not supermarket food wrapped in plastic. Kids see where food really comes from. They experience the impact their own actions can have. They see what they can do. They feel empowered that their actions can make a difference."²⁵

- Yvette McCullough

CONNECTING WITH NATURE

By working within the local context and scale, place-based approaches also make more likely that students will become environmental stewards. Students can identify and relate to environmental problems that are real and proximate, not abstract and remote. They can more easily see in a community context that issues are interrelated, not separate, and that perspectives on these issues are complex, not simply "right" or "wrong". They can conduct investigations in a hands-on, inquiry-based way, not hypothetically or virtually. Working independently and collectively, students can then more readily develop and implement strategies for resolving the environmental problems in a responsible way. Place-based education facilitates taking action that allows the learner to gain a sense of ownership, empowerment, and hope since local problems tend to be less overwhelming and solutions are more readily implemented.

Since the completion of Tule Elk Park in late 1997, there has been a dramatic change in the children, many of whom have rarely, if ever, played in a natural environment. Once afraid to sit on the grass at neighboring parks, the children now eat edible flowers, are intensely curious about the insects and birds at the park, and tend the garden.

Downtown High School's Wilderness Arts and Literacy Collaborative (WALC) exposes inner-city students to unfamiliar but accessible wilderness areas and involves students in environmental issues by practicing stewardship. An example of a recent WALC semester focused on the theme *Interconnections*. Teachers and students studied the environmental impact of human actions including consumerism and waste, the "Leave NO Trace" outdoor ethic, flux equilibrium, and habitat loss due to development. They learned about native and non-native plants, particularly

Downtown High School is an inner-city continuation high school serving approximately 200 students who have been unsuccessful at other schools for reasons like severe truancy, disciplinary problems, or lack of academic credits. The vast majority of students are lowincome, close to 80% are designated as **Educationally Disadvantaged Youth** (EDY), and over 90% are students of color. The Wilderness Arts and Literacy Collaborative (WALC) uses environmental education as a means of both motivating students and integrating multiple subject areas. Through their engagement in environmental issues, students learn about writing, art, history, science, health and technology as they develop stewardship skills.

Contact: Catherine Salvin, teacher, 415.695.5860

²⁵ Center for Ecoliteracy. (1999). *The Edible Schoolyard*

the effects of aggressive non-native species on native ecology. They wrote problem-solving essays about environmental issues and made earth-based arts such as baskets and pottery. To complement classroom work, they conducted field studies in weekly outdoor excursions. They made one-time trips to Muir Woods to learn about how the Park Service and tourism have affected the Redwood Forest and to the Miwok village in Point Reyes to learn about interconnections between Miwok people and the land. They also made multiple trips to McLaren Park, first for a "walk-about" tour of native and non-native plants, ponds, and animals and later to help with habitat restoration.

PUTTING LEARNING INTO PRACTICE

The STRAW project began with 4th graders following an interest to save the endangered California Freshwater Shrimp. Working with a rancher to restore the shrimp's riparian habitat, the students and teachers realized that they had accomplished something quite amazing. Community members and ranchers got really excited about the relationships that came about and encouraged the schools and kids to do more. The Project has now grown to include 100 classrooms comprising 3000 students, working cooperatively with each other and the community to restore, monitor and protect eight miles of creek habitat. Songbirds have returned. 90 to 95% of the restoration has survived. Students and teachers are connecting with the place.

And at Martin Luther King, Jr. Middle School, "Students practice the principles of ecology as they reuse, recycle, and compost. Vegetable tops and scraps become stock, a tin can becomes a cookie cutter, and bottles are employed as rolling pins. Students carry produce to the kitchen and scraps to the garden composter, becoming a part of the cycle of regeneration themselves. As they eat their way through the seasons and plan menus in anticipation of crops they have planted, their attachment to the natural world strengthens and grows."²⁶

Through firsthand experiences with real places and real issues, students are acting on what they are learning, and in the process are gaining a sense of self-efficacy as they become environmental stewards.

²⁶ Center for Ecoliteracy. (1999). *The Edible Schoolyard*

PLACE-BASED EDUCATION: Implications for Grantmaking

why invest?
surface the potential
make the heart connection
feed the deep yearning
break down the walls
of age-based ghettos...
a very muddy task
- found poem²⁷

CHALLENGES AND OPPORTUNITIES

Whether one funds education, youth development, community development or environment, the potential for grantmakers to achieve more significant impact through place-based education is apparent. However, there are challenges as well as opportunities for those foundations that are interested in supporting and advancing place-based education.

One challenge, as the Cox Trust's McHugh explains, are "the structural silos of foundation work that cause marginalization of cross-sectoral programs... Environmental education programs first came to the [Cox] Trust's attention as part of the environmental grantmaking program, but often didn't fare well in competition with major ecosystem challenges and advocacy opportunities. As my understanding of its potential as an educational tool grew, it migrated to my domain in education grantmaking, where it has stayed and fared better."²⁸

McHugh describes a second challenge: "An additional difficulty in the competitive world of grantmaking is that frequently the best of these programs is not replicable, precisely because its strength comes from the organic nature of its attachment to the specific environment immediately surrounding the school, a particular natural feature or a unique community resource. How do we advance these small but excellent programs that are *sui generis* in a competitive funding environment focused on impact, replicability and scale? We need to redefine what we mean by impact and leverage that we think of as separating a good grant from a great grant."

Another major barrier that McHugh identifies is "the notion among education funders that place-based education is nothing more than curriculum, and curriculum is not at the heart of school reform and improvement. My experience has suggested otherwise, that this work is transformative for teacher, student and for the school as well. It can give life to the reform mantras of inquiry-based, hands-on, experiential, multi-modal learning and encourage schools to embrace the world around them...The challenge, which place-based education is well positioned to meet, is to show measurable results deriving from examples of rich learning environments on the one hand, while, on the other hand, recognizing and honoring

²⁸ See Appendix 7 for complete text of McHugh's presentation

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²⁷ A collage of selected phrases spoken at the March 16 *All of a Place* Institute session

the indirect paths that learning takes and modifying our public focus on measurable results accordingly."

These challenges can be daunting. However, grantmakers are in a position to leverage change that helps place-based education navigate its way among the obstacles. Perhaps it would be helpful to think in terms of the multiple levels of intervention at which foundations might engage in this work. This suggests a

multi-pronged approach that recognizes these interdependent, nested systems:

- Support for exceptional individuals (teachers and program providers);
- Support for innovation and integration at the school site level (such as those presented in the Institute's case studies); and
- Support for strategies that effect system-wide change.

Each level, in turn, calls for distinct actions. Respectively, these would be:

- Professional development and support for individual teachers;
- Program development and evaluation on a whole school basis; and
- Systemic coordination, public support and policy development.

To ensure that all the levels are addressed effectively, funder collaboration is crucial. Different foundations can address different components depending on the interests and capacity of each foundation, but coordination is necessary to ensure that adequate resources are strategically applied to advance the field of place-based education as a whole. An added benefit is that collaboration contributes to learning among funders that, in turn, sharpens grantmaking practice across program areas.

The individual level

Individual teachers are on the frontlines of public education, and place-based education is no exception. As discussed earlier in this report, professional development, structured support, and modest amounts of project funding can go a long way toward revitalizing teachers.

Professional Development. Several support providers in the Bay Area offer professional development programs in place-based education.²⁹ Funders should look for organizations that are well versed in the state and local curriculum requirements and take the approach of increasing the teachers' own capacity to use the local setting as the context for teaching and learning.

Structure Support Networks. Related to professional development programs are on-going support networks for teachers (and for that matter, principals). The Center for Ecoliteracy sponsors a network for educators to meet regularly to develop awareness, build knowledge, translate knowledge into practice, and reflect on their practice. Similarly, the Environmental Science Initiative (supported by the Richard and Rhoda Goldman and Walter and Elise Haas Funds) enables San Francisco high school teachers to meet several times over the course of the year for professional development opportunities, help with field trip logistics, and access to information about possible partnerships with community-based organizations.

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²⁹ See Appendix 8

On-Site Coordinators. Funders can also facilitate place-based learning by supporting onsite coordinator positions that connect teachers with community resources and work keep these relationships going. The North Coast Rural Challenge Network, Adopt-A-Watershed, the Community-based School Environmental Education program, among other place-based programs, have found this to be indispensable.

Project Funding. Small project grants can make all the difference for a teacher who is motivated to adopt a place-based curriculum. As McHugh observes, "we often find place-based programs – organically grown relationships with groups or organizations located near the school where the resource has shaped the school's focus and vice versa. Often these programs don't need a lot of money but they do need some to sustain the relationship." Large regional foundations that have difficulty managing small grants might consider an intermediary such as the Center for Ecoliteracy, and/or the establishment of a funder collaborative for place-based learning, perhaps housed at Northern California Grantmakers or some other "pass through" agency, which can more efficiently transmit funds contributed by foundations and donors of various program interests.

Even with these supports, individual teachers can only do so much. To advance placebased education beyond the "scattershot" of individual classes, program development at the whole school level needs to be encouraged and supported.

The school site level

As documented in the Institute's briefing paper and case studies as well as in SEER's *Closing the Achievement* report, there are a number of program models that have been established at schools around the country. However, as has been frequently noted, place-based education is unique to the particular attributes of the school, community and ecology. Support for existing and new place-based learning programs and evaluation thereof is necessary to the advancement of place-based education.

In the earlier discussion, several readiness factors were identified that would be important for funders to consider. Among those are:

- A critical mass of teacher commitment:
- A school culture of innovation and risk taking;
- District and school board understanding and sanctioning of program;
- Adequate teacher planning time and resources, including community partnerships; and
- Consensus on goals among program's multiple funders and supporters.

Promote Collaboration. Funders might engage intermediary organizations experienced in place-based education such as the Center for Ecoliteracy or the State Education and Environment Roundtable to work with schools and districts to develop the capability to design and deliver place-based education programs.³⁰ Even with the expertise of these support providers, foundations can play an instrumental role in forging partnerships among schools and community organizations by convening interested parties. As McHugh suggested, "we also need to engage the nonprofit community in this conversation, to encourage collaborative thinking and learning among these community organizations

³⁰ See Appendix 8

themselves, focused on youth, out-of school time, museums and natural resources, all right under our noses, to bring to them the new tools of educators and help them to think about their work with schools and school children in ways that are more aligned to the classroom of the future." Funders can support school partnerships with environmental learning centers, higher education programs, community organizations, conservation agencies, etc.

Research and Evaluation. Another critical need is evaluation. While there is some intriguing and encouraging data available, it is limited. More rigorous evaluation research is called for to establish more definitively the relationship between place-based education and its apparent outcomes. Foundations can help address the need to show measurable results and perhaps more importantly, the opportunity to draw out essential lessons on what works that will inform future program development.

Evaluation data is also essential to activities at the next level. Making the case for greater support and policy initiatives will require more reliable evidence of the benefits of place-based education.

The systems level

Coordinated Action. Foundations can also play a critical role to building greater public support of place-based education at the district- and community-wide level. Bringing grantees and other key stakeholders together to explore avenues for coordinated action is one such role foundations can play.

With the support of a local corporate funder, the Aldo Leopold Nature Center in Madison, Wisconsin spearheaded the establishment of "Nature Net," a consortium of sixteen nature education providers that offers experiential, place-based environmental education to the schoolchildren, teachers, and families of 18 school districts in south-central Wisconsin. Collectively, this regional collaboration provides a comprehensive and coordinated array of curricular, professional development and networking programs that are aligned with state academic standards.

Don Jen and Sallyanne Wilson described how the Marin Community Foundation convened a series of planning discussions over two years that eventually led to the creation of the Environmental Education Council of Marin (EECOM), an alliance of 60 environmental and community groups, education organizations, and businesses who want to strengthen connections between local schools, communities and their shared environments. The alliance is facilitating the development of collaborative projects as well as working to build greater public awareness and support for place-based environmental education. Jen and Wilson note that these efforts require long-term commitments even as the specific outcomes cannot be predicted. They counsel staying the course as far as the larger goals are concerned but "not being real rigid as a funder" – the partners need flexibility and autonomy as the project evolves over time.

In San Francisco, a nascent effort is underway to form an alliance of education, environmental and community organizations that would promote the design and development of outdoor learning environments on school grounds *a la* Tule Elk Park. Similar to Nature Net and EECOM, the SF Green Schoolyard Alliance aims to draw upon the assets that exist within the local natural and cultural setting to foster academic achievement, community building and environmental stewardship. These types of coordinated efforts merit

foundation support - through a place-based framework, they produce synergies among existing groups that overcome the territoriality that oftentimes comes with a competitive funding environment.

Impacting Policy. Coordination among a broad range of groups also brings the needed visibility and organized base of advocates that is necessary to promote policy changes that support place-based education. One recent example is that of a new learning standard passed by the Vermont Board of Education. Thanks to the efforts of an alliance of educational, community and environmental groups, including the Vermont Rural Partnership, a Rural and Community Trust-supported project, "Understanding Place" was added in Spring 2000 to the "Vital Results" section of Vermont's Framework of Standards and Learning Opportunities. "Understanding Place" is a civic/social responsibility standard that requires students to "demonstrate understanding of the relationship between their local environment and community heritage and how each shapes their lives." "

Similarly, the Kentucky Education Reform Act of 1990 included provisions that promoted place-based education. According to Jane Wilson Eller, Executive Director of the Kentucky Environmental Education Council, the heart of the reform effort is theme-based learning that integrates the student's world into the curriculum. "Because teachers realize that the environment can be used as a theme to integrate knowledge, and that integration is essential to doing well on the test [upon which school funding is based], more schools are now doing environment-based curricula. In fact, we estimate that about 80% of our schools have outdoor classrooms now."

Foundations can support efforts that promote place-based education through a variety of policy-making mechanisms. In San Francisco, a group of teachers is mobilizing support for an environmental education curriculum proposal to the school board. At the state level, a consortium of environmental education groups is drafting a master plan for environmental education. Funders should explore these and other policy initiatives as opportunities to support place-based education at the systems level.

³¹ Rural and Community Trust. (June, 2000) *Rural Policy Matters*. www.ruraledu.org/rpm/RPM2_6txt.html.

EVERYTHING FITS TOGETHER: From the Parts to the Whole

"Water is H_20 , hydrogen two parts, oxygen one, but there is also a third thing that makes it water and nobody knows what it is."

- D.H. Lawrence

Through place-based education, one's perspective shifts from that of the parts to that of the whole. Everything fits together – better learning, greater civic participation, improved environmental stewardship – in a manner that is meaningful, manageable and sustainable. By placing education within the local context and scale:

- The <u>content</u> of the curriculum becomes richer and more relevant, not generic as is the case in a text-based curriculum – students become more engaged, teachers are revitalized, the community is more invested;
- The <u>quality</u> of teaching and learning improves because teachers, students and community members care more – students get better grades, teachers raise expectations for what students can achieve, families get directly involved with their children's learning; and
- The high level of <u>connectivity</u> promotes synergistic effects students apply what they learn in school to improve the community and local environment, teachers collaborate with each other and with members of the community, the community replenishes its social capital through intergenerational interactions.

In a similar vein, there is the potential for grantmaking to move from separate and distinct program funding approaches to one that is more integrative, using a sense of rootedness in place as the framework for collaboration. Our colleagues in Boston are moving in this direction, as Kathy McHugh reports, "We hope to develop a larger cadre of committed funders and a plan to expand the work. We are making a deliberate effort to reach out to a wider spectrum of funders, including those interested in community development, character development and civic engagement, as well as our core groups of education and environmental funders."

Now with a stronger understanding of place-based education, Bay Area funders might return to questions raised in the Institute's briefing paper that have yet to be addressed: How might schools serve as centers of community and, **at the same time**, use the community as context for learning? How do the community school and the place-based education movements complement each other and what might this mean for children, families, and communities? What if schools were designed to serve as the centers of their communities in order to spur investment in education and counteract sprawl and its strains on infrastructure, transportation and the environment? And what if the curriculum were designed to use local environments as the context for students not only to learn the core academic subjects, but also to contribute to community revitalization?

Educational achievement, youth development, community revitalization and environmental stewardship all start with the development of a sense of place, a sense of belonging. Complementary approaches such as community schooling and place-based education offer powerful ways to re-connect us all with each other, our communities, and the natural world so that everything fits together.

RECOMMENDED RESOURCES

Center for Ecoliteracy. (1999). *The Edible Schoolyard.* Berkeley, CA: Center for Ecoliteracy. www.ecoliteracy.org.

Center for Ecoliteracy. (2000). *Ecoliteracy: Mapping the Terrain.* Berkeley, CA: Center for Ecoliteracy.

Lieberman, Gerald A. and Hoody, Linda L. (1998). *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning.* San Diego: State Environment and Education Roundtable. Available at www.seer.org.

North Coast Rural Challenge Network. (2000) *Exploring Ecoliteracy: Growing a Network for Community-based Learning*. Berkeley, California: Center for Ecoliteracy.

The Orion Society (1998). *Stories in the Land: A Place-based Environmental Education Anthology.* Great Barrington, MA: The Orion Society. www.orionsociety.org.

The Orion Society (1999). *Into the Field: A Guide to Locally Focused Teaching.* Great Barrington, MA: The Orion Society.

Orr, David W. (1992). Ecological Literacy. Albany, NY: SUNY Press.

Rogers, Laurette. The California Freshwater Shrimp Project: An Example of Environmental Project-based Learning. Berkeley, CA: Heyday Books

Smith, Gregory A. and Dilafruz R. Williams. (1999). *Ecological Education In Action: On Weaving Education, Culture and the Environment*. Albany, NY: SUNY Press.

Sobel, David. (1996) Beyond Ecophobia: Reclaiming the Heart in Nature Education. Great Barrington, MA: The Orion Society and The Myrin Institute.

State Education and Environment Roundtable. (March 2000). *California Student Assessment Project: The Effects of Environment-based Education on Student Achievement.* San Diego: State Education and Environment Roundtable.

Stone, Michael K. (Spring 2001). "Solving for Pattern: Fourth-graders love for a shrimp has built a human web for changing education, ranching, government, philanthropy and parenting." Whole Earth. pp. 77-83. San Rafael, CA: Point Foundation.