Environmental Learning in the San Francisco Bay Area:
Networks, Place Connections, Stewardship, and Educational Outcomes

As environmental and social changes threaten natural and human-built ecosystems, environmental education (EE) represents an opportunity to engage citizens of all ages with the challenges of shaping and achieving sustainability. This opportunity is present in the San Francisco Bay Area, where social and ecological systems are diverse and complex, and the region is replete with interlinked groups focused on issues of environment, sustainability, social justice, education, health, and community engagement. With the Bay Area's reputation for innovation and collaboration related to these issues, it is poised to be one of the world's sustainability hubs.

The "Environmental Learning in the San Francisco Bay Area: Networks, Place Connections, Stewardship, and Educational Outcomes" ("Environmental Learning") project aims to strengthen the research basis, theoretical underpinnings, and practice of EE through examining how, when, where, and why people learn about the environment and are motivated to act sustainably within a community and regional context. This program of research investigates the social landscape of environmental learning in the Bay Area in a broad sense; the role that people's sense of place plays in their learning and stewardship actions; and how environmental learning contributes to academic, learning, sustainability, and conservation outcomes (including behavior).

Phase One of the project includes an organizational social network analysis; a survey of Bay Area residents; community listening sessions; and interviews with environmentally minded, community oriented leaders. The results of Phase One—which is exploring elements related to environmental learning, environmental behavior, and sense of place among Bay Area residents and providers of environmentally related learning opportunities—will contribute to the selection of comparative case study sites for Phase Two. The case studies will more deeply examine places and experiences where a nexus of environmental learning and environmental behavior appear to intersect in innovative ways. Overall, this work intends to advance the field of EE by strengthening its theoretical basis and providing findings that can improve practice.

Four overarching themes drive the project's research approach:

- People of all ages undertake action and learn while embedded in community contexts. Many types of communities are important to people's everyday lives and offer ways of engaging in environmental learning; thus, we **consider communities holistically and look beyond traditional providers of environmental education/learning.**
- The population shift toward urban areas represents a dramatic change in people's daily lives and also alters the content, context, and structure of environmental learning. This project works primarily **in an urban context and particularly in areas where the intertwining of the social-ecological systems is a powerful, often visible element of people's everyday lives.**
- Most environmental issues do not occur in isolated local areas, and solutions require collaboration, connections, and integration among people from multiple geographic scales (not only the local). This project involves **thinking on a large/(eco)regional scale.**
- Residents' perceptions of the "Bay Area" as a place, combined with their sense of ownership of the place and their sense of responsibility toward it, may be key to motivating stewardship behaviors that contribute to sustainability. Therefore, we seek to better understand the **relationship between sense of place and sustainability**.

How, where, why, and with whom do people learn about the environment in everyday life, and what motivates them to act sustainably?

Supply

How are environmentally-related institutions connected?

Organizational Network Analysis

Demand

How do individuals-in-context learn about and make decisions related to the environment? What motivates environmentally friendly behavior?

Community Listening Sessions
Bay Area Resident Survey (n=1200)
Community Leader Interviews

Phase One

Supply & Demand

How do institutions and individuals interact to influence environmental learning and behavior?

Case Studies

Phase Two