

What Do you Say When...

Myth Busting - Buying Locally

by Carla Peters and Gale Smith

Project Synopsis Bibliography

Summer Institute for Educators 2010

This document is the result of the author's participation in the BC Agriculture in the Classroom Foundation's Summer Institute for Educators in 2010. This third year level course in curriculum design is offered every other year through the University of British Columbia's Faculty of Education's Office of External Programs.

In the summer of 2010 the Foundation partnered with the Teachers of Home Economics Specialist Association - THESA - and the Office of External Programs to make the Summer Institute a part of the Home Economics Education Diploma Program. This program consisted of 10 three credit courses that closely examined the Home Economics Curriculum IRP's and explored creative ways to address the learning outcomes.

Participants (30 educators from a variety of secondary disciplines and from many regions of the province) were based at the BC Ministry of Agriculture and Lands Abbotsford Agriculture Centre in Abbotsford, BC. As a result of visits to local farms and through intensive classroom work they developed a number of teaching strategies drawn from the agricultural, environmental, economic and nutritional concepts featured in the IRP's.

Participants taking the course for credit created teaching modules such as this to share with other educators around the province.

The BC Agriculture in the Classroom Foundation is supported by the BC Ministry of Agriculture and Lands as well as the agricultural community. Participants were sponsored for their farm tours as well as their meals (prepared by our Summer Institute chef using fresh and delicious local products).

Visit the BC Agriculture in the Classroom website at <u>www.aitc.ca/bc</u> for further information on this and our many other exciting programs or to order additional resources for your classroom.

Thank you for bringing agriculture to your classroom. We hope that you too will find it a great teaching tool to enhance your lessons.

www.atic.ca/bc



Table of Contents

4 38

grown locally."

- produce manager.
- trademarks that are in place to help increase consumer awareness of B.C products.
- BCfresh, BCBlueberries and buyBC".

More information for teacher:

BCgrown: Food, fish, beverages or agricultural products which are 100% grown, caught, or raised in British Columbia.

BCproduct: Processed food, fish, beverages or agricultural products that are made with a majority of raw materials (by composition) which are grown, caught or raised in BC; and are processed and packaged in the province with 51% or more of the direct cost of producing the product in its final form (direct labour, raw materials, processing and packaging) originating in British Columbia.

BCmade: Processed food, fish, beverages or agricultural products that are made with a majority of raw materials (by composition) which are not grown, caught or raised in BC; and are processed and packaged in the province with 51% or more of the direct cost of producing the product in its final form (direct labour, raw materials, processing and packaging) originating in British Columbia.

buyBC: May be used for all products that qualify to use the BCgrown, BCproduct or BCmade marks.

BCfresh is the name now used by Lower Mainland Vegetable Distributors, Inc. for marketing of vegetables produced in the Fraser Valley.

4

"When I am in the grocery store, it is very difficult to determine what food is made or

• Many grocery stores now have signs in the produce department indicating the country of origin of the produce. Some grocery flyers now include that information. If it is not available then ask the

• Once you get use to reading packages and labels you can get very good at seeking out the information of where food is made or grown. A helpful hint is to look for specific logos or

• These logos or trademarks are present on over 5000 products in the grocery store, and they ensure that the food bearing these labels are either made or grown in British Columbia. Some examples include "BCmade, BCproduct, BCgrown, BCmilk, BCchicken, BCflowers, BCpork, BCFreshEggs,

"It is difficult to buy B.C. produce throughout the year, because B.C. produce is only in season in the spring and summer."

- Think about becoming a seasonal eater. Rather than demanding lettuce in January have a beet salad! Also consider preserving the BC harvest while it is fresh and savouring it in the winter. Canned peaches and frozen blueberries can be enjoyed all year long.
- Our climate provides farmers with the ability to grow a diverse crop of fruits and vegetables that allows consumers to enjoy a large array of locally grown produce twelve months of the years
- Eating seasonally means enjoying the ripest and freshest food at the height of its natural harvest time. It means supporting local farmers who transport their goods the shortest distance to your plate. It also means experimenting with delicious foods you might not otherwise consider adding to a meal!
- While many fruits and vegetables are available year-round, we enjoy some only briefly and eagerly anticipate their return to market from year to year

More information for teacher:

- What's in season in January? Apples, Cabbage, Pears, Rosemary, Sage, Turnips, Winter Squash
- What's in season in February? Apples, Cabbage, Pears, Rosemary, Sage, Turnips
- What's in season in March? Apples, Pears, Rosemary, Sage
- What's in season in April? Apples, Chives, Pears, Rhubarb, Rosemary, Sage, Spinach
- What's in season in May? Apples, Chives, Radish, Rhubarb, Rosemary, Sage, Spinach, Turnips
- What's in season in June? Apples, Cauliflower, Cherries, Chinese Vegetables, Chives, Cilantro, Lettuce, Peas, Potatoes, Radish, Rhubarb, Rosemary, Sage, Salad Greens, Spinach, Strawberries, Thyme, Turnips
- What's in season in July? Apricots, Basil, Beans, Beets, Blueberries, Broccoli, Cabbage, Carrots, Cauliflower, Celery, Cherries, Chinese Vegetables, Chives, Cilantro, Cucumbers, Kale, Lettuce, Peas, Peppers, Potatoes, Radish, Raspberries, Rhubarb, Rosemary, Sage, Salad Greens, Spinach, Strawberries, Summer Squash, Swiss Chard, Tomatoes, Thyme, Turnips
- What's in season in August? Apples, Apricots, Basil, Beans, Beets, Blackberries, Blueberries, Broccoli, Cabbage, Carrots, Cauliflower, Celery, Chinese Vegetables, Chives, Cilantro, Corn, Cucumbers, Currants, Garlic, Kale, Lettuce, Melons, Onions (sweet), Peaches, Pears, Peppers, Plums, Potatoes, Radish, Raspberries, Rosemary, Sage, Salad Greens, Shallots, Spinach, Strawberries, Summer Squash, Swiss Chard, Tomatoes, Thyme, Turnips
- What's in season in September? Apples, Basil, Beans, Beets, Blackberries, Blueberries, Broccoli, Cabbage, Carrots, Cauliflower, Celery, Chinese Vegetables, Chives, Cilantro, Corn, Cucumbers, Currants, Garlic, Kale, Lettuce, Leeks, Melons, Onions (sweet), Onions (cooking), Pears, Peppers,

Plums, Potatoes, Pumpkins, Radish, Raspberries, Rosemary, Sage, Salad Greens, Shallots, Spinach, Strawberries, Swiss Chard, Tomatoes, Thyme, Turnips, Winter Squash

- Sage, Salad Greens, Swiss Chard, Tomatoes, Thyme, Turnips, Winter Squash
- Leeks, Onions (cooking), Pears, Rosemary, Sage, Thyme, Turnips, Winter Squash
- Turnips, Winter Squash





• What's in season in October? Apples, Beans, Beets, Blackberries, Broccoli, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Celery, Chives, Cilantro, Corn, Cranberries, Garlic, Kale, Lettuce, Leeks, Onions (sweet), Onions (cooking), Pears, Peppers, Potatoes, Pumpkins, Radishes, Rosemary,

• What's in season in November? Apples, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Garlic,

• What's in season in December? Apples, Brussels Sprouts, Cabbage, Garlic, Pears, Rosemary, Sage,

"Local food is no better than food produced in other parts of the world, so why should I buy it?"

- Local produce is grown for its taste and guality; other produce is grown to withstand long travel distances and times
- Local produce is picked when it ripe and travels only a short distance to the store, resulting in a better tasting and fresher product
- Food from other parts of the world is often picked before it is ripe, and before the flavour texture, and nutrients have had a chance to develop
- Local food also gets to your table faster with less nutrient loss
- Local produce is often a healthier choice, and choosing local produce may also increase your consumption of fresh fruits and vegetables

More information for the teacher:

- Close-to-home foods can be bred for taste, harvested at the opportune time and delivered fresh, rather than bred for durability so they can withstand the long distance travel it takes to deliver it to your local stores
- A good example to use with students is bananas. Ask the students the following questions: When bananas first come into the store what colour are they? Where are they grown? What do you think would happen to the bananas if they were picked when they were ripe and yellow and than had to travel all the way to Canada? Examples like this show students that imported produce is picked weeks before it is ripe, and often, the nutrients, taste, texture, and colour have not fully developed, which can result in the produce being gassed to create a pleasing, healthy appearance to the consumer.
- 24 to 48 hours after harvest, 50%—89% of vitamin C is lost from leafy vegetables
- Bagged spinach loses about half its folate and carotenoids after being stored in refrigeration for just four days. Think about the loss of nutrients in produce that has taken 3 or 4 days to get into our grocery stores.
- Studies have shown that increased awareness of regional foods leads to an increased consumption of fresh fruits and vegetables which can lead to a healthier diet, reducing obesity, a major contributor to Type 2 diabetes and other diseases. When people become more aware of what they are eating, they tend to make healthier food choices and choose food that is less processed with added sugar, fat and preservatives.

What to say when someone says:

"My food choices do not affect the environment."

- public transit instead of a car
- footprint, which will in turn have a positive effect on the environment
- and climate change (global warming).
- by eliminating the use of synthetic fertilizers and chemical pesticides
- Another way you can help the environment is to prevent food waste

More information for the teacher:

- The average North American meal travels 2,400 km to get from field to plate and contains ingredients from 5 countries in addition to our own – that's a lot of "food miles"
- largest component of airfreight
- and human health.
- important consideration.
- supermarkets and kitchens





• Choices about what you eat can make as big a difference for the environment as choosing a bike or

• As a consumer your decision to buy locally produced food can dramatically reduce your carbon

• When food is transported lengthy distances, a lot of fossil fuels are burnt, creating greenhouse gas (GHG) emissions. This emits a variety of toxic chemicals that contribute to air pollution, acid rain,

• Energy is also consumed with the refrigeration required to keep your food from spoiling as it travels

Choosing to buy food that is local and organically grown can be a better choice for the environment

• In the past 20 years in North America, the import and export of food have tripled with agriculture and food now accounting for more than a guarter of the goods transported on our roads and the

• Food transported short distances is fresher (and, therefore, safer) than food that travels long distances. Preservatives are often used to keep foods looking fresh longer, and can be hazardous to human health. Industrially produced foods are also difficult to grow without pesticides, chemical fertilizers, antibiotics and growth hormones, all of which can be damaging to both the environment

 Transportation is only a small percentage of the overall carbon footprint of food — approximately 11% on average, according to studies. How the food is grown makes up a much larger percentage - roughly 83%. Therefore choosing foods from farms that practice sustainable agriculture is an

Close to half of all food produced worldwide is wasted — discarded in processing, transport,

"Local food is too expensive. I can't afford it."

- The originators of the 100 Mile Diet who ate local for one whole year said it was only expensive in the beginning. They assert that most people eating a typical diet could actually save money by eating locally and eating foods that are less processed.
- Some local produce may be slightly more expensive but it is fresher and better quality. We are prepared to pay more money for deluxe electronics, bikes, jeans and cars, why not food?
- Some produce may appear to be more expensive by weight but you need to take into consideration the lost moisture and nutrients of imported produce as they travel around the world and sit on store shelves
- Local produce is fresher and therefore there is usually less waste

More information for the teacher:

• According to the originators of the 100 Mile Diet, most of us pay a big premium for out-of-season foods like cherries in winter or prepared foods like spaghetti sauce, usually with a long list of ingredients we might prefer not to have in our bodies. Eating locally, they bought fresh ingredients in season and direct from the farmer - and they often bought in bulk. They also preserved enough food for the winter and that saved on buying groceries in the winter.

http://100milediet.org/faqs#7

 US food expert Hugh Joseph discovered that eating local sustainable food only costs \$10 more per month

http://www.digitaljournal.com/article/274391

 An economics professor and her business-statistics class at Seattle University compared prices for organic produce at a farmer's market with that sold at a local supermarket. To their surprise, the farmers market was slightly less expensive pound for pound, on average, for 15 items that included Fuji apples, red potatoes, baby carrots, spinach and salad mix.

http://seattletimes.nwsource.com/html/localnews/2003733548_farmers04.html

 Another US study in Iowa found that the mean price per pound for the local farmers' market vegetable basket was lower that that of the non-local supermarket vegetable basket

www.leopold.iastate.edu/pubs/staff/prices.html

What to say when someone says:

"Local food is no safer than imported food. So why should I buy local?"

- be made aware of the issue is a timely manner
- sense of confidence in its safety

More information for the teacher:





• Food grown and produced in British Columbia is held to high food safe regulations and policies. In addition, when food safety issues do arise British Columbia residents can be assured that they will

• Most consumers feel safer buying local food over imported food because it is easier for them to trace exactly the food comes from, and knowing where one's food comes from creates a greater

• Food safety is the top priority of the Canadian Food Inspection Agency. There are also provincial and municipal regulations aimed at protecting Canadians from preventable food safety hazards, to ensure that food safety emergencies are effectively managed, and that the public is aware of--and contributes to--food safety. The Food Safe certification program in BC and HAACP are examples.

"Even if I do buy locally, none of the money goes to the farmer or my community; it all goes to some big company out there that distributes the food to the grocery store."

- Most local food is sold either directly to the restaurant or retailer or through one local distributor. This keeps a larger percentage of the profits in the hands of the farmer
- This also keeps a larger percentage of the food dollar in the province, which goes towards strengthening the local economy
- People in your community also benefit from the large number of jobs that result in the local food sector

More information for the teacher:

- In 2008, there were 33,700 people working in agriculture in BC. Greenhouse, nursery & floriculture production employed about a quarter (8,300) of these workers. Cattle ranching & farming (8,700) and fruit and tree nut farming (4,300) were other big employers.
- It is estimated that there are up to 300,000 food-related jobs (from processing, sales, retailing, restaurants, caters, etc.)
- Farm gate sales total \$2.3 billion and food processing accounts for \$6.6 billion in revenue. All of this money circulates in British Columbia.
- Eating "local" also helps families and communities grow. For example, very dollar earned by a BCfresh vegetable grower generates \$6 to \$7 in income for other British Columbians.

What to say when someone says:

"Why do I need to worry about buying local and preserving local farms?"

- countries.
- and it may not be profitable if there is no demand for locally produced food

More Information for the teacher:

- production
- succession
- overlooked





• Consumer support of local and regional food helps BC farmers stay in business, ensuring that healthy and abundant food will be available for future generations. If we lose our farms we lose the ability to feed ourselves and become dependent on other

 Many farmers are approaching retirement, and if we do not continue to support and purchase the food they produce it will be difficult to find a new generation of farmers to take over their business

 Also consider the other value of productive farmland such as providing the opportunity for citizens of BC to enjoy the rich biodiversity of hundreds of species that rely on farmland for habitat

 Agriculture represents about 2.8% of the land base. According to the "ecological footprint", a quantitative tool that estimates humanity's ecological impact in terms of the amount of land and water area a human population would hypothetically need to provide the resources required to support itself and to absorb its wastes, given prevailing technology, for a nutritious diet, on a sustainable basis, British Columbia requires 0.5 hectars of cropland per capita using current agricultural methods of production. Today in B.C. we have available 0.63 hectars of cropland per capita but we do not fully utilize our current agricultural land base for food production and choose to import about 40 percent of our food needs. If we don't use the land it may be lost to agriculture. We have in British Columbia, what is called the Agricultural Land Reserve (ALR), land set aside for agricultural purposes only. It was established in 1973, and is administered by a government appointed body called the Agricultural Land Commission with the mandate to protect agricultural land and to encourage farming. Increased urbanization has put pressure on the land and the Commission is constantly faced with applications to remove land from the reserve

• Eating locally grown food supports our farmers and protects our precious farmland by keeping it in

• We need to protect our farmland from development and we need to "grow" farmers. In British Columbia, the median age of a farmer in 2007 was 57 years. This means that many farmers are set to retire in the near future and viable opportunities are needed to engage the next generation into

• The aesthetic and social benefits of green space in the form of farmland should also not be

References:

Education

- www.aitc.ca/bc
- www.ecologicalfootprint.com/

Government, Government Initiatives

- www.bcac.bc.ca/buybc
- http://www.agf.gov.bc.ca/
- http://www.inspection.gc.ca/english/
- http://www.hls.gov.bc.ca/pho/reports/

BC Products (examples)

- http://www.bcchicken.ca/
- http://www.bcegg.com/
- http://www.bcblueberry.com/
- www.bcfreshvegetables.com/
- www.bcgreenhouse.ca
- www.bcraspberries.com/
- www.bctree.com/
- www.bcfga.com/

Organizations that Support Local Agriculture

- http://www.bcfarmersmarket.org/
- http://www.getlocalbc.org/en/
- http://www.ffcf.bc.ca/
- http://100milediet.org/
- http://www.davidsuzuki.org/
- http://www.buylocalthinkglobal.com/AboutBuyLocal.cfm
- http://cityfarmer.org
- http://www.farmersfeedcities.com/

