Place-Based Learning
at Harmony Union School District

VISION

Students graduating from the Harmony Union School District (HUSD) have a deep understanding of their home. As they progress through the grades, students learn about our region's diverse ecosystems and its rich cultural history. Global principles emerge from learning grounded in place. Place-based education uses the local community and environment as a starting point for learning across the curriculum. Because of our school's unique setting, with its acres of redwood forest, creek and grasslands, place-based education is primarily focused on environmental education, but also incorporates history and extends to the community.

Students learn in the context of an integrated curriculum, which is hands-on and relevant. Learning is active and experiential – a vibrant garden program, a campus rich in experiential learning opportunities, classroom connections and the best possible curriculum materials support these goals. Guest speakers, service learning and field trips round out the curriculum. In addition, our students acquire and use skills such as scientific methodology, monitoring techniques, organic gardening, land management and restoration practices.

Embedded in place-based learning at HUSD are our green school values. From site development, energy usage, construction materials, forest management, and sustainability guide all of our decisions from the Board level down. These are transparent to our students, who are integral to the creation and management of these processes and systems. Older students learn by doing the actual work of managing these systems, evaluating their success, and innovating solutions as problems arise.

The school has put many systems in place to support these PBL goals. A Place Based Learning Committee continually generates new PBL goals and evaluates progress. A part-time Place Based Learning Coordinator assists with planning and execution of lessons, activities and programs. A comprehensive Stewardship Plan also guides our process. There is a strong District commitment to the Garden Program, the Garden to Cafeteria Program, and local sourcing of food in the cafeteria. Sustainability guidelines have been adapted to inform development and public bonds, and the District has invested heavily in solar energy, stormwater management, forest management, and water conservation.

We strive to connect PBL to our other school goals. Our academic program is aligned with the NGSS and Common Core standards. Additionally, we expect students to learn a significant body of material beyond these standards, including becoming critical thinkers able to analyze complex, real-world issues such as those connected to climate change. Our intention is to engender in students a sense of stewardship for their environment and responsibility to their community and beyond. We strive to create and deliver an inquiry-based curriculum, which integrates language arts, math, science, social studies, technology and the arts. Our units of study build upon each other, and students' understanding of material and methodology is regularly assessed.

OVERARCHING GOALS

• **An in-depth knowledge of bioregion and watershed:** HUSD students are expected to know the various local habitats including the common plants and animals in the area. In addition, they are able to describe the dynamics of natural phenomena, such as stream morphology, weather patterns, migration patterns, etc. Additionally, HUSD students know the boundaries of their watershed, are able to trace various possible paths that precipitation follows, know the source and destination of their domestic water, have a concrete understanding of human effects on watersheds, possess the ability to assess the health of a riparian creek habitat, and are able to intelligently discuss historical and current watershed issues.

• **An understanding of sustainability relating to food systems and energy and resource use:** HUSD students compost their cafeteria waste, and work with the compost bins in the garden. As a result, they see directly where their waste goes, and how it benefits the garden. As students get older, they learn in-depth why composting makes good ecological sense. Food systems at HUSD are designed to build students' connections to healthy, local food. Cooking and eating fruits and vegetables grown in the garden, both through the garden and cafeteria programs, lays a foundation of lifelong patterns of understanding and health with regard to food production and consumption. Likewise, HUSD students understand and embrace the why and how of reducing, reusing and recycling. Our buildings and energy systems reflect our ecological values; our students understand this connection. Older students learn about contemporary environmental issues such as plastic pollution, climate change, and water diversion and acquire the skills to think, write, and debate critically about them.

• **A strong sense of local history, community and current events:** HUSD students have a solid knowledge of the region's early indigenous people; including their settlement patterns and practices. They have an understanding of how land ownership has changed hands over time, and the various contributions and impacts of the subsequent populations. They are aware of current issues we face in this area, and can speak knowledgeably about them.

• **A solid understanding and use of scientific methodology:** HUSD students have many opportunities to work with each other, their teachers and scientists in the community to investigate real-world issues. Through data collection, measurement, monitoring, experimentation, and data analysis, students gain first hand experience with scientific methodology.

• **Systems thinking:** Students graduating from HUSD are systems-thinkers, with a solid foundational understanding of ecological principles.

• **A predilection toward environmental stewardship and advocacy:** Students study science in terms of our relationship and responsibility to the earth and in the context of ecological "best practices" – recycling, composting, appropriate technology, conscious land management practices, and climate advocacy. They participate in service learning and get first-hand experiences with leadership and volunteerism through various projects in the community and at school during their years here. It is our belief that (continued/continually?) connecting to place plants the seeds of a relationship with self, other and our environment -- in hopes of cultivating a care, respect, and responsibility for our world.

DEVELOPMENTAL PROGRESSION

TK-SECOND GRADE: Connection to nature, "On your campus"
Place based education in the primary grades is focused largely on nurturing positive experiences in nature and the surrounding community through play, exploration and structured learning experiences. Students in the early grades spend time in the garden, play in the Dragon Playground (a student-created natural playscape), hike the nature trail, and become familiar with each of the three natural habitats on the school's site. They are introduced to concepts through hands-on exploration and thematic instruction. They connect with their local community through field trips and classroom guest speakers. During these early years, our students build a deep and lasting connection to their campus and develop the skills to comfortably observe outdoors.

THIRD-FIFTH GRADES: Observation, understanding, scientific processes "In your community"
Once the students have developed comfort and connection to their place, they broaden their learning in both geographic and scientific realms, and their studies become more complex. For example, they conduct a seed study, research Northern California owl habitats, learn about steelhead and participate in a release project, engage in a study of marine ecosystems, practice natural journaling, and continue to engage with the campus regularly. These students expand their definition of place, learning about and exploring Sonoma County, California and the United States. Our students build upon their exploration by learning specific observation practices through the scientific method and process, and through data, begin using those observations to understand the mechanisms behind fundamental ecological and social processes.

SIXTH-EIGHTH GRADES: Evaluation, action "Your global community"
The upper grades build upon observation and understanding to evaluation, synthesis, and action. They take on leadership roles by teaching younger students, such as in the "big buddy/little buddy" program, Climate Action Club, service learning, and hosting an Earth Day Climate Change Teach-In. Their study becomes more global; students study state, national, and global environmental and social issues and engage in advocacy for environmental causes. Speakers from a variety of professional fields are brought in regularly to broaden students' knowledge and their ideas of possible place-based careers. There are two dedicated PBL enrichment classes during the year for 7th and 8th graders to do meaningful PBL work on campus such as tree planting and natural building projects. Through these experiences, our students can think critically, have a strong sense of place, have social empathy, and are empowered to act on complex social and environmental issues.