# DietSense: Mobilizing Ancestral Memories, Advanced Technology and Student Inquiry/Engagement for Health in a Community and High School of El Sereno

# Background

In the Fall 2009, the Leadership Development in Interethnic Relations class conducted student action research to investigate access to healthy foods and green space in El Sereno. The **Parent Center** hosted weekly classes on Ancestral Foodways with El Compadre Guillermo. At the same time, MEChA, a student-led organization on campus, created opportunities to connect to the community, promote cultural awareness and advance learning. Using computational thinking, students in the Exploring Computer Science course created web pages, animation and used smart phones to collect and analyze data. UCLA Center X's TIIP grant allowed teachers to combine the efforts of these schooling participants and come up with a common vision: Through cultural

awareness, education and self-determination, the Garden Collective will cultivate our communal land and ancestral knowledge. Thus, the People's Garden was developed as a nexus for cooperative inquiry and action around ancestral foodways.

# Latin American & Mexican American Studies

#### **Ancestral Memory**

The content knowledge that students learn draws from the funds of knowledge that students and their families possess. Students have the opportunity to validate themselves in this curriculum that is focused on health, foods and visual arts for positive cultural and academic identities.



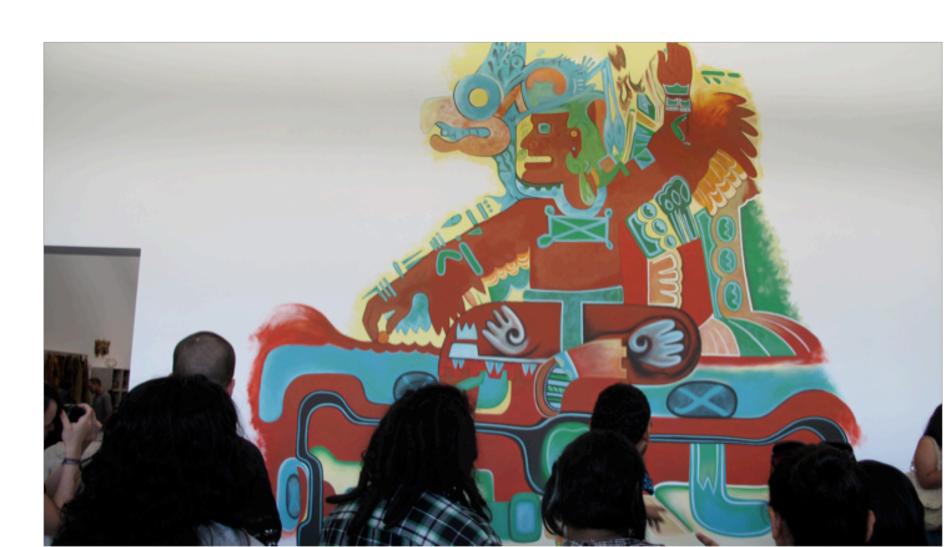
#### **Ancestral Foods**

Students are currently creating an Ancestral Foods Recipe book that develops from their research in their communities focusing on the dietary practices of the Anahuak, Ancient Mexico, and Central America. They have participated in Parent Center and MEChA sponsored events that include "El Trueque" and handmade tortillas.



#### Remedios

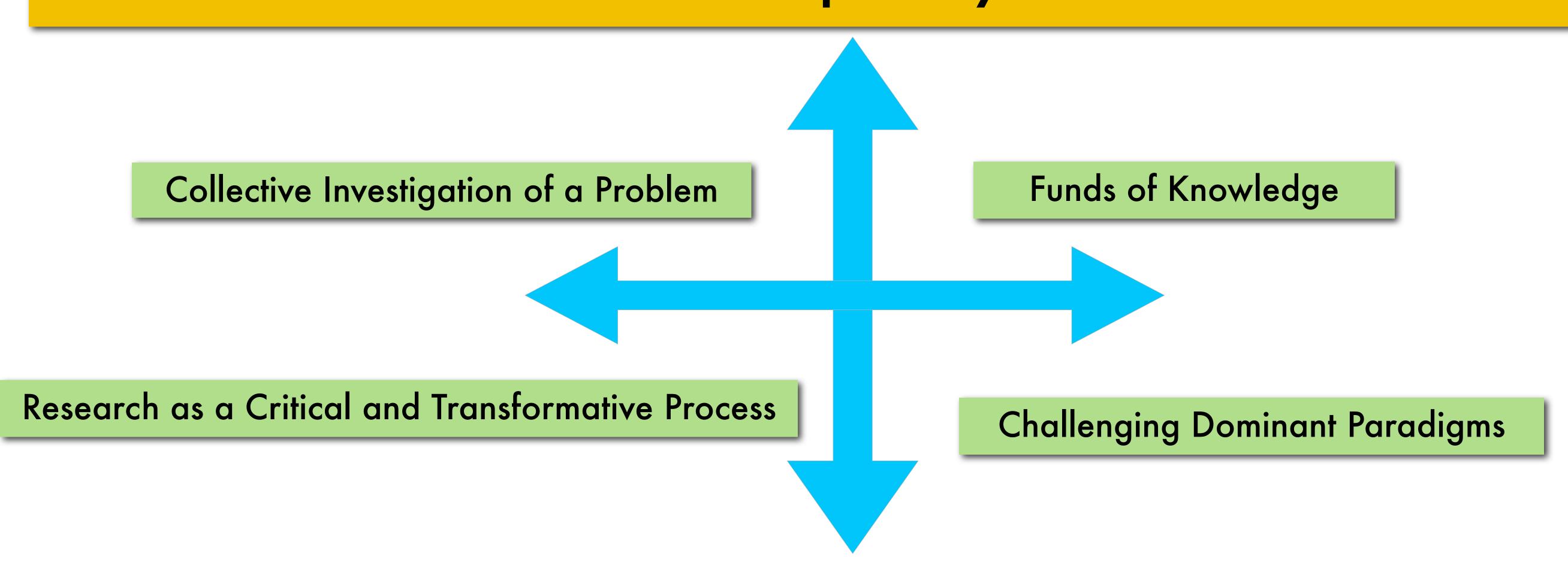
This group of students is currently creating a Remedios Book that would be shared with the larger community. By creating documentaries from interviews on ancestral remedies from community members, students tap into their own funds of knowledge as the center of their inquiry and health practices.



Students created replicas of ancient codices that document their families' migration stories to the United States. They used manta, cotton material, to write their stories with images.



# What is Youth Participatory Action Research?



# Exploring Computer Science

Interdisciplinary

Through DietSense, a

participatory sensing

drink practices in the

mobile application that

collects data on food and

community, students are

making connections to

gardening practices and

ancestral foodways as a

awareness that would

agricultural practices.

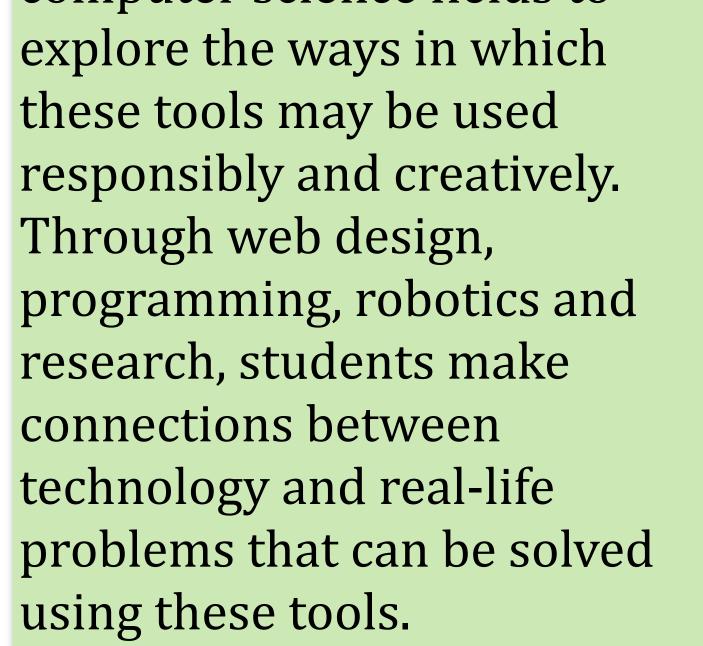
promote the remembering

of ancestral cultural and

means to develop

#### **Advanced Technology**

Students use a wide range of computer science fields to explore the ways in which these tools may be used responsibly and creatively. Through web design, programming, robotics and research, students make connections between technology and real-life problems that can be solved



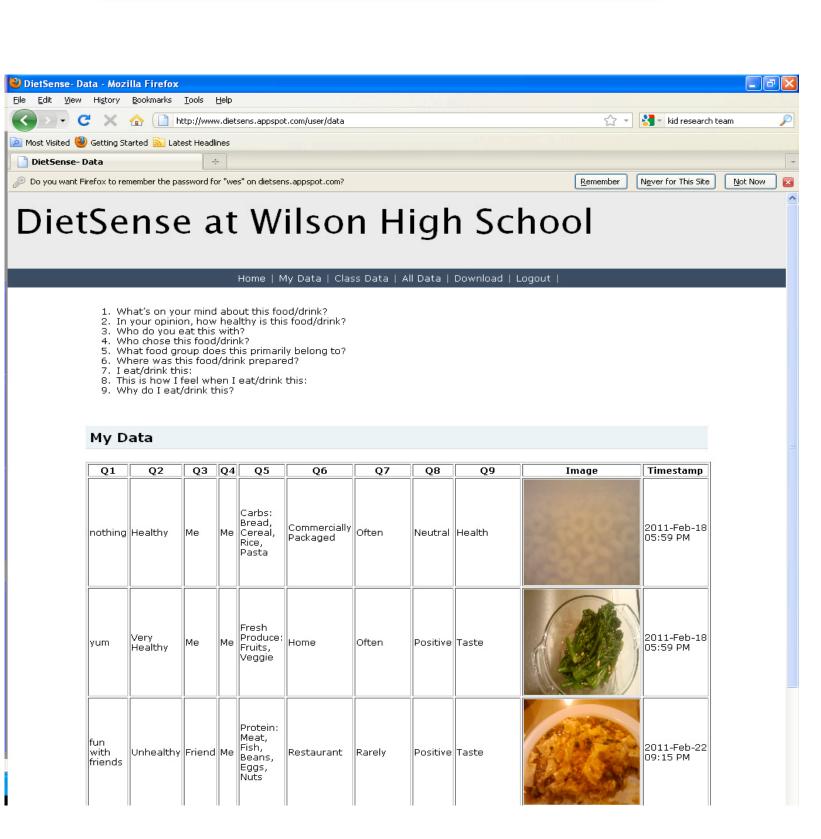
## **Participatory Sensing**

Students use an approach to data collection and analysis with mobile phones and web services to collect, analyze and interpret data on food and drink practices in the community. They use technological tools to present their findings to the larger community at the Healthy Start Faire and other venues.

# Computational

Sprite1 Sprite2 Sprite3 Sprite4

Student are exposed to methods that include problemsolving, design, connection to other disciplines, team building and critical thinking about the relevance and impact computer science has on society.



# **Food Landscape**

This group is researching the types of food outlets available in the community. By community mapping, this group will research the Retail Food Environment Index to determine if the community is a food desert.

#### Access to Healthy Food in "Our" Community

This group is conducting a comparison study of the markets in El Sereno and South Pasadena to determine if there is a disparity in the availability of fresh, healthy, and affordable foods in these two communities.

#### **Acculturation and Diet**

This group is investigating the health benefits and/or disadvantages of a traditional Asian and Latino diet. They will research how diet and food preparation has changed between families' home countries and the United States.

What do we eat?

Why do we eat that?

Student Inquiry and Research Groups



Leadership Development in Interethnic Relations

### **Community Gardens**

This group is learning how community gardens are organized to address food insecurity in communities of color. Their research will inform the People's Garden at Wilson High School.



#### **Environmental Racism in Our Community**

This group is mapping the El Sereno community to determine the environmental hazards that exist around the school. This group will also research the health effects of these hazards on the community.



### Professional Development Providers for the Wilson Garden Collective

- Asian Pacific American Legal Center
- Instituto de Educacion Popular del Sur de California
- Los Angeles County Museum of Art
- Center for Embedded Networked Sensing
- Exploring Computer Science Food Justice Conference
- Mujeres de Maíz and Decolonial Food for Thought





Wilson High School Garden Collective
UCLA Wilson High School Parent Center

















To develop a Healthy Foods Campaign to end food insecurity in the community while supporting schoolbased gardens and publishing student-led research.