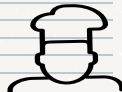


ABOUT

COMMUNITY PROJECT

- Partnership: **Lord Roberts Elementary School**
- Project Director: **Brent Mansfield**
- Location: **West End of Downtown Vancouver**
- Student Body: **40+ different countries represented**
(Working directly with students in grades 4-7)
- Mission of LunchLAB: **promote a hands on learning experience through gardening, cooking activities and nutrition education in an inclusive environment**



Programs within Lord Roberts Elementary School

- Edible Education:** a weekly food education program teaching children about nutrition, culturally diverse foods, the preparation process of healthy meals and the different types of food in the food system
- LunchLAB:** Learn, Access and Build a Strong Community
- Empower children and youth, provide access to a balanced diet while participating and building strong relationships with peers.**



SCAN ME

OBJECTIVES:

- 1. Collect soil samples from old and new plots in Lord Roberts School Garden and conduct multiple soil tests**
 - Nutrient Composition (Phosphorus, Potassium, Nitrogen)
 - pH of the Soil
 - Water Composition
 - Organic Matter Composition
- 2. Create a Crop Schedule**
 - Outcome: the project director will more knowledge around the composition of the school garden's soil
- 3. Propose a Three Bin Composting System**
 - Outcome: the project director will have a greater foundation in the construction of a compost system



RESULTS

SOIL TEST

	pH	Phosphorus	Potassium	Nitrogen	350°C	500°C
Old Bed #1	6.5-7	Medium	Medium	High	2.31%	0.24%
Old Bed #2	6	Medium	High	Medium	2.15%	0.26%
Old Bed #3	6	High	Medium-High	High	2.25%	0.23%
Old Bed #4	6	High	High	Medium	1.84%	0.19%
Old Bed #5	6	Low	High	Low	2.59%	0.19%
Old Bed #6	6	Low	High	Trace	1.14%	0.12%
New Bed #1	6.5-7	Trace	High	Trace	2.25%	0.23%
New Bed #2	6.5-7	Trace	Medium	Trace	2.25%	0.39%
New Bed #3	6	Low	High	Trace	1.35%	0.18%
New Bed #4	6	Medium	High	Low	1.29%	0.14%
New Bed #5	6	Low	High	Trace	1.81%	0.21%
New Bed #6	6.5-7	Low	High	Trace	1.82%	0.21%



HARVEST SCHEDULE

	Bed 1	Bed 2	Bed 3	Bed 4	Bed 5
Y1	Alliaceae/Leguminosae	Brassicaceae	Solanaceae	Umbelliferae	Cuberitaceae/Chenopodiaceae
Y2	Brassicaceae	Solanaceae	Umbelliferae	Cuberitaceae/Chenopodiaceae	Alliaceae/Leguminosae
Y3	Solanaceae	Umbelliferae	Cuberitaceae/Chenopodiaceae	Alliaceae/Leguminosae	Brassicaceae

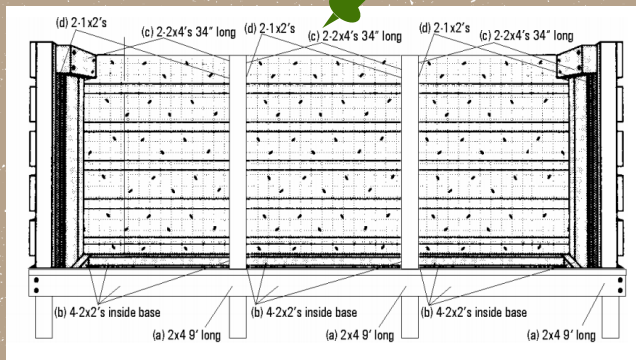
One of the purposes of the harvest schedule is to maximize yield to provide a greater availability of produce to the community. This, in turn, allows for greater community food security.

Community food security exists when all individuals in a community have access to affordable, safe, culturally appropriate, ecologically responsible and nutritionally adequate food at all time.

- Alliaceae/Leguminosae:** garlic, onions, chives, soybeans, lentils, chickpeas
- Brassicaceae:** bok choy, broccoli, cabbage, kale, cauliflower
- Solanaceae:** potatoes, pepper, tomatoes, eggplants
- Umbelliferae:** carrots, celery, parsley, fennel
- Cuberitaceae/Chenopodiaceae:** cucumber, squash, spinach



COMPOST SYSTEM



The Project Director, Brent Mansfield, discussed incorporating a compost system. Two methods were proposed: a **repurposed compost bin system** and a **three bin compost system**. After analyzing the state of the school's garden, Brent decided that the **three bin compost system** worked best with their school system.

In accordance with the Vancouver School Board's (VSB) policies, a three bin compost system proposal was created. Based on the VSB guidelines, the proposal incorporates a modified construction of three wooden bins with removable plexiglass panels to allow the students to observe the different stages of composting.

TOTAL COST:
~\$645.00



IMPLICATIONS

Based on the results of the activities, the following recommendations have been given to the project manager:

For the Soil:

- Increase the levels of nitrogen and phosphorus through nitrogen and phosphorus inoculate
- Add fertilizer to the new soil beds to help improve nutrient levels in order to fortify the health of the soil

For the Garden:

- Provide an adaptive crop schedule that the project manager is able to refer to throughout the year
- The crop schedule allows the freedom to incorporate culturally diverse plants
- Allows students to express the types of plants they want to incorporate in their garden, promoting student engagement and will enhance their food literacy skills

For the Compost System:

- The plexiglass cover for the three bin compost system allows students to monitor and witness the changes within this system

