

School Grown Curriculum

AUTHORS:

Co-Written by School Grown Student Farmers: Amanda Simpson, Cali Wilson, Deshanel Evans, Jordan Burke, Justin Hutson, Kamaria Mjomba, Katelynn Harker, Liam McNamee, Russell Speares, Quyen Truong & School Grown Staff: Katie German.



WHAT IS CURRICULUM?

Curriculum is what teachers and workplaces use to teach, it's all the content you should learn. Curriculum is all the stuff you should know by the time you finish a class or a job. To write a curriculum for our program, we asked ourselves these questions:

- *What should a student farmer know by the time they finish working at School Grown for the summer?*
- *What do student farmers need to know in order to do their job well?*
- *What matters to us about food?*
- *If we could teach a class about food, what should be taught?*

Some of this curriculum is about practical, job related skills. We called this part the *Farming Curriculum*. We also wrote a *Food Justice Curriculum*, this one is less about job skills and more about our own experiences with food in our schools, in our families, in our community, and in our city.

USING THIS GUIDE:

In this guide we explain why it is important to include youth in creating curriculum. All of the content was co-authored by students and staff who had spent at least one summer working at School Grown. We also explain two different processes that we used for writing our curriculum together as a group, and the ways we made sure everyone had a voice. The curriculum is available for download, and free for you to use in your own school farming program or workshop

For more information visit: www.foodshare.net/schoolgrown



School Grown Curriculum

WHY YOUTH SHOULD WRITE CURRICULUM

Curriculum is usually written by adults.

Adults may not know what is most important to us and our lives. They also might not live in our community, understand how we live, and how other people around us live.

We should be able to learn what we want to learn.

We shouldn't have to learn only what other people want us to learn. If it comes from us, we'll probably be more interested and enjoy it more.

We are already experts.

When we wrote the curriculum, it showed the world that we are already experts in somethings. We aren't just empty minds, we know a lot about the world even before we come to school.

BANKING AND BUCKETS

When we started our curriculum writing jobs we read a part of a book called *Pedagogy of the Oppressed* by Paulo Freire and he wrote about an education system that is like a banking system. Students are like empty bank accounts and teachers deposit knowledge into them. Students don't do anything other than receive that deposit. We believe this isn't a good system for students to learn.

We started to call this being treated like an empty bucket. This is how we feel most of the time at school. When we have a good teacher, it's usually because they understand that they can teach *and* learn from us too. They know that we aren't just empty minds. We don't see ourselves as empty buckets, we see ourselves as full buckets that keep on getting bigger.

This is how the education system
sees us:



This is how we see ourselves:



Writing our own curriculum is about getting the education system to
see us *as we see ourselves*.

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THE PROCESS: HOW WE WROTE OUR FARMING CURRICULUM

Mattering Maps

We started by brainstorming all of the different spaces where we work at School Grown. This included: the gardens at each location, the farmers market, the kitchen, and the compost area. In groups, we drew a map of each space and then we asked ourselves, “what matters about this map?” We then added notes about all the things that would matter to a student farmer if they worked at School Grown and were working in that area. For example, on the map of the kitchen we labelled that the fridge temperature matters, that the wash station matters, that safe food handling matters, and more.

Took a Tour

We laid our maps out on to the table and “took a tour” of each group’s space. When we presented our maps, we thought of new things that mattered about them. Or someone from another group would point out something that was forgotten that they thought was important.

Projecting Our Work

We connected a computer to a projector and did all our writing up on the screen in a word document. That way everyone could see what was being written as it was being written and sometimes it would take 4-5 people to write one sentence. We would all contribute a word, or vote on the best word to use, or share a way to make the sentence we were writing more clear.

Turning What Matters into Learning Expectations

We would take the notes we made about what matters on the map and turn them into a statement about what students should know or be taught when they work at School Grown, in order to work in that space. A post-it note on the map that read “*know about covers for garden beds*” was expanded and changed with everyone’s input into:

“know about how and why to use row cover on the garden beds e.g. How: use the stakes to hold down each edge or bury the edges in mulch to keep the bugs out; Why: helps keep plants warmer for longer, keeps pests out of the crops, keeps the garden beds moist so that they can be watered less often. Know the difference between summer and winter covers and what they do.”



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THE PROCESS: HOW WE WROTE OUR FOOD JUSTICE CURRICULUM

For this curriculum, we adapted the process that Paulo Freire writes about in *Pedagogy of the Oppressed*. He calls it “creating the content of an education” and the focus is in designing a curriculum that emerges from the community of learners. We recommend checking out his book for more details.

Food Issue Cards

We all sat around a table with a stack of blank cue cards. Katie asked the question “what is a food issue in your life?” Once we started talking, we would write each issue down on a card and put it on the table. Each issue would generate new ideas, as we would think about how they were connected, and write down more cards. We didn’t always agree on everything, but we talked a lot and kept an open mind.

Making a Visual Representation

With all of the issue cards spread out on the table, we picked an issue that we connected with (it didn’t have to be one that we came up with) and then worked in partners to create a picture that represents that issue. We went out into the neighborhood to find examples of our issue that could be photographed.

Reading the Pictures

We sat around the table again and would look at a picture one at a time. The people who took the picture didn’t talk at first, so that other people had a chance to talk about what they saw in the picture. We would name the food issues that we saw in the picture, and we would put the new issues onto a new card.

Sometimes the issue that people saw was different than the issue that the photographer saw. For example, this picture of a truck was taken to represent the issue of trucks creating pollution in our community, but when we showed it to the whole group, we realized that the snow was blocking the accessible parking spot. Accessibility wasn’t on our list of food issues yet, so we added it to a card.



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HOW WE WROTE OUR FOOD JUSTICE CURRICULUM (CONT'D)

Then we talked more about food accessibility and said it meant more than just *physically accessible*. We talked about how it could also mean not living too far from a grocery store, being able to get fresh food for decent prices in your own neighborhood, having more than just fast food in your own community, accessing more independent stores that aren't owned by big corporations, and finding your own cultural foods too. Looking at the pictures helped us to come up with new ideas, that were still from our community, but that we didn't think of yet.



Grouping Issues

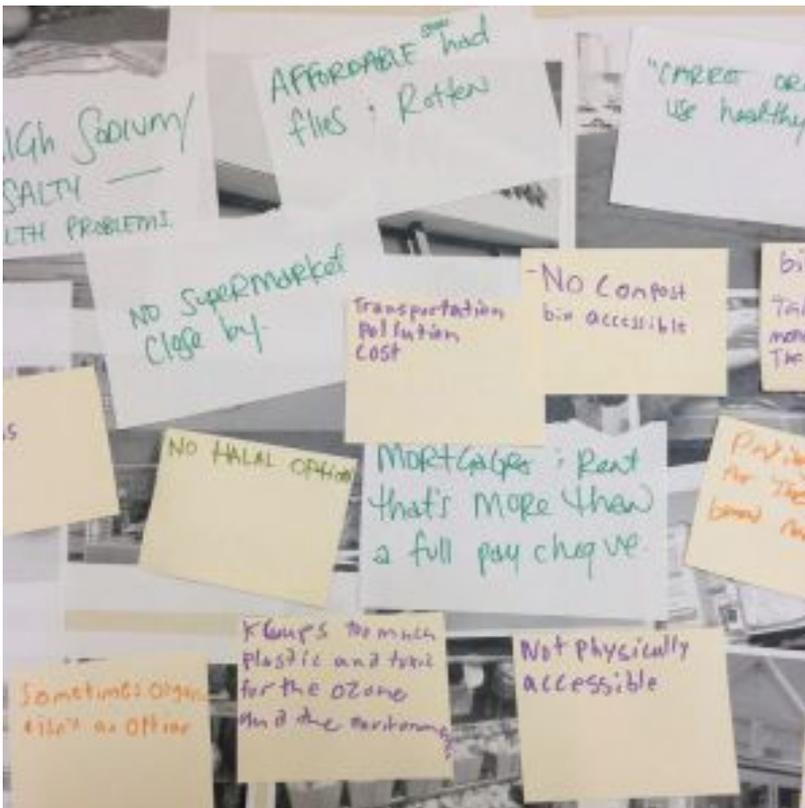
After we took a break, we sat at the table again and laid out one card at a time. As we read each card we started to make groups that went together. As we read more cards, we would add to groups, or make new groups. Eventually we had all of the issue cards sorted into similar themes. For example, we grouped together *halal options*, *food allergies*, and *physical accessibility* into one category.

Naming Themes

We gave each group of cards a name based on the theme that we thought connected them together. For example, we named the halal option, food allergies and physical accessibility category "*accessibility*."

Adding Issues

Then we asked if anything was missing - for example, we looked at the "accessibility" category and decided to add vegetarian diets, vegan diets, and religious food choices. Because those are important things that everybody should be able to access without any problems.



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FARMING CURRICULUM

These are the curriculum expectations we wrote for the farming portion of our program. These are all of the things a student farmer should learn in a summer working at School Grown and this curriculum should help the staff create lessons and workshops for the students.

Working in the garden

Student farmers should know...

- Not to stand in the garden beds because this causes soil compaction (which makes water pool on top of the soil and makes it harder for new seeds to sprout through the soil). Standing on the bed can also damage new seedling growth.
- About how and why to use row cover on the garden bed (How: use the stakes to hold down each edge, bury the edges in mulch to keep bugs out; Why: helps to keep plants warmer for longer, keep pests out of the crops, and keeps the garden beds moist so that they can be watered less often).
- Organic ways to keep pests away including: using row cover, use sticky water bottle heat traps, spraying natural remedies like tomato leaf tea, using companion planting, or manually removing bugs.
- How to identify common garden insects and which ones are good for your garden: flea beetles, aphids, tomato horn worm, wasps, bees, ladybugs and ants.
- How to make trellises, how to fix them, and what kinds of plants need trellis support (pole beans vs bush beans, indeterminate tomatoes vs determinate tomatoes).
- How to prep and care for mushrooms (soak the log for 24 hours, bang them on the ground to activate the spores, keep them out of the sun, keep them moist).
- How to properly maintain each crop (take runners off strawberries, pick suckers off tomatoes, pick flowers off basil, thin crops as needed, weed often).
- How to identify the common weeds we encounter and which are edible: thistles, bind weed, stinging nettle, dandelion, lamb's quarters, purslane, grasses, etc.
- Wear gloves for weeding (especially if they are new to identifying thistles and stinging nettle)
- How to prepare a garden bed for seeding (turn the soil, remove weeds, rake to remove large soil clumps, tamp down the soil for good seed-soil-contact, use seeder, cover up furrows with back of rake).

Watering

Student farmers should know...

- How the full irrigation system works and how to fix it. Make sure to give them a tour on the first day.
- Where the hoses are stored and how to properly put them away.
- Differences between watering new seedlings (gently and often) and established plants (usually less often).
- Which crops needs frequent watering (lettuce, spinach, arugula, etc.) and which crops don't (tomatoes).
- Which plants don't like to get water on their leaves (zucchini, tomatoes, cucumbers) to help them avoid diseases.
- How to water different types of containers (sub-irrigated planters, rooftop planters, in-ground beds).
- How to avoid over-watering and to make sure they always water the edges (end of a row, edge of a bed).

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FARMING CURRICULUM (CONT'D)

Harvesting

Student farmers should know...

- How to safely use and store a harvest knife.
- How to properly harvest each vegetable (see the *School Grown Harvest Guide*).
- To keep weeds separate from harvested food - use two bins while harvesting greens, one for compost and one for harvested foods.
- How to tell the difference between unripe, ripe and overripe by sampling the food at each stage.
- What needs to be harvested everyday (beans, peas, tomatoes, zucchini) and what can be harvested less often (strawberries, kale, chard, onions) (see the *School Grown Harvest Guide*).
- To keep harvested produce out of the sun and in the shade as much as possible.
- When to wash a crop, hydro-cool a crop, or avoid washing it in order to make it last longer (see the *School Grown Harvest Guide*).

Post-Harvest

Student farmers should know...

- To practice proper food labeling. Label bins of produce with the name of the crop, the date, and the destination (farmer's market, restaurant, etc.)
- To always put the label on the correct end of the bin so that labels can be read when the bins are stacked.
- Which side of the fridge is for unwashed produce and which side is for washed and labelled produce.
- Not to store any produce bins on the floor of the fridge.
- To place harvested items into bins carefully so that they don't bruise.
- How to properly use the scale (use the right unit - lbs or grams, keep hands off of scale for accurate weight, how to use the tare function to subtract the weight of the bin, turning it on and off).
- How to sort, wash and spin all cut greens (see the *School Grown Harvest Guide*).
- How to properly fill out the harvest log sheets for good record keeping.
- How to properly clean out the sink and the salad spinner after each use.
- That clean bins should be stored upside down so that they can dry and be quickly identified as clean.

In the Tool Shed

Student farmers should know...

- How to keep the tool shed organized (hanging same tools together).
- To always put tools away properly and neatly after each use.
- How to identify common tools and how to use them safely (pinpoint seeder, disk seeder, spade, shovel, collinear hoe, loop hoe, landscape rake, leaf rake, trowel).

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FARMING CURRICULUM (CONT'D)

In the Compost Area

Student farmers should know...

- Where the necessary tools are stored and how to use them: shovel, sifter, moisture meter, thermometers, shredder, gloves work boots, aprons and other tools.
- How (layering materials, adding greens and browns, measuring temperature, using a moisture meter, when to turn the pile) and why (environmental benefits, organic alternative to fertilizers) to compost.
- What can and cannot go in the compost bin (dairy, meat, plastic forks, oils, stickers on fruit).
- What to do with finished compost (sift and add to garden beds).
- How to keep good records in the compost shed.
- About the importance of worm composting and how to care for them.
- Know how to access the water source close by for adding moisture.

In the Greenhouse

Student farmers should know...

- How to regulate temperature by opening and closing windows and doors, or adding an extra layer of row cover in cold weather if needed.
- To keep the greenhouse clean (sweep up dirt, don't over water and flood the greenhouse, keep trays organized and labelled)
- How to start seedlings for good germination (filling seed trays, label trays properly, seeding at the correct depth, watering gently, potting up when needed, knowing when to plant them out).
- How to harden off seedlings before planting outside.

Cooking in the Kitchen

Student farmers should know...

- To follow safety guidelines for cooking in the kitchen: be careful of the people around you if you have a hot pan, sharp knife, or are carrying heavy stuff. Keep your workspace clean and wear proper attire.
- To follow proper sanitation standards: wash your hands before and after touching food, wash vegetables before cooking, don't cross contaminate between raw meat and other items, store meat on the bottom shelf of the fridge.
- To get a tour of kitchen spaces before starting so that they know where things are located including utensils, cutting boards, pots and pans, measuring cups, appliances, dish washer, stove and fridge.
- How to cook the produce that we grow in the gardens.
- How to follow a recipe and then how to cook a dish without a recipe.
- Different food cultures and respect their traditions and flavours.
- About grocery shopping well: budgeting, picking healthy options, how to compare prices while in the store.
- Why its important to shop locally for ingredients, "keep the cash in the community."

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FARMING CURRICULUM

At the Farmers Market

Student farmers should know...

- How to get to the farmers market and what time they start their shift.
- Where things are - be sure to give them a tour of the market at their first shift so that they can find the washrooms, the vendor stall, the market manager is if they need them, and the water source.
- To dress for the weather - they will be outside rain or shine. Wear comfortable shoes, bring a jacket and sweater, bring a rain coat, bring an umbrella, pack a snack.
- Help unpack the van quickly so that it can be parked.
- Have a pre-market meeting at each shift so that everyone knows: what's new that week, what will be sampled, what time people should take breaks, weather conditions, plan for setting up.
- What to do on a rainy market day to encourage sales - bring the table back from the edge of the tent so that customers can come into the tent and not get wet.
- How to give samples: be sanitary and wash your hands, prepare a small sample (like chutney on crackers), know what you are sampling and how to describe the flavours, know a few ways to cook or use that item, don't force people to take it and smile a lot.
- All of the prices including the deals: 3 bags of greens for \$10 (save \$2)
- To be respectful of the neighbours at the market, don't block their signs or booth, be mindful of taking up their space, wait for them to finish talking to a customer before you approach the customer.
- To use the hand washing stations before/after eating food, handling cash, and giving samples. Know how to set up a hand washing station properly.
- Keep bins of produce organized: Labels facing forward so you know what you have, stack empty bins so that you know what's empty, keep produce bins ALWAYS in the shade (under the table, inside the tent).
- To check the quality of the food before its sold - is something yellow, brown, mushy, too soft? Ask yourself if you would want to buy it?
- Good customer service skills including how to talk to people, smile often, be polite, be happy, be friendly.
- Always make the table look full of produce. Add more produce as it sells out or is running low, use a spray bottle to make it look fresh, consider the colour scheme (not all the greens together - break it up with something colourful like carrots), take down a table and condense the food as you sell more.
- How to use the scale and how to weigh things properly, know how to use the price per lb. calculator.
- To prepare some items so that they are pre-bagged (salad greens, spinach, etc.) Prepare extra bags so that you can restock as they sell.
- To make sure they have all the items they need for the market - grocery bags, elastic bands, spray bottle with water, cash box, sand bags/tent weights, reusable bags to sell, chalk for signs, stand for displaying produce, baskets, table cloths, tables, signs, banner, tent, sampling kit (knife, cutting boards, tooth picks, hand washing stations) and produce to sell.
- How to set up and put away the tent properly.
- What they are selling - know ways to prepare it, ways to eat it and ways to describe its flavour.
- How to answer common questions like "Is it organic?" "How do I eat it?" "Will it lose its colour if I cook it?" "Why this price?" "What's School Grown?"
- How to respond nicely to complaints.
- When and why we do or don't change prices: don't lower prices at the end of the market, if they complain about the price give them a sample of the item.

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FOOD JUSTICE CURRICULUM

Nasty/Tasty Food

Student farmers should know...

- About the high salt level in processed food.
- Why processed foods are cheaper, keep longer and are designed to be more “convenient.”
- The health and environmental price of “convenient” processed food.
- That companies use salt, fat, sugar and oil to make their food taste good and convince you to buy it.
- What unhealthy food does to their body.

Food Marketing

Student farmers should know...

- That unhealthy food is marketed a lot more than healthy food.
- How effective branding is at convincing us to make food choices.
- How much of food advertising is false advertising - final food product doesn't look like the picture advertised.
- How far food marketing is from reality for animals and people in our food system (i.e. factory farming and low wage labour).
- Who is doing the marketing and who is being targeted by marketers.
- That the motivator for most marketing is making profit, not feeding people good food.
- Where marketing takes place (commercials, street signs, in schools, etc.)

Who Are Our Farmers?

Student farmers should know...

- What is organic farming and how many Canadian farms are organic.
- What are the demographics of the farmers in Canada.
- About diversity in farming - tell the stories of women, Indigenous and people of colour who are farming. Talk about what struggles they face and what they are doing well.

Big Brands vs Local Shops

Students farmers should know...

- Money leaves a community when we shop at a big corporation, and that shopping at independent stores can keep the cash in the community.
- You can often pay more for a brand name even though the quality may be the same.
- About alternatives like co-op models for stores, housing, and farms.

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FOOD JUSTICE CURRICULUM (CONT'D)

High Cost of Food

Student farmers should know...

- Why is food so expensive and why does that price change depending on where you live.
- How to save money when they are shopping for food (green grocers, co-ops, bulk buying programs).
- That just because there is a grocery store near you doesn't mean its accessible if you cant afford it.

Accessibility

Student farmers should know..

- About food deserts and what its like to live in a neighbourhood with no grocery store close by.
- Why it's important to think about people's food allergies and make sure they can eat.
- Why it's important to make sure people have the food they need like halal or kosher.
- Why it's important for people to have the food that is important to their culture.
- Why it's important to make sure there are vegan and vegetarian options for people.
- Where the farmers markets are and why they don't have them in our neighbourhoods.
- Why it's important to not have any physical barriers to accessibility at a grocery store or farmers market.
- That places where you get food should have all kinds of languages so everyone can understand.

Importing and Pollution

Student farmers should know...

- How importing foods leads to pollution from the distance food travels.
- About the different environmental impacts of different food transportation methods (bike, truck, train, boat, plane)
- How importing food leads to picking it earlier and impacts nutrition levels in produce.
- Imported foods may not give back to the community the same way local foods might.

Income and Poverty

Student farmers should know...

- About the colour of poverty and how it effects racialized people in our city.
- About the geography of poverty in our city and where its located, and why those parts have worse grocery stores and more fast food.
- About employment and unemployment and how it is different for youth and youth of colour.
- How the system that sets wages works and how we can fight for a livable wage in the city.

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FOOD JUSTICE CURRICULUM (CONT'D)

Where You Live

Student farmers should know...

- About housing prices in Toronto and what makes them so high in general and higher in some neighbourhoods.
- How homelessness impacts how you can eat and where you can eat.
- What do you do if there is a natural disaster (like the power goes out).
- Why people can't just move if the food access in their neighbourhood is bad.

Food Waste

Student farmers should know...

- About composting and why its important.
- How to advocate for more compost bins if they don't have them in your building.
- About food waste across the whole food system - how much gets wasted in the field, at the grocery store, at big institutions.

Meat

Student farmers should know...

- That people eat too much meat in general.
- How growth hormones and steroids are used and where.
- About the common farming standards and living conditions of animals.
- About methane production from livestock and how it impacts climate change.
- The environmental impact of factory farming meat.
- What the diet is of the animals that we eat.

This Curriculum Was Created With Support From:

LIDLAW
FOUNDATION



The Counselling
Foundation of Canada