

Are we out to lunch? – A school lunch awareness project.

The Inspiration

What inspired students to take action?

- Climate change
- Improving school lunches
- Supporting local farmers
- Curiosity

Answering the question: why grow our own food?

- Food security
- Reduce carbon footprint
- Carbon restoration
- Reduce climate change
- Better health

Why is your project topic important?

- Raises awareness of carbon footprints and how they can be reduced
- Raise awareness of climate change and lead to better addressing it
- Educates the next generations
- Increases awareness
- Inspires increased food security

What is the science/research behind the actions?

- The environmental and medical health impact of the lunches tie to:
 - The implications of modern agriculture, even modern organic agriculture and how top soil erosion and pollution of water and human bodies from chemical agriculture.
 - Organic agriculture is now the baseline bar and not the ceiling bar. Food forest polycultures with a shift to more perennial crops and less fossil fuel dependent annual crops is the ceiling and where the bar is being raised.

What did/will students learn?

- carbon footprint of the food they eat at lunch
- environmental impacts (distance food travels, diesel, carbon exhaust pollution of ships, trucks, trains, planes)
- chemical impacts (with a focus of new research findings of glyphosate specifically)
- organic impacts

What was the purpose and goals of the project?

- To teach children that radical change in diet/food is one of the largest feasible ways to change impactfully.
- Introduce the new scientific concepts of food forestry, monoculture vs polyculture ag systems, top soil erosion, glyphosate, edge effect, swales, carbon sequestration, restoration forestry and agriculture, bio-mimimcry, and microrhyzal fungi.

The Action(s) Taken

Where and when did the project take place?

Venables Valley, BC in the 2019-2020 school year.

Who was involved in the project?

Our students age 9-15

Did anyone outside the classroom help with the project? If so, what did they do (lead a workshop or provide expertise/tools etc.)?

Michael Hollihn – food forest permaculturalist, Ron Schnider – permaculturalist

What steps did the students take to complete the project (or are currently taking if it's an ongoing project)?

- Research 12 menus from our vegetarian school lunch program. For each menu, list all ingredients, and determine: whether they are organic or not; the distance in km from harvest to kitchen, and their cost.
- Enter all that data into spreadsheets.
- Ask questions which increase understanding.
- Create charts and graphs which can answer the questions.
- Reflect on what was learned.
- Script video
- Report findings through video.
- Take practical action based on findings
- The Impact and Reflection

What challenges did your team face?

- Difficulty in identifying each ingredient used, and how much the cost is per amount, and where and how it came from its origin.
- Some families were self-conscious about their menus: how much they cost, or how organic or local they were.
- Learning spreadsheets and how to create graphs and charts from them
- Making a video

How did/is your project helping the environment?

- We are encouraging the children to look at these new scientific practices of sustainable agriculture.

- We are asking the children to think about these new concepts and take them into their study/research environments and home environments in hopes of motivating the radical change that is necessary to achieve a food secure system that is carbon neutral or negative, eliminates top soil erosion (builds top soil) and increases health in the water shed and bioregion.

How did the project affect/benefit the students, school, and community?

The project vaulted our school lunch concept to another level. Families are now inspired to use much more local ingredients and to serve the students only organic food. Students are inspired to work with local farmers and their own family gardens to produce more local, organic food.

Did your project move beyond the classroom?

Yes, the students apprentice weekly with local farmers as part of their curriculum, and will be growing staple crops dedicated just for school lunches this year.

What measurable impacts/results did your project have?

The spreadsheets of the food ingredients put into pie charts, bar charts and graphs visually represent where we are at in the valley as either food secure or food insecure with indicators of air quality (carbon dioxide and other chemical/heavy metal pollution from trucks, boats, trains and planes), water quality (glyphosate chemical and other herbicides/fungicides farming vs organic farming methods), and human health from these global, local and bodily impacts.

Did your project meet the set goals?

Yes, it definitely raised awareness and launched community initiatives to produce more local, organic food for our residents

How was the project promoted within the school or community?

Each family involved with the school was part of the process, and then community meetings were organized too.

[The Next Steps](#)

How will your project continue in the future?

We'd like to revisit our school lunch program annually to see how it is improved in reducing ecological and carbon footprints, and we'd like the students to be increasingly involved in the entire process of planting, harvesting, preservation, and meal preparation.