The Berkeley Unified School District Gardening and Cooking Program publish Semester Reports at the end of each semester to highlight special projects, fundraising efforts, budgets, and introduce future activities. All reports are made available to the public on our website.
ABOUT OUR WORK

The Berkeley Unified School District (BUSD) Gardening and Cooking Program engages all students in preschool through high school with hands-on instruction in science, language arts, environment, and nutrition education in three preschools, eleven elementary schools, two middle schools, and Berkeley Technology Academy. As part of the 2020 Vision for Berkeley Children and Youth, the Program is woven into student life to help close the achievement gap by ensuring the academic, physical, emotional, and social development of the whole child.

We value providing all children with an opportunity to learn, grow, and take care of themselves, each other, and their community. By doing this, we are modeling how a school district can implement garden-based learning programs across campuses with shared resources, goals, and vision. We are committed to building community and supporting lifelong change. This is evident when students connect to what’s important to themselves, to nature, healthy food, and each other in the school gardens.

HOW WE DO IT

Our team of ten garden educators and two supporting administrative staff provide a comprehensive program to all students at seventeen schools. We support students’ academic learning in common core and next generation science standards, the academic standards recently adopted by the State of California and BUSD, through our newly published Garden-Based Learning Curriculum. We began this curriculum project in 2014 by first gleaning from existing resources, bringing the experts together, aligning assessments, practicing, and then repeating this process until we had a finished package, which we currently practice across the District. We have made this Curriculum available to other educators as a free PDF download on our website, in addition to counseling many who are interested in structuring a similar sustainable program at their schools. We also have Spanish translations available by request.

We continue to finesse our garden-based learning practices so we can engage all of our students. This report provides information on the Program, including how we stay creative and flexible by trying new things, how we budget for this work, and how we remain lifelong learners along with our students.

SPECIAL PROJECTS

Special projects are funded through grants and donations, and focus on innovation in education. For example, this year we developed project-based learning lessons for secondary education in the garden at Longfellow Middle School, and professional development for school site staff that utilizes the natural calm and focus of the garden to support our high school students with social-emotional care at Berkeley Technology Academy (BTA).
LONGFELLOW MIDDLE SCHOOL PROJECT-BASED LEARNING

Project-based learning (PBL) is a dynamic approach in which students actively explore real-world problems and challenges and acquire a deeper knowledge. Many teachers use PBL to encourage students to encounter and struggle with important “big” ideas. PBL in the garden invites students to define problems, develop possible solutions, and improve existing tools. By engaging in four-week long projects, students approached a design, engineering, and life sciences problem with real-world parameters as they worked together in small groups to develop multiple solutions they practiced and presented on.

With funding from an Annie’s and General Mill’s grant, we focused this project at Longfellow Middle School because of the garden-education gap in instruction and resources there. We began this project by developing a garden on the California St. side of the school last summer, 2015. This year, the Maintenance Department built a courtyard garden that we’ve been developing over the year with students. We used both gardens to practice PBL lessons, which are collaboratively developed with our new garden instructor, program coordinator, curriculum experts, and teachers to ensure connections between the classroom and the garden.

We are editing these lessons this summer to pilot PBL in the garden again in September, 2016. Changes will be made based on assessments that we used to measure and document the work done thus far (including teacher and student surveys) in preparation for publishing our District Gardening and Cooking Program PBL Curriculum for Middle School in fall 2017.

![Figure 1: Longfellow PBL in the Garden](image-url)
RTI IN GARDEN

Response to Intervention (RTI) is a data-driven, multi-tiered approach to the early identification and support of all students, particularly for those who demonstrate learning and behavioral challenges. The school garden is one of the most appropriate and effective settings for many RTI activities that support students in academic and personal development. This year, we utilized the garden at Berkeley Technology Academy (BTA) for RTI, including opportunities for restorative justice circles, one-on-one conflict resolution, and self-care for traumatic stress.

We collaborated with teachers twice a week for the entire school year to develop this project. The outcomes were: 1) Two professional development meetings with the entire staff at BTA to provide training on RTI practices; 2) Developed a process for utilizing the garden as a full class and for RTI; 3) Implemented tools for student reflection when using the garden for self-care; and 4) Developed a structure for internship opportunities with the garden instructor, including enterprise development and larger garden building projects. We will continue to develop and practice RTI in the garden next year with BTA staff and students with leadership from the garden instructor and teachers.

We also hosted two community events with all staff and students. One day spent preparing healthy foods using recipes from the African Diaspora with a well-known food justice leader, Bryant Terry. The other day was spent building out the school garden with more vegetable and fruit plants that students could harvest from over the years with support from a local restaurant, Sweetgreen. These community days invited leaders in our community to support BTA and the school garden, provided resources for the staff and students, and fostered teambuilding through shared experiences and goals.
GREEN TEAM LEADERSHIP

We have supported waste reduction efforts at school sites and at District offices for two years now, with support from Altamont Education Advisory Board grants. We focused on supporting Green Teams, school site working groups dedicated to sustainability and waste reduction efforts and composed of students, teachers, parents, and other volunteers. This year, with a grant of $20,785 from Altamont, we worked to incorporate our work with Green Teams into District practices and policies, so that we could internalize many of these efforts without funding support from one-time grants.

We gathered information on best-practices Districtwide, at individual school sites, and in support of Green Team projects lead by students at specific schools. Much of our work was spent supporting custodians and ordering materials that were used for proper waste sorting. Next year, this project will be transitioned to the Facilities Department, per our lessons learned throughout these years that identified this department as a better fit for directing many waste reduction efforts. Together, we will continue to institutionalize processes and procedures to meet the District’s goals of reducing the amount of recyclable and compostable materials sent to the landfill to less than 10% by 2020, as well as incorporating the natural connection between sustainability education and garden-based learning.

BUDGETS

This year, the School Board and City of Berkeley generously supported us with $350,000 from the District’s General Fund and $250,000 from a City grant through Measure D (Sugar Sweetened Beverage tax). Additional funding for special projects was afforded by fundraising efforts and grants: including the Altamont grant for Green Team support and the Annie’s and General Mills grant for Longfellow PBL.

During our transition years from a fully funded federal grant program to a Districtwide program, we have asked each school site to contribute $15 per student served. This financial contribution has helped fill in funding gaps. This year, school sites collectively provided us with $140,330, with LeConte elementary school and Willard middle school supporting increased garden instruction with additional funding and principal approval.

We are fortunate to announce that the School Board approved next year’s budget in May, 2016. This includes ongoing funding of $300,000 from the District’s General Fund and a larger City of Berkeley grant of $637,500, which will support our work educating our students and their families on the importance of reducing sugar consumption and increasing water and fresh fruit and vegetable consumption. This increased grant reduces our need for school site contributions and allows us an opportunity to implement special projects for cooking instruction and other health and wellness activities for students and families.
after school and during some evenings and Saturdays. We will report on these special projects in the Fall Semester Report for 2016.

FUNDRAISING

Each year, we partner with local restaurants and businesses throughout Berkeley to co-host a food-filled day and night for our community. We call these events Berkeley Dine Out, because we encourage folks to support our local businesses and schools by dining out at participating restaurants throughout Berkeley, who in turn donate a percentage of sales directly to us. These fundraising activities help fill in financial gaps, support special projects, and fund larger garden building projects.

Friends and families, as well as restaurants, have expressed immense enjoyment and community spirit during Dine Out. Our BUSD community and beyond joined us for Dine Out on February 18, 2016, where we received over $13,000 in restaurant donations. In total, we were able to raise $17,697.25 in fundraising efforts this semester. This contributes to our annual fundraising total of $23,817.25. We will continue to co-host Dine Out events next year. A list of past events, including participating restaurants and event updates will be posted on our Tumblr site here: http://berkeleydineout.tumblr.com/

PROFESSIONAL DEVELOPMENT

We provide professional development to all Program staff that focuses on techniques for supporting academic standards, classroom management, social-emotional development, and approaches to instructing the whole child in the school garden. This semester, we worked with experts at Life Lab, a nationally renowned organization at UC Santa Cruz that provides workshops and professional development to educators of all kinds with hands-on practices connecting classrooms and students to gardens. Life Lab focused on incorporating NGSS standards into our GBL Curriculum and practices. We will continue to work with Life Lab to build upon our skills instructing all students in the garden during two Districtwide professional development days next year, 2016-17.

IN SUMMARY

We are a collaborative Program within the Berkeley Unified School District. We are able to do this work with strong support from Berkeley residents, City of Berkeley leaders, non-profit leaders, families, the School Board, and our dedicated garden educators and classroom teachers. This support, and our ability to continually innovate and serve our students in meaningful ways, allows us to model what it’s like for a school district to provide a garden-based learning program. We invite you to visit our BUSD website @http://www.berkeleyschools.net/gcp/. Please reach out to our Program Supervisor, Jezra Thompson, for additional information and questions at jezrathompson@berkeley.net.